LEADERSHIP OF TEACHING AND LEARNING THROUGH ADVICE AND INFORMATION: A CASE STUDY OF SUBJECT TEAMS

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A thesis submitted in fulfillment of the requirements of the degree of Doctor of Philosophy

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Statement of Originality

This work has not previously been submitted, for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by any other person except where due reference is made in the thesis itself.

Signed: .........................................................
Manuj Kumar Gokul

February 2013
ACKNOWLEDGEMENTS

The research and writing of this thesis have been supported by a strong network. I wish to express my sincere appreciation to a number of people who contributed to the completion of this dissertation:

To my supervisors, Associate Professor Cheryl Sim, for providing untiring guidance, support, and together with Dr Paula Jervis-Tracey, for providing powerful supervision. My academic growth and learning, in large part, must be attributed to the excellent tutelage of Cheryl and Paula.

To my network analysis mentor, Associate Professor Malcolm Alexander, for teaching me the basics of network analysis and pushing me towards understanding organisational networks.

To members of the Transcript Analysis Group (TAG), for contributing towards analysis and interpretation of some transcripts of meeting talk in the TAG data sessions; and in particular, to Dr Jessica Harris, for taking the time to listen to audio recordings and checking the quality of transcriptions.

To Professor James Spillane of North-western University, USA, for taking the time to critique an extract of my confirmation paper. The feedback provided was most useful in my reflection in the early stages, influencing the direction my research project would eventually take.

To the participants in the research study, for affording me the opportunity to enter their professional worlds and capture their voices despite their busy professional and personal lives.

To the Department of Marketing, Griffith University, for a six month Completion Assistance Postgraduate Research Scholarship to support me to undertake the study full-time to finalise the writing up of this dissertation.
To my critical friends, Mr Bert Watt and Mr Archie Pillay (Acting Principal, Orient Hill Primary School), for their constructive and critical feedback on my ideas, interpretations and conclusions drawn from the study.

Finally, to wife Sheela, and sons Jashir and Lamir, from whom I borrowed the time to pursue my academic journey.
Abstract

Over the last decade, it has become increasingly recognised that school leadership is critical for improved student outcomes. Hence, the spotlight is on leadership of teaching and learning, not only the learning of students, but also of professionals. Traditionally, leadership in schools has been associated with positional authority; the province of the principal. In recent years, it has been acknowledged that the capabilities of a single individual are inadequate for the many leadership roles and tasks in schools, including the challenge of preparing a diverse group of students for success in a post-industrial, knowledge-based world. Rather than associating leadership solely with the school principal, leadership is now also thought of as being distributed throughout the organisation across many talented actors (Gronn, 2002; Spillane, 2001; 2004).

In addition to leading as individuals with responsibility and accountability for improving student outcomes, collaborating in subject teams is seen as a progressive way to lead teaching and learning. Subject teams are perceived to serve the function of learning communities where professionals collaborate and engage in dialogue about improving teaching and learning. One form of dialogue is advice and information – the building blocks of knowledge (Spillane, Healey, & Kim, 2010). Such knowledge is shared, not only in formal contexts, but also through informal networks; and is provided not only by formal leaders, but also by informal teacher leaders, as this study found.

The main purpose of this study was to explore, analyse and document the practice of leadership of teaching and learning through advice and information interactions in two subject teams in a middle school in Australia. Adopting a mixed methods research design, data was gathered through observations, social network survey, and interviews with principals, heads of curriculum, and teachers. The framework for analysis was guided by an integrated model comprising network theory, hybrid leadership, distributed leadership practice, and conversation analysis, an offshoot of ethnomethodology. The two main methods of analysis employed were organisational network analysis (ONA) and conversation analysis (CA).

The study found leadership in the two subject teams took on three distinct patterns: a centralised pattern in the formal interactions; a decentralised pattern in the informal interactions; and a hybrid pattern with various configurations in both the formal as well as informal interactions of participants. A second finding was that despite participants’
belief that providing advice and information was an act of leadership, limited leadership was exercised in important areas of teacher’s work in both teams. This was reflected in network density scores indicating low levels of leadership communication, low-in-degree scores, and the frequent peripheral position of formal leaders. However, the study also found that teachers without formal positions emerged as informal leaders, sometimes occupying more central positions in networks when compared with some of the formal leaders; suggesting that the lived experience of leadership in subject teams may be significantly different from that of the formally designed organisation. Factors that affected the extent to which leadership was provided included the lack of a shared understanding of the purpose of the team and the network architecture. A third finding was that team meetings constitute an important site for ‘doing leadership’ of teaching and learning through ‘talk’. Leaders proffered advice voluntarily or when recipients asked for information or opinion, disclosed or identified problems, and where recipients announced a plan. In their advice and information interactions, participants used a range of interactional resources to accomplish the task of ‘doing leadership’. The study found that the type of meeting talk employed, opened or closed doors to professional learning. The ‘talk’ and informal interactions also suggested that some participants adopt a stance towards adaptive expertise, seeking advice to solve problems, whilst others are positioned as routine experts, providing leadership; however with limited initiative directed towards their own professional learning.

Three main conclusions were drawn from the study. First, accomplishing the task of leadership of teaching and learning in subject teams requires mixed patterns of patterns of leadership, including the co-existence of individual-focused leadership and distributed leadership arrangements. Second, to meet the challenge of developing the knowledge-base of educators through professional learning, structural change such as subject teams and new leadership arrangements are insufficient; a shared understanding of the purpose of the team is critical for teachers to embed leadership in their professional practice. A third conclusion is that collaboration to improve professional learning and teaching practice is less effective or ineffective unless members engage in ‘talk’ that draws in greater involvement of teachers as well as ‘talk’ that characterises adaptive experts, such as advice seeking, problem solving and reflective practice, particularly around the examination of student achievement data.
This study contributes to expanding the limited empirical base on subject leadership and to the paucity of empirical research on school leadership in Australia. The findings of this study are of potentially considerable significance to understandings of subject team leadership, an integral component of leadership of teaching and learning in schools. The findings of this study provide valuable insights for teachers and administrators of the school in the case study as well as other schools in terms of considerations for future professional and leadership development programs; future leadership arrangements, and teacher teaming initiatives. This study also highlights that an integrated framework composed of a network approach, the concept of hybrid leadership and distributed leadership practice, is a powerful lens to examine, analyse and build understanding of leadership of teaching and learning in subject teams, and when combined with methods of CA and ONA, the framework is a powerful one, generating robust empirical findings.

**Key Words:**
leadership, teaching and learning, formal leaders, informal leaders, hybrid leadership, configurations, subject teams, advice and information, interactional resources, meeting routine, informal interactions, organisational network analysis, conversational analysis.
LIST OF PRESENTATIONS

The following symposium and conference presentations have resulted from this research project:


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CHAPTER ONE
SETTING THE FOCUS

1.0 Introduction

Over the last decade, it has become increasingly recognised that school leadership is critical for improved student outcomes (Louis, Leithwood, Wahlstrom, & Anderson, 2010; Robinson, Hohepa, & Lloyd, 2009). The spotlight is on leadership of teaching and learning, not only the learning of students, but also of professionals (MacBeath; 2009; Robinson, 2006; 2007; Robinson et al., 2009; Timperley, 2011). Traditionally, leadership in schools has been associated with positional authority, with the principal regarded as the sole leader. In recent years, it has been acknowledged that the leadership capabilities (including knowledge, skills and dispositions) of a single individual is inadequate for the many roles, tasks and challenges facing schools (Australian Institute for Teaching and School Leadership, 2011; Crowther, 2002; Queensland Government, 2011a; Timperley, McNaughton, Lai, Hohepa, Parr, & Dingle, 2009). Rather than associating leadership solely with the school principal, leadership is now also thought of as being shared throughout the organisation across many talented individuals, including teachers (Crowther, 2002; Gronn, 2002; Margolis & Huggins, 2012; Spillane, 2006). In addition, structures such as subject teams are seen as a progressive way to lead teaching and learning (Brundett & Terrell, 2004). Subject teams functioning as professional learning communities (PLCs) foster collaboration, engaging educators in dialogue about improving teaching and learning (Visscher & Witziers, 2004). Two forms of dialogue are advice and information – the building blocks of knowledge (Spillane, Healey, & Kim, 2010). Such knowledge is shared, not only in formal contexts of routines such as team meetings, but also through informal networks (Hayton & Spillane, 2011); and is provided not only by formal leaders, but also by informal teacher leaders (Hancock, 2008; Spillane et al., 2010).

This study explores the practice of leadership of teaching and learning through advice and information interactions in two subject teams in a middle school in Queensland, Australia. In this chapter, I first sketch an outline of the background to this study by highlighting key themes emerging in recent scholarship on the leadership of teaching and learning in Australia. Next, I present the research problem outlining issues with
previous empirical research; and then present the research questions and purpose that guide this study. I then provide a justification for the study; presenting a case why this study is different. This is followed with an explanation of the contribution that this study will make to education and the broader community. I then present an outline of the limitations of the study. Finally, I present a preview of the chapters that follow in this dissertation.

1.1 Background to the Study

*Leading, teaching, and learning* have recently emerged as central concepts to scholarship on educational renewal and school improvement (see Collinson, 2006; Robinson, 2006; Robinson *et al*., 2009; Webb, 2005) and are integral to school improvement policies and initiatives of government departments in many countries across the world. In Australia, like in most western countries, the spotlight on educational leadership is on teaching and learning. In Queensland, the current State Department of Education, Training and the Arts (DETA) emphasises that learning and teaching must be the central activities of schools (AITSL, 2011; Queensland Government, 2008a; 2009; 2011b). DETA has embarked on several reforms to improve teaching and learning. These reforms have been driven by policy such as *Queensland State Education – Destination 2010 Action Plan* (QSE – 2010) (Queensland Government, 2005a) which was later reviewed and revised as goals were being achieved (Queensland Government, 2008b). QSE – 2010 responds to the challenge of preparing students to participate and communicate in new and complex social, cultural and economic futures by providing “quality educational experiences and ensuring quality outcomes for all students” (Queensland Government, 2005a, p. 4).

The focus on teaching and learning is one of the seven over-arching key priorities in the *Roadmap for P-10 curriculum, teaching, assessment and reporting* policy of DETA (Queensland Government, 2011b). This policy provides direction with the *P-12 Curriculum Framework*, (Queensland Government, 2008a) - a revision of the *P-10 Curriculum Framework* (2005b). The *Roadmap* points out that achieving better outcomes and helping students become the best they can be is at the heart of everything done in state schools. This means, providing high-quality curriculum teaching as well as
programmes that support students’ social and emotional development at all stages of their schooling. DETA has identified the teaching of English, Mathematics and Science as priority areas for improvement in teaching and learning maintaining that improving the education outcomes for every student “requires an unwavering focus on quality leadership, quality teaching and quality curriculum in all schools” (Queensland Government, 2011b, p. 11). To ensure high-quality teaching and improve the achievement of students, amongst other factors, there is a “need for strong leadership with an unrelenting focus on improvement” (Queensland Government, 2011b, p. 2).

In Queensland, a distributed or shared leadership approach has emerged in the last decade or so as a significant leadership agenda. The leadership agenda articulated through the policy document, Leadership Matters (Queensland Government, 2006), emphasises the importance of collaboration and inclusivity, and requires educational leaders to operate in non-hierarchical, trusting and mutually respectful ways. Notwithstanding the need for flatter structures, the importance of individuals such as school principals cannot be underestimated as they have an important role to play in leading learning. Hence, the Roadmap outlines five leadership capabilities for highly effective principals in Education Queensland schools; one of them being, helping teachers make a difference. To achieve this goal, principals need to (i) work with and support the professional development of their teachers; (ii) create opportunities for teachers to mentor and learn from others and to access professional information; (iii) schedule time for teachers to work together to plan and review the school curriculum and examine student work; and (iv) allocate time for teachers and specialist support staff to plan and collaborate in meeting the learning needs of particular student cohorts, for example, students with a disability or students who are English Second Language (ESL) learners (Queensland Government, 2011b).

Whilst school principals have an important role in leading learning and are seen as a major influence on the quality of teaching practice and student achievement “leadership of Queensland state schools is not the sole province of the principal. The greatest impact occurs when leaders at all levels in the school community work together to achieve learning outcomes for students” (Queensland Government, 2006). This understanding and expectation of collaboration and shared leadership is also advocated in the Professional Standards for Teachers (Education Queensland, 2005c) which emphasises that standards of excellence for teachers includes leadership roles for teachers.
Educational reformers acknowledge that the challenge of providing quality education in a knowledge intensive society, not only requires leadership at all levels but also various structures to achieve quality outcomes. Thus, policy initiatives such as the Roadmap outline the importance of teams, such as school leadership teams. The P-10 Curriculum Framework also provides the structure to allow schools to achieve the curriculum objectives of QSE - 2010; and facilitates the emergence of schools as learning communities, each with its own way of combining relevant approaches to school organisation, curriculum, teaching and learning. Also, the Curriculum Framework suggests that “effective teaching strategies” will reflect teachers “working collaboratively in professional teams” (Queensland Government, 2005b, p. 11). The notion of professionals collaborating in teams is also articulated in the Professional Standards for Teachers (Queensland Government, 2005c) which outlines that teachers are expected to be actively engaged in collaborating, networking, and sharing with other personnel to provide the best learning outcomes for students; establish and effectively implement procedures to meet personal work related goals and priorities; and contribute to the effective functioning of professional teams, work with other professionals, and other community-based personnel.

DETA acknowledges professional associations and networks play a vital role in enriching the professional lives of educators as these promote knowledge related to particular disciplines. Hence, various networks, particularly, online professional communities have been established. Educators, viewed as sources of expertise, are the key to sharing expertise in the online forums that include subjects such as Literacy and Mathematics.

1.2 Research Problem

School leadership is critical for successful, quality schools. Much of the previous research equates school leadership with the work of the school principal (Supovitz, Sirindes, & May, 2010). Gurr and Drysdale (2013) argue that whilst their leadership is critical to successful schools, “it does not mean that principals are the only leaders in a school” (p. 56). Moreover, school leadership is a complex task that presents many challenges. It has been increasingly acknowledged that the capabilities of a single individual are inadequate for the challenge of preparing a diverse group of students for
success in a post-industrial knowledge-intensive society. A related problem in previous research is that it focuses mostly on what leaders do in broad and general terms (Hallinger, 2009) or generic leadership (Robinson, 2006), giving limited attention to the practice of leading teaching and learning. In the recent years, scholars (e.g. Lingard, Hayes, Mills, & Christie, 2003; Robinson, 2006; Robinson et al., 2009) argue that to improve student achievement, the central activity of leadership needs to be on teaching and learning, particularly on aspects such as curriculum, pedagogy and assessment. To address this challenge, governments and schools have responded in various ways, including creating leadership positions and organisational structures such as subject teams, to foster knowledge-building through dialogue between professionals. Whilst there has been a steady increase in the literature on leadership theory and teaming, a review of the relevant literature indicates that there is a scarcity of empirical evidence related to leadership of teaching and learning, particularly knowledge-sharing through advice and information interactions in subject teams.

1.3 Purpose of the Study

The main purpose of this study is to explore, analyse and document the practice of leadership of teaching and learning through advice and information interactions in school subject teams; and thereby contribute to the limited research base. The research design of this study is innovative as it uses an integrated framework applying Organisational Network Analysis (ONA) to school research in conjunction with Conversation Analysis (CA) to explore the leadership of teaching and learning through advice and information interactions in teams. The questions guiding the study are outlined below.

1.4 The Research Questions

The focus question of this study is: How is leadership of teaching and learning through advice and information interactions practised in school subject teams?

The investigation of the focus question is guided through the following sub-questions:
1. What are the patterns and configurations of leadership that emerge in the interactions of participants?

2. To what extent do formal leaders provide advice and information to colleagues; and do teachers without formal leadership positions emerge as informal leaders?

3. How do participants perceive the influence colleagues have on their work?

4. What are the leadership actions performed by leaders in formal interactions; and what are the interactional resources used by leaders?

1.5 Justification for the Study

This study differs from previous studies of leadership in several ways. First, as Hallinger’s (2009) review of literature indicates, earlier studies of school based leadership has generally been on what leaders do in broad and general terms; focusing on actions such as culture building and goal-oriented leadership. Robinson (2006, 2007) argues that there is a need to redirect the focus of school leadership research, giving lesser emphasis to studies of generic leadership, placing greater emphasis on the core business of schools – teaching and learning. Similarly, Spillane and Diamond (2007) contend that examining and undertaking an in-depth analysis of the day-to-day practice of leadership has been mostly neglected in studies and its importance merits the attention of scholars. My study is an in-depth study focusing on investigating the practice of leadership of teaching and learning in one school.

Second, much of the previous research is replete with studies focusing mainly on the principal as school leader (e.g. Blasé & Blasé, 2000; Hallinger & Heck, 1996; Mulford, 1996; Muse & Abrahams, 2011; Southworth, 2002; Waters, Marzano, & McNulty, 2004; Wildy & Dimmock, 1993). However, in recent years there has been a steady increase in the number of studies focusing on other leaders. For example, in Australia, more studies of middle-level leaders such as deputy principals (e.g. Cranston, Tromans, & Reugebrink, 2004; Gronn & Hamilton, 2004) and assistant principals, deputy principals, heads of school, and deans of study (e.g. Cranston, 2006, 2009) have been undertaken in the recent years. Whilst some studies of middle-level subject leadership have been undertaken (e.g. Cotter, 2011; Keane, 2010; Rosenfeld, 2008; White, 2000), “middle-level leadership has not captured the research interest it deserves” (Gurr &
Drysdale, 2013, p. 57). Hallinger and Heck (1996) refer to the view that school leadership rests singularly on the principal as one of the ‘blind spots’ which have limited the field of leadership research. This study examines leadership of middle level subject leaders as well as teacher leaders, thus addressing one of the ‘blind spots’ of research in school leadership.

Third, the formation of subject teams in schools has been increasingly recognised as a valuable medium to improve teaching and learning. However, there is a scarcity of research-based evidence about the experience of team work in educational settings (Hall, 2002). A review of literature thus far reveals that, despite the growing number of studies (e.g. Melville, Wallace, & Bartley, 2007; Ritchie, Mackay, & Rigano, 2006; Sawyer, Brock, & Baxter, 2007), empirical studies of leadership in subject teams is limited in Australia. This research study focuses on leadership practices in teams - addressing the concerns of researchers, for example, Mulford (2008), who points out that there is a paucity of research studies on Australian school leadership.

Fourth, the provision of advice and information – a common daily activity in everyday life – is important to teaching and learning. Several studies of advice and information interactions have been undertaken in the health and medical fields (e.g. Heritage & Sefi, 1992; Pilnick, 1999; Silverman, 1997). Despite some studies undertaken in education, most focus on the context of higher education (e.g. He, 2009; Vehviläinen, 2009; Waring, 2007). Recently, studies focusing on school leadership through advice and information networks (e.g. Hancock, 2008; Warfield, 2009) have emerged; however, most of these studies on networks focus on the informal interactions, with little or no attention paid to the formal interactions such as team meeting routines. This research study explores the advice and information interactions in both, formal and informal, contexts.

Fifth, this study of leadership adopts a framework that integrates a hybrid leadership perspective and a distributed leadership perspective with a network approach. While there is some theory about hybrid leadership and distributed leadership, there is relatively little empirical knowledge about hybrid leadership practices in schools. A few major conceptual discussions of hybrid leadership appear in the literature (e.g. Gronn, 2009a, b, 2010). Also, a few major conceptual discussions appear in the literature on distributed leadership (e.g. Gronn, 2002; Harris, 2004, 2008; Spillane, Halverson, &
The number of empirical studies on distributed leadership is gradually increasing internationally (e.g. Camburn, Rowan, & Taylor, 2003; Scribner, Sawyer, Watson, & Myers, 2007; Spillane & Camburn, 2006; Timperley, 2005); however, only a few studies have been undertaken in Australia (e.g. Dinham, Aubusson and Brady, 2008; Gronn 2009; Ritchie et al., 2004). Whilst there are an increasing number of studies on distributed leadership, there is a dearth of empirical studies on hybrid leadership in schools with just one study undertaken in Australia by Gronn (2009b), and another in New Zealand by Higgins and Bonne (2011). This study of leadership using an integrated framework of ONA and CA contributes to the limited empirical research base of studies employing hybrid leadership and distributed leadership practice as analytical tools.

Finally, empirical studies of educational leadership, including many of those listed in the previous paragraphs, have been undertaken predominantly in either a quantitative paradigm (e.g. Marks & Printy, 2008; Supovitz, et al., 2010) or qualitative paradigm (e.g. Mangin, 2007; Muse & Abrams, 2011). This study adopts a mixed-methods approach using observations, surveys and interviews to gather data on both formal as well as informal leadership practices in both formal and informal contexts, providing a more comprehensive understanding of the leadership practices in relation to teaching and learning. This study of leadership captures the interactions of teachers in teams through CA, a method deemed appropriate where the medium of interaction is ‘talk’, and ONA. A review of literature to date has revealed a study adopting both CA and ONA approaches has not as yet been undertaken. At this juncture, it is important to point out that adopting both CA and ONA approaches poses a considerable challenge as these are two distinct research methods. The challenge here was to create a synergy between the two approaches in order to gain a fuller understanding of leadership of teaching and learning through teams in formal and informal contexts.

1.6 The Significance of the Study

With leadership being critical to improve educational outcomes for students, it is essential that approaches to leadership are informed by evidence about quality teaching, including, effective curriculum, assessment and pedagogical approaches. The
importance of effective subject leadership and collaboration through advice and information interactions facilitated by teacher teaming is paramount to improve teaching and learning. Therefore, expanding the knowledge base and understanding of subject leadership practice and teaming are important for theory, policy and practice. The data generated from this research study has particular significance at a number of levels.

The findings of the study will:

1. Provide insights for teachers and administrators of the school in the case study. Feedback to the school will be useful for future professional, leadership and management development programmes at the school. The findings can be useful to inform future leadership arrangements and distribution, and teacher teaming initiatives.

2. Provide useful strategies, ideas and principles for educators to collaborate and participate effectively as leaders in teams.

3. Contribute at state, national and international levels, research about teachers’ practices of leadership, and thereby increase empirical base of leadership research, especially in Australia.

4. Be useful to researchers, for example those considering adopting a mixed methods approach, and those interested in ONA and CA.

5. Provide valuable data to education policy makers (e.g. Education Queensland) on how policy (e.g. the Professional Standards for Teachers) is translated into practice, and thereby impact on future policy.

6. Be valuable in the design of future pre-service courses to include a focus on aspects related to collaborative teaming, postgraduate leadership programmes, and in-service programmes for aspiring leaders.

1.7 Limitations of the Study

This research study seeks to generate a greater understanding of leadership of teaching and learning through advice and information, in particular, curriculum, pedagogy, and assessment, in subject teams. The work in this thesis suffers from a few limitations. In the first instance, the sample under investigation in this study is a small one. This study was undertaken at a single site, a middle school in a P-12 government school. Two Key
learning Area teams (Mathematics and English), each with a team membership comprising 13 members, were investigated. The choice of this single site and two teams limited generalisations. This is explained in more detail in the Methodology chapter (Chapter Four).

Secondly, the study was undertaken at a site where the researcher was a Head of Curriculum (HOC). Aware that with the ‘insider researcher’, there is potential for researcher’s values and biases; I assumed a non-obtrusive approach during observations and interviews of participants. Furthermore, constant reflection was employed to minimise the possibility of bias emerging in the findings. These strategies to assure validity are discussed in more detail in Chapter Four.

A third limitation of this study is its narrow focus on leadership through advice and information interactions of participants. The focus on advice and information interactions excluded other aspects of leadership related to teaching and learning, for example, mentoring. This narrow focus was intentional so as to explore advice and information interactions in subject teams, an area not previously examined in school leadership research. It is acknowledged that in a school situation, leadership of teaching and learning is not restricted to solely advice and information interactions.

**1.8 Summary of Chapter**

The purpose of this chapter was to provide an introduction to the study with the aim of outlining the focus of the study. It provided a background to the study, outlining key themes emerging from recent policy on leadership, teaching, learning, teaming, and networks in Australia. In line with international endeavours, such policy fosters shared leadership and professional learning of all members of the school community. The chapter then outlined the research problem, emphasising the paucity of empirical evidence on leadership of teaching and learning in subject teams, in particular in the area of providing advice and information. Subsequently, the chapter presented the purpose, focus research question and sub-questions; a justification for the study and the potential significance of the study. Finally, the chapter highlighted that despite its strengths, this study was not without its limitations.
The next section provides a preview of the chapters in this dissertation.

### 1.9 Preview of the chapters that follow

To orient the reader on the dissertation structure, a summary of the focus each of the chapters is provided.

**Chapter Two**

In Chapter Two, relevant literature is reviewed. The review begins with an exploration of definitions, importance, and theories of leadership. The review then focuses on current educational thinking about leadership of teaching and learning; examining concepts of hybrid, distributed and teacher leadership, making reference to empirical evidence. The review then examines the links between leadership and learning. After exploring subject leadership and examining empirical investigations of leadership of teaching and learning, the review undertakes a detailed examination of advice and information interactions in networks.

**Chapter Three**

Chapter Three provides an account of the theoretical frameworks that guide this study. In particular, it provides an exposition of the integrated analytical framework that guides this study. First, it provides a model of the conceptual framework for the study. It then discusses the network perspective, outlining the underlying theory of networks, the links between theory and methods, and the levels of analysis using ONA. This is followed by a discussion of hybrid leadership theory, and typical patterns and configurations of leadership associated with a hybrid perspective. The chapter then provides a discussion of distributed leadership theory, in particular, the framework used to analyse leadership practice in routines such as team meetings. The aspect of the team meeting routine includes a discussion of the theoretical basis of CA, an offshoot of ethnomethodology.

**Chapter Four**

Chapter Four provides a detailed account of the methodological approaches adopted in this research. This chapter introduces and elaborates on the mixed methods research
design adopted in the study, outlining the quantitative and qualitative approaches adopted, the data collection process and tools. The chapter then explains the methods used in the analysis of the data. First, it discusses ONA, introducing relevant concepts and the measures used to analyse the data. Second, it presents a discussion of the method of CA, outlining the analytical procedure adopted in this study. The chapter then provides a discussion of the validity and reliability of the study, and concludes with a discussion on the ethical considerations of the study.

Chapter Five
Chapter Five provides an analysis and reports the results of the Mathematics Key Learning Area team. The analysis and results are presented in two parts. In Part One, the profile of team members is first presented. Then, the analysis and results of the formal interactions are provided. In this section, the observation data related to meeting talk is analysed using ONA. This is followed by an analysis of the meeting talk data, using CA to analyse the advice and information sequences. In Part Two, the informal interactions are analysed using ONA based on social network survey data, and the results are presented. The chapter concludes with a summary of the results, comparing the formal and informal advice and information interactions in the team.

Chapter Six
Chapter Six provides an analysis and reports the results of the interactions of the English Key Learning Area team. The analysis and results are presented in two parts. In Part One, the profile of team members is first presented, proceeding with the analysis and results of the formal interactions. In this section, the observation data related to meeting talk is analysed using ONA, followed by an analysis of the meeting talk data using CA to analyse the advice and information sequences. In Part Two, the informal interactions are analysed using ONA based on social network survey data, and the results are presented. The chapter concludes with a summary of the results, comparing the formal and informal advice and information interactions in the team.

Chapter Seven
Chapter Seven provides a comparison of the results of Mathematics KLA Team and the English KLA teams. First, the results of the formal interactions are compared based on the results of ONA, and followed with a comparison of the results of conversational
analysis of meeting talk. Second, the results of the informal interactions are compared based on the results of ONA.

**Chapter Eight**

Chapter Eight provides a discussion which synthesises the findings presented in Chapters Five, Six, and Seven. The chapter begins with a summary of the limitations of the study. The summary of the findings is then presented and discussed in the light of the research questions that guided this study. This is followed with a discussion of the main conclusions emanating from the study and recommendations for improved leadership practice. The chapter concludes with suggestions for possible directions for future research.

In the next chapter, a review of the literature is provided.
CHAPTER TWO
REVIEW OF LITERATURE

2.0 Introduction

The main purpose of this review is to examine literature documenting the leadership approaches adopted in teaching and learning, the practice of leadership in subject teams, the role of networks in leadership of teaching and learning in school, and to develop an argument for the topic under study. The review begins with a brief outline of importance and definitions of school leadership, an examination of the various approaches of school leadership; citing some examples of empirical research undertaken in these approaches. Next, the review focuses on the school subject leadership, including discussion of the importance of teams, the role of the subject team leader, and subject teams as PLCs. In this part, an examination of empirical evidence on leadership of teaching and learning in subject teams is included. The review then focuses on networks, advice and information interactions, and the link between leadership and advice and information. In this part, empirical evidence on leadership of teaching and learning through advice and information networks undertaken nationally and internationally is examined. Finally, the review discusses the recent use of ONA to examine networks.

2.1 The Importance of School Leadership

School leadership matters (Davis, Niven, Thiele, Anderson, Douglas, & Lloyd, 2010; Pont, Nusche, & Moorman, 2008; Robinson et al., 2009; Waters et al., 2004). Over the last two decades, research in educational leadership has gained prominence and school effectiveness studies have listed leadership as one of the critical features of effective schools (Christie & Lingard, 2001; Marzano, Waters & McNulty, 2005). The renewed emphasis on leadership can be attributed to a few reasons. First, school leadership is believed to be crucial to improving student outcomes and maintaining these improvements over time (Leithwood & Riehl, 2003; Spillane & Diamond, 2007). Second, school leaders such as principals, other education leaders, and teachers are being held accountable for how well teachers teach and how much students learn.
(Leithwood & Riehl, 2003). Third, the school environment is much more complex than it previously has been; and in these ‘new times’ school leaders need to respond to a variety of factors, including, an increasing diversity in student characteristics; changing curriculum standards, and achievement benchmarks (Leithwood & Riehl, 2003).

Among their seven strong claims about successful school leadership, Leithwood, Harris, and Hopkins (2008) contend that school leadership is second only to classroom teaching as an influence on student learning. This view on the importance of leadership is supported and illustrated in a number of studies. In North America, Louis et al. (2010) undertook a six year study to identify the nature of successful educational leadership and to better understand how such leadership can improve educational practices and student learning. At the start of their investigation, the researchers claimed, based on a preliminary review of research that leadership is second only to classroom instruction as an influence on student learning. After six years of research, the authors asserted that they were “even more confident about this claim” (Louis et al., 2010, p. 9).

The findings of the above study are supported by Robinson et al. (2009) who reviewed 134 studies (New Zealand and international studies) on the impact of leadership on student outcomes. The study confirmed the findings of previous studies – leadership matters. Moreover, the researchers maintain that whilst other approaches to leadership are important, pedagogical leadership is vital to improving student outcomes – the closer leaders get to the business of teaching and learning, the more likely it is that they will have a positive impact on their students. Adopting a dimensions analysis approach to determine which dimensions of leadership had a stronger effect on student outcomes, the study found that resourcing strategically and ensuring an orderly and supportive environment had small effects; establishing goals and planning, coordinating, and evaluating teaching and the curriculum had moderate effects; whilst promoting and participating in teaching and learning and development has a large effect.

In their study in the UK, Day, Sammons, Hopkins, Harris, Leithwood, Gu, and Brown (2010) investigated the leadership of schools that had improved student learning outcomes over three years. This study, too, confirmed the findings of previous studies that effective school leadership is second only to classroom teaching. In particular the study found that the headteacher’s leadership can influence improvement in the school’s organisation and in the teaching and learning environment, which in turn improves
student outcomes. These findings are similar to those of empirical studies undertaken in Australia. For example, Gurr, Drysdale and Mulford’s (2007) multiple case studies, found that whilst there are examples of direct instructional leadership by principals, the more typical path is indirect, working through and with others. Similarly, Silins and Mulford (2002) and Silins, Mulford, Zarins, and Bishop (2000), found that the principal, administrative team and teacher leadership working through an organisational learning dimension impacted upon teachers’ work, which in turn influenced student dimensions of academic self-concept, participation, engagement and retention. These findings are consistent with those of Hallinger and Heck (1996) who concluded that “leadership effects on school achievement appear to be indirect is neither cause for alarm nor dismay” and “achieving results through others is the essence of leadership…” (p. 39). This view is consistent with that of Dempster (2009) who maintains that human agency is a leadership fundamental; “and if the primary purpose of schools is to be achieved, it is only possible with and through others” (p. 27).

2.2 Defining of School Leadership

Whilst there is agreement on its importance, the concept of leadership remains ‘elusive’ (Christie & Lingard, 2001; Hayes, Christie, Mills, & Lingard, 2004). MacBeath (2004) contends that leadership “…is a term full of ambiguity and has a range of interpretations” (p. 4). Yukl (2006) maintains “like all constructs in social science, the definition of leadership is arbitrary and subjective” (p. 8) and “researchers usually define leadership according to their individual perspective and the aspect of the phenomenon of most interest to them” (p. 2). Whilst some definitions are more useful than others, “there is no single correct definition that captures the essence of leadership” (Yukl, 2006, p. 8). After a comprehensive review of the leadership literature, Stogdill (1974, as cited in Yukl, 2006) concluded “there are almost as many definitions of leadership as there are persons who have attempted to define the concept” (p. 2).

The consideration of a variety of descriptions or definitions of leadership helps identify the key elements of the phenomenon. For many, leadership is seen as a process of providing direction and exercising influence. Northouse (2010) defines leadership as “a process whereby an individual influences a group of individuals to achieve a common
goal” (p.3). For Yukl (2006) leadership is, “the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives” (p. 8). For Sergiovanni (1987), “Leadership is the process of persuasion by which a leader or leadership group (such as the state) induces followers to act in a manner that enhances the leader’s purposes or shared purposes” (p. 2). These definitions suggest that at the core of most definitions of leadership are two functions: providing direction and exercising influence (Leithwood & Reihl, 2005; Louis et al., 2010).

Based on empirical work, Spillane and Coldren (2011) define school leadership as:

“those activities or practices tied to changing the core work of the organisation that are designed by organisational members to influence the motivation, knowledge, affect, or practice of other organisational members or that are understood by organisational members as intended to influence their motivation, knowledge, affect, or practice in order to enable change” (Spillane & Coldren, 2011, p. 28).

Spillane and Coldren’s (2011) definition of leadership also emphasises influence; however, it is strongly tied to the organisation’s core work of teaching and learning – classroom instruction. Similarly, Robinson et al. (2009) see leadership as having a pedagogical function, involving the key dimensions: strategic resourcing, ensuring an orderly and supportive environment; establishing goals and planning, coordinating, and evaluating teaching and the curriculum; and promoting and participating in teaching and learning and development.

The literature on school leadership points out that one of the key elements of leadership is the capabilities of leaders (AITSL, 2011; Queensland Government, 2011a; Timperley et al., 2009). It is this view of leadership of teaching and learning that is employed in this study. Timperley et al. (2009) describe capabilities as a means of having the knowledge and skills to carry out specific roles, responsibilities and actions needed to improve student outcomes. Robinson et al. (2009) add dispositions to knowledge and skills (KSDs), as being critical to leadership that makes a positive difference for students. Thus, there is a strongly held view that leaders need to develop their capabilities in leading teaching and learning. For example, in Queensland, Australia, it
is expected that principals focus on developing their instructional leadership capabilities in order to improve school and student performance. These include the following:

- Educational leadership capabilities (knowledge and understanding of curriculum, teaching, learning, and assessment)
- Intellectual leadership capabilities (enact the purposes of public education)
- Organisational leadership capabilities (support continuous improvement through effective management of human, financial and physical resources)
- Personal leadership capabilities (demonstrate integrity and commitment to professional, moral and ethical behaviour)
- Relational leadership capabilities (interpersonal skills required to develop and maintain quality relationships with a diverse range of people)

(Queensland Government, 2011a)

The many definitions and descriptions indicate that leadership is a much contested concept amongst scholars and practitioners. This is also evident in the many approaches adopted to studies of leadership, including early theories (e.g. scientific management theory, trait theory, situational and contingency leadership) and more contemporary approaches. The latter approach is discussed in the next section.

### 2.3 Contemporary Approaches to School Leadership

Since the early years of the 20th century, leadership, as a construct, has been examined from a variety of paradigms, theories and models. Over the past 30 years, several conceptual models of leadership have emerged, focusing explicitly on the manner in which leadership exercised by school administrators and teachers brings about improvement in school conditions and student outcomes. After a comprehensive review of research on school leadership Hallinger (2009) observes that instructional leadership, the most common conceptualisation of school leadership, has evolved conceptually in its “reincarnated for of leadership for learning” (p. 1).

#### 2.3.1 Instructional Leadership

Though not a new concept, instructional leadership rose to prominence during the 1980s in the US and internationally along with the effective schools movement (Hallinger,
The focus was on the effective supervision (where the principal rated the effectiveness of teachers) of instruction to improve the quality of teaching and learning in the classroom. Studies on leadership conducted during the 1980s concluded strong principal instructional leadership was central to successful programmatic change, instructional improvement and school effectiveness (Camburn, Rowan, & Taylor, 2003). Despite the apparent importance of instructional leadership, as noted by Hallinger (2003), this conventional view of instructional leadership was criticised because the research suggested strong instructional leadership was in short supply in most schools. This was due to the fact that principals played managerial, political, instructional, institutional, human resource, and symbolic leadership roles in their schools (Cuban, 1988, as cited in Hallinger, 2003). Thus, the typical principal’s working day was consumed by managerial tasks having little or no direct bearing on the improvement of instruction (Camburn et al., 2003). Hence, the traditional approach of instructional leadership became an “outmoded concept, one that was always more ritual than reality” (Hoy & Hoy, 2006, p. viii). Another strong criticism of conventional models of instructional leadership was that they focused too much on the principal as the centre of expertise, power and authority in the school (Cuban, 1988, as cited in Hallinger, 2003).

At the turn of the 21st century, the emphasis on accountability and performance in schools led to a refocusing on instructional leadership (Brundett & Rhodes, 2011; Hallinger, 2003). Whilst there is still no clear definition of instructional leadership, one of the most frequently used broader conceptualization of instructional leadership was developed by Hallinger (2003) who proposes three dimensions of the instructional leadership construct; further delineating these into ten instructional leadership functions: (1) Defining the school’s mission (framing and communicating the schools’ goals); (2) Managing the instructional programme (supervising and evaluating instruction, coordinating curriculum, and monitoring student progress); and (3) Promoting a positive school-learning climate (protecting instructional time, promoting professional development, maintaining high visibility, providing incentives for teachers, developing high expectations/standards, and providing incentives for learning).

According to Lashway (2003), current definitions of instructional leadership are richer and more expansive than earlier ones since they include much deeper involvement in the core technology of teaching and learning; thus, instruction has been an increasing
focus in schools and empirical investigations. In the USA, using open-ended survey questionnaires, and involving a sample of 809 teachers in elementary, middle and high schools, Blasé and Blasé (2000) investigated teachers’ perspectives of the characteristics of school principals that influenced their classroom instruction and what impact those characteristics had on them. The study found two interrelated aspects to effective instructional leadership behaviour which were used to construct the reflection-growth (RG) model of instructional leadership. These are: (a) talking with teachers to promote reflection (e.g. making suggestions, soliciting advice and opinions); and (b) promoting professional growth. In another study, also using semi-structured interviews, but involving a sample of ten head teachers in the UK, Southworth (2002) investigated successful instructional leadership of heads in small primary schools. The findings of the study revealed successful heads’ instructional leadership emerged as a result of working hard, determination, positive dispositions, approachability, teamwork, and school improvers. In Australia, Gurr, Drysdale and Mulford’s (2007) multiple case study exploring examples of instructional leadership of principals as part of the research study titled *International Successful Leadership Project*, found whilst there are examples of direct instructional leadership by principals, the more typical path is indirect, working through and with others.

### 2.3.2 Transformational Leadership

The second foremost conceptualisation of school leadership evident in empirical studies is transformational leadership. The seminal work of Burns (1978) on transformational leadership contributed significantly to leadership research in general, and to educational leadership, in particular. Burns (1978) contrasted transformational leaders with transactional leaders who motivate followers by appealing to individual, typically monetary, extrinsic interests. He stated transformational leaders are individuals that appeal to higher ideals and moral values of followers in an attempt to raise their consciousness about ethical issues and mobilise their energy and resources to reform institutions. Working with Burns’ (1978) theory, Bass (1985) defined transformational leadership in terms of four dimensions: charisma, inspirational motivation, individualised consideration, and intellectual stimulation. Building on the work of Burns (1978) and Bass (1985), Leithwood (2007) identifies four major dimensions of transformational leadership in schools, each of which includes three to four more
specific sets of practices: (1) setting directions (building a shared vision, fostering acceptance of group goals, and high performance expectations); (2) developing people (providing individual support and consideration, intellectual stimulation, providing an appropriate model, and re-designing the organisation); (3) building collaborative cultures (restructuring, building productive relationships, connecting the school to its wider environment, managing the instructional programme); and (4) staffing the programme (providing instructional support, monitoring school activity, buffering staff from distractions to their work).

Early studies of transformational leadership have been criticised for its focus on the principal and its lack of focus on the core business of schools – teaching and learning. In recent years, however, there has been a shift in focus towards empirical investigations of transformational leadership and instructional leadership, and transformational leadership and shared leadership. In a review of 32 studies, Leithwood and Jantzi (2005) found effects of transformational leadership existed on changed classroom practices, collective teacher efficacy and organisational learning, and on instructional or pedagogical quality. The findings of a study by Marks and Printry (2003) also underscored the benefits of transformational leadership; however the authors maintain transformational leadership needs to coexist with instructional leadership. The study, undertaken in the US, using surveys of teachers, interviews with staff, observation of meetings, and documents, examined the relationship of transformational leadership and shared instructional leadership to teachers pedagogical practice and student achievement. One of the major findings of the study was that transformational leadership is a necessary but insufficient condition for instructional leadership. When transformational and shared instructional leadership were integrated, teachers provided high-quality pedagogy and student achievement was higher. These findings are similar to the BES study of Robinson et al. (2009) which found that the impact of pedagogical leadership (emphasis on clear education goals, planning the curriculum, and evaluating teaching and learning) to be nearly four times that of transformational leadership (emphasis on relationships). The authors maintain that both theories are needed.

However, the findings of other studies were quite different. A study undertaken by Barnett, McCormick, and Conners (2001) in Australia, using survey questionnaires involving 124 teachers in twelve secondary schools, examined the relationship between principal transformational and transactional leadership behaviours and teacher
outcomes, and school-learning culture outcomes. One of the most important findings was that transformational leadership behaviour of vision/inspiration had a negative association with teacher excellence in teaching and students learning culture. The authors suggest a visionary/inspirational principal may actually distract teachers from concentrating on teaching and learning. The study found only transformational behaviour of ‘individual concern’ was associated with positive teacher outcomes of extra effort, satisfaction and effectiveness.

Despite the mixed findings, transformational leadership has had a major influence and tends to occupy a prominent place in educational contexts. However, a growing number of scholars have become dissatisfied, particularly because transformational approaches have equated school leadership with school principals; its notion of ‘the power of one’, and portraying principals as heroic leaders (Hartley, 2007; Spillane, 2006). Consequently, many forms of post-transformational approaches to leadership have emerged over recent years. These include distributed leadership (Gronn, 2002; Harris, 2004; Spillane, 2006) and teacher leadership (Crowther, 2002; Lieberman, Saxl, & Miles, 1988).

### 2.3.3 Distributed Leadership

In recent years, distributed leadership has been the buzz word amongst scholars and practitioners of school leadership. However, the study of distributed sources of leadership can be traced back to the work of Gibb (1954), an Australian psychologist, who challenged the traditional assumption that leadership should reside in a single individual. Gibb argued that “leadership is probably best conceived as a group quality, as a set of functions which must be carried out by the group” (Gibb, 1954, as cited in Gronn, 2000, p. 324), proposing two forms of leadership, focused and distributed, with distributed being an alternative to the usual leadership studies focused on one leader.

Mayrowetz (2008) argues there are four common usages of the term ‘distributed leadership’: (a) distributed leadership as a descriptive theoretical lens; (b) distributed leadership for democracy; (c) distributed leadership for efficiency and effectiveness; and (d) distributing leadership as human capacity building. The latter three are seen as prescriptions for how sharing leadership in schools can improve practice. Mayrowetz
(2008) concludes each usage has its strengths and weaknesses and there is unlikely to be an agreed universal definition.

In theoretical terms, the work of Spillane (2006) and Gronn (2003) have been at the forefront of the current debate about distributed leadership. Gronn (2003) grounds his conception in an analysis of the actual division of labour in the workplace. Gronn (2002) defines distributed leadership as “… the demonstrated or presumed structuring influence attributable to organisation members acting in concert” (p. 654). Spillane maintains school leadership is best understood as a distributed practice, stretched over the school’s social and situational contexts. Spillane and his colleagues’ (2001; 2004) conception of distributed leadership practice implies focusing on actors’ (both leaders’ and followers’) webs of relations, as well as on their ‘situations’, conceived as complex sets of work routines, tools, structures and elements of organisational culture.

Despite the variations in definitions, there is agreement that there are three distinctive elements of the concept of distributed leadership: (1) distributed leadership highlights leadership as an emergent property of a group or network of interacting individuals; (2) distributed leadership suggests openness of the boundaries of leadership – it widens the net of leaders to include others such as the teachers; and (3) distributed leadership entails a view that varieties of expertise are distributed across the many, not the few (Bennett et al., 2003). Recently, however, Gronn (2009) has posited that whilst he has been one of the proponents of distributed leadership, there are a number of shortcomings with analysis of distributed leadership practice. Hence, Gronn (2011) proposes hybrid leadership with configurations and role sets as the core components of units of leadership analysis. I will return to this debate in the next section.

Spillane and Healey (2010) observe empirical investigations of distributed leadership have been undertaken on three dimensions: Who (who takes responsibility for leadership and management – sources of leadership), What (what aspects of the work or functional responsibilities are distributed), and How (how is the work distributed). However, studies may include more than one of these dimensions as their area of focus. Using survey questionnaires sent to 503 elementary school leaders in 114 schools in the US, Camburn et al. (2003) investigated instructional improvement functions of formally designated leaders and found that school principals performed the broadest range of functions, including instructional leadership, building management functions, and
boundary spanning functions; whilst locally appointed coaches and facilitators (e.g. literacy coaches) focused on instructional leadership, devoting less time to building management and boundary-spanning functions.

The Distributed Leadership Study (DLS), referred to above, was one of the most comprehensive empirical investigations that explored leadership as a practice of instructional improvement and examined the relations between leadership practice and teachers’ classroom work. Several reports were generated from this study, for example, Spillane et al. (2003), Spillane (2005); Spillane, Sherer, and Coldren (2005); Coldren and Spillane (2007). These studies found multiple leaders, formal and informal leadership undertaking the task of leadership. Furthermore, the findings of the DLS suggest that the range of distribution patterns in schools depended on particular routines (e.g. assessment, team meetings). Some routines tend to involve no more than one or two leaders, typically, the principal and assistant principal (e.g. formative evaluation of classroom teaching, and to a lesser extent, informal monitoring of instruction). Other routines involve more leaders, and in addition to formally designated leaders, involve teachers and individuals from outside the school. Whilst Spillane and colleagues and other scholars focused on and found evidence of distributed leadership, some of these findings have recently been re-analysed with insightful findings discussed in the section that follows.

2.3.4 Hybrid Leadership

Whilst studies of distributed leadership have contributed to leadership scholarship, Gronn (2009a; 2011) argues that a distributed perspective provides only a part of the picture of practice; acknowledging that whilst he too postulated distributed leadership as an approach to school leadership, distributed leadership has its shortcomings. Gronn (2008) argues that a distributed approach underplays the significant contributions of highly influential individuals working in parallel with collectivities; “in hindsight, it may have been better to confine “distributed” to instances of conjoint agency” (p. 431). Thus, Gronn (2009a, 2011) argues that studies of distributed leadership actually show hybrid leadership patterns.
Evidence of Hybrid Leadership Patterns in Distributed Leadership Studies

In his re-analysis of scholarship on leadership, Gronn (2009a; 2011) observes solo leaders continue to figure prominently in accounts of distributed leadership, arguing these studies demonstrate various forms of hybrid patterning, citing examples from studies of schools, including the following:

- In the study undertaken by Spillane, Camburn, Pustejovsky, Pareja, and Lewis (2008), exploring principals leading or co-leading, results showed both hierarchical and heterarchical elements; evidence of combination of solo and co-performed work. On the one hand, hierarchical enactments involved principals leading for about two-thirds of the time, about half the time as sole leader. On the other hand, heterarchical enactments occurred the other half of the time as principals led in conjunction with a colleague, mostly teachers. Gronn (2011) describes this hybrid practice as “simultaneous multiple individual leaders and co-leading pairings” (p. 443).

- In the study undertaken by Leithwood et al. (2007), investigating the engagement of informal (non-administrator) leaders, mixed pattern of solo and shared leading was evident. Whilst informal leaders made a high contribution to three of the four leadership functions, teacher teams were found to require principals monitoring and intervening to move forward stalled agendas; suggesting it depended on focused leadership. Gronn (2011) describes this hybrid practice as “shared teacher leading contingent upon a focused leader” (p. 444).

- In the study undertaken by Timperley (2005), investigating instructional leadership in seven elementary schools in New Zealand, leadership practice comprised collaborative work in teacher teams. However, significant leadership roles were also performed by designated individuals who influenced the practice of colleagues in their teams and spanned the boundaries between principals and teacher teams. Gronn (2011) describes this hybrid practice as “project teacher team leaders, their teams and other leaders” (p. 443).
Gronn (2008) argues that in each of the above examples, “hybrid” may be a more accurate reflection of the mix of the work in solo, dyad and team leadership than “distributed” (p. 152). A situation of hybridity does not designate a new type of leadership but is employed as a means of characterising situations (Gronn, 2009). “Hybrid leadership means mixed leadership patterns” (Gronn, 2009, p. 17).

Accounting for Hybrid Leadership in Schools

Gronn (2009b) hypothesises that hybridity represents an attempt by schools to accommodate contingency. The notion of devolution has increased every school’s responsibility, including the deployment of resources (e.g. staffing and finances), and accountability associated with teaching and learning; resulting in schools improvising and making local arrangements to meet site-based needs. Gronn (2009b) observes the absence of guidelines for handling contingency have led to schools continually experimenting to find what works best for them. One of the ways in which schools handle contingency is by adopting ad hoc structures and relationships, or by grafting these on existing longstanding arrangements. These structures are vital for knowledge-sharing. Hence, Gronn (2009b) argues that the need for intelligence is the trigger for hybrid leadership. He maintains that the clue to understanding hybridity may be the need for schools and school leaders to try to maximise their means of acquiring knowledge. “The possession of knowledge is typically understood to be a source of power; however, the lack of it recasts a leader’s relationship with colleagues as one of dependence on them, as much as they are dependent on a leader” (Gronn, 2009b, p. 35). Thus, hybridity is related to a division of labour, which is understood as comprising leadership units that are both hierarchically ordered and legitimated (top-down), and heterarchically emergent and entangled (bottom up) (Gronn, 2009b).

Configurations and Role Sets as a Tool for Analysis of Leadership

Gronn (2009a) maintains in any organisational setting leadership is constantly changing, therefore the mix or configuration should be understood as a response to the situational challenges specific to that context. A hybrid perspective allows for, where leadership may be manifest, different kinds and degrees of both individualised-focused and distributed patterns of leadership to co-exist. Furthermore, there are likely to be
occasions during which each leadership form will be present simultaneously while for periods of time their presence may be sequential.

According to Gronn (2009a), a hybrid perspective, in particular, focusing on understanding configurations is a useful tool for the analysis of leadership patterns. Gronn (2011) proposes configurations (a pattern or an arrangement of practice) and role sets as the core components of units of leadership analysis. Using hybridity as an analytical lens, empirical evidence of hybrid patterns has been found in couple studies. Gronn (2009b) undertook a case study of informants’ perceptions of forms of leadership and the dynamics of leadership relations in a secondary school in Australia. Data was gathered using sociometric techniques, documents, interviews, and observations. Findings of the study show “hybridity”—individualism and partnering manifest in the school. For example, in some instances, individuals monopolised leadership while in others leadership was shared. Furthermore, of the fifteen sociogram respondents, two participants associated leadership with individuals; twelve selected a group/team; and one nominated both an individual and a group.

In another study of mathematics instructional improvement in a New Zealand elementary school, Higgins and Bonne (2011) examined leadership functions in combination with structural configurations that shape leadership enactments aimed at promoting practices that lead to improved student outcomes. Data collected over a two year period included one-on-one interviews; relevant school documentation from school leaders and numeracy, lead teachers engaged in reforming their mathematics teaching, including reports of school achievement data. Looking at the core functions of leadership (Leithwood et al., 2007) viz. setting directions, people development, redesigning the organisation, and managing the instructional programme, the study found that in all functions, there was evidence of both configurations of leadership; in some instances either hierarchical or heterarchical enactments prevailed, whereas in others both fused in a hybrid form of leadership. The authors suggest enactments of particular functions, namely direction and organisational redesign, are necessarily dominated by those in senior positions in a school’s hierarchy, whereas other functions can be effectively driven by heterarchical enactments of leadership, involving lead teachers. They emphasise hybrid patterns – combination of hierarchical and heterarchical leadership enactments – rather than either of these on their own, appears to be more important in promoting instructional improvement. Furthermore, combining
leadership functions and configurations into one analytical frame is useful in building an understanding of the complexities of school-based leadership by capturing leadership enactments of not just those in designated positions, but across all members of a school staff, including teachers.

2.3.5 Teacher Leadership

Teacher leadership, by definition, is a form of distributed leadership in action and distributing leadership in schools implies more teachers in leadership functions and roles than has traditionally been the case (Harris, 2003, 2004). In an OECD report (Schleicher, 2012) defines teacher leaders as those who are “responsible for teams, year levels, or curriculum areas” (p. 22). However, others see teacher leadership as involving teachers without a formally designated leadership position. Katzenmeyer and Moller (1996) claim teachers have the potential to exercise new and dynamic leadership in schools, thereby enhancing the possibility of social reform. Barth (2001) argues “…if schools are going to become places in which all children are learning, all teachers must lead” (p. 444). Whilst, not all teachers can or will be professional leaders in their schools, it is possible that several of them can act as professional leaders besides formally appointed colleagues (de Lima, 2008).

Whilst principals and middle level leaders have an important role in school leadership, Lambert (1998, p. 24) argues “teachers must take the responsibility … for the work of school improvement”. Harrison and Killion (2007) contend that whether leadership roles are assigned formally or shared informally, they build the entire school capacity to improve. These authors suggest ten roles as a sampling of the many ways teachers can lead: resource provider (e.g. instruction materials); instructional specialist (e.g. planning lessons); curriculum specialist (e.g. planning instruction and assessment); classroom supporter (e.g. demonstrating lessons); learning facilitator (e.g. professional development programmes); mentor (e.g. for novice teachers); school leader (e.g. grade level chair); data coach (e.g. lead data analysis conversations and interventions); catalyst for change (e.g. commitment to improvement); and learner (e.g. demonstrate lifelong learning). Regardless of the roles they assume, teacher leaders shape the culture of the school, improve student learning and influence practice among their peers (Harrison & Killion, 2007).
One form of teacher leadership that has received considerable attention in the literature is instructional leadership (de Lima, 2008). Murphy (2005) argues that teacher leadership has “an instructional, relational and an enabling component. Teacher leaders are chiefly concerned with securing enhanced learning outcomes, generating positive relationships with staff and students and creating the enabling conditions for others to learn” (p. 15). The instructional leadership role of teachers has been a finding in a number of studies, for example, York-Barr and Duke (2004) undertook a meta-analysis to investigate the concept and practice of teacher leadership in the research literature from the past two decades. Amongst others, the study found that teacher leaders play an important role in instructional improvement.

Over the past decade, there has been a steady increase in the number of empirical studies related to teacher leadership, including studies of both formal and informal leadership (see Beachum and Denith, 2004; Muijs and Harris, 2007); only formal (positional) leadership (see Gigante and Firestone, 2007; Lieberman et al. (1988); and studies focused on fulltime classroom teachers as leaders (see Njerve, 2005; Sanders 2006; Sly, 2008). Notwithstanding the steady increase in the number of studies, Muijs and Harris (2007) argue that there are few contemporary studies of teachers as leaders. In the United States, Margolis and Higgins’s (2012) empirical study examined the intended and actual utilisation of the hybrid teacher leader (HTL) approach to promote school reforms, and how the defining of these new roles affects efficacy. Data was collected using semi-structured interviews, observations, and artifacts from six HTLs and their administrators across four school districts over two years. The study revealed four themes: de facto HTL role definitions, obstacles to defining HTL roles, ramifications of not defining HTL roles, and accountability and outcomes. The pervasive lack of role definition for HTLs led to numerous de facto definitions emerging. Conflicting de facto definitions led to diminished success for the HTLs, deterioration in professional development and relationships, and a lack of capacity to account for HTL efficacy. The authors recommend that for new teacher leaders to be successful, states and districts will need to much more clearly define roles and priorities and make these public before roles are created and be specific about how teacher leaders are to use their budget-supported time to further teacher professional development and school reform efforts.
In Australia, one major study that investigated teacher as leaders was the Teachers as Leaders Project undertaken by Crowther and colleagues (2002). The first phase of the study investigated “ordinary teachers doing extraordinary things” (p. 16) found several cases of teacher leaders without formally designated positions exercising distinctive forms of leadership to shape meaning for their students and communities. One snapshot provided is the story of an Elementary School where teachers single handedly inspired and coordinated a literacy programme to enhance student achievement across an entire school. In the second phase, the study explored teacher leadership in successful schools with documented evidence of significant student outcomes. The findings that teacher leaders work with principal leaders, in distinctive but complementary ways led to the research team’s conceptualization of school leadership as “parallel leadership” (Crowther et al., 2002, p. 38).

Whilst some teacher leaders have achieved success in their initiatives, others have not. One study investigating teachers without a formally designated position leading from within the classroom was undertaken by Silva, Gimbert, and Nolan (2000). In this exploratory case study undertaken in the USA, data was collected through interviews with three teachers who were nominated as teacher leaders by at least three peers in the district. This study found three separate cases of failed teacher leadership: teachers faced frustration with the school administration; an unwillingness of teachers to come forward, structural obstacles, and an unwillingness of the district to consider different perspectives. The findings of this study emphasise the point made by Sanders (2006) that teacher leaders need training as well as support from administration and colleagues. Notwithstanding the challenges and limitations, a finding in these studies is the critical role of teachers and school leaders in their professional learning as well as the professional learning of colleagues in order to improve the learning outcomes of students.

In sum, the reconceptualisation of leadership (Sawyer, Scribner, Watson, & Myers, 2005; Youitt, 2004) over the past decade has resulted in a variety of approaches adopted to school leadership. Whilst in some situations the principal may be the sole leader, in other situations other role players step up to exercise leadership, thus indicating a mixed-method (hybrid) approach to school leadership. This approach is aptly captured in the musical metaphor of Portin, Schneider, DeArmond, and Gundlach (2003) to describe three different leadership approaches to leadership. In some situations, the
principal operates like a one-man band is responsible for almost everything from the lyrics and melody to the bass line and harmonics. In other situations, a distributed leadership model is employed where the principal performs like the leader of a jazz combo expects her musicians to play solo – the leader lays down the basic melody line and encourages individual band members to improvise around the theme. Yet in other schools, there is a broader distribution – “the principal is akin to an orchestra conductor, playing nothing himself but making sure the many individual parts are expertly performed, while harmonizing and working together smoothly” (pp. 25-26). Despite their leadership position, the focus of school leaders in the recent past has been on teaching and learning.

2.3.6 Leadership for Learning

The focus of school leadership is on teaching and learning (Robinson, 2007); building the learning capacity not only of students but of teachers (Webb, 2005) since improving teaching is integrally related to learning (Macbeath, 2006; Timperley, 2011). Thus, (MacBeath, 2009) asserts that whilst the purpose of schools is to improve student learning, “pupil learning is inseparable from professional learning” (p. 7).

Leadership for Learning Project

Between 2002 and 2005 an international collaborative venture, the Carpe Vitam Leadership for Learning (LfL) project involved seven countries (including Australia, Greece, Austria, Denmark, England, Norway and USA), partners from eight universities and 24 schools. One of the key issues driving the LfL project was the desire by the research teams to bring stronger relevance between theory and practice of leadership and learning in schools. Adopting a methodology that could be described as action research, data was gathered through structured school visits, questionnaires to school managers, teachers and students, interviews with head teachers/principals, and teachers, shadowing of senior leaders, and focus group meetings with parents. The primary function of these instruments was to serve as “tin openers” (Frost, 2009, p. 70) to illustrate how data can be used as a basis for dialogue. The project team members contributed to various publications which include a book titled Connecting Leadership and Learning: Principles for Practice (2009) and a volume of articles in the journal Leading & Managing (Vol. 12(2), 2006). From the study, MacBeath and Dempster (2009) postulate that five major principles underpin leadership for learning practice: (1)
maintaining a focus on learning as an activity; (2) creating conditions favourable to learning as an activity; (3) creating a dialogue about leadership and learning; (4) sharing of leadership; and (5) establishing a shared sense of accountability.

Dempster (2009) contends that conducting disciplined dialogue about learning stands out from the LfL study as an interesting contribution to thinking about how leaders influence learning and processes. Dempster (2009) adds that strategies used in the LfL study can be used in schools, for example, scaffolding dialogue was achieved by using ‘tools’ (e.g. processes, questions, scenarios, critical incidents, reports, tests and questionnaire data). Conversations were disciplined in two ways: (1) their concentration on the moral purpose of leadership (improvement in student learning and performance); and (2) the qualitative and quantitative data opened up by the use of tools were subject to scrutiny using three generic questions: What do we see here? Why are we seeing what we are seeing? What should we be doing about this? School leaders (and researchers) found that employing these three questions to an evidence base helped keep discussions disciplined (Dempster, 2009); improving learning of professionals and ultimately, students.

Pedagogical Knowledge and Leadership

Lingard et al. (2003) suggest that if the core imperative of school leadership is about student learning, the most significant factor in the achievement of student learning is teacher practices. MacBeath (2009) maintains that, as professionals, teachers must focus on learning, building their professional knowledge through observation, inquiry, discussions with colleagues, reading theoretical texts and keeping up to date with developments in the field. Hayes (2003) points out that, teachers in any one school would have generally experienced very different pre-service and in-service professional development; meaning their professional languages are not easily interpreted or shared, and they may be ‘balkanised’ by their knowledge of various theories, for example, Gardner’s multiple intelligences, and learning styles and various gifted and talented theories. Hence, school leaders need to be pedagogical leaders (Sergiovanni, 1998; Webb, 2005), building the capacity not only of students, but also of teachers. One way of doing this is to create opportunities for teachers through collaborative teams where teachers participate in professional dialogue using shared language about teaching, for example, using the productive pedagogies framework (Hayes, 2003). School leaders also need to participate in collaborative teams in order to improve their own learning.
(Robinson, 2006), thus, leadership for learning involves the acquisition and development of knowledge of all professionals.

Watson (2005) maintains that a teacher’s knowledge of teaching and learning is more likely to be correlated with their effectiveness. Shulman (1986) distinguishes among three categories of content knowledge: curricular knowledge, subject matter content knowledge, and pedagogical content knowledge. Whilst teacher education provides the basic knowledge for teaching practice, continuous professional learning is critical to knowledge of effective teaching and learning practice; hence the notion of adaptive expertise has gained considerable currency (Crawford, 2007; Crawford, Schagler, Toyama, Riel, & Vahey, 2005; Timperley, 2011). According to Timperley (2011), “adaptive expertise has professional learning at its core” (p. 8).

As Timperley (2011) maintains, professional learning aimed at building deep pedagogical content and assessment knowledge is vital to improve student outcomes means not only developing knowledge of novice teachers but also of expert teachers. Adaptive experts are (a) deeply knowledgeable about both the content of what is taught and how to teach it; (b) aware of their assumptions underpinning their practice and know when they are helpful and when to question them; (c) become expert in retrieving, organising and applying professional knowledge in light of the challenges and needs presented by the students they are teaching; (d) vigilant about the impact of teaching and learning routines on students’ engagement, learning and well-being; and (e) have the capability to work out when known routines do not work for students and sufficient knowledge to work out innovative approaches when needed. Timperley (2011) emphasises that part of being an adaptive expert is to know when and from where to seek help and engaging in ongoing inquiry and knowledge-building cycles is at the core of their profession. In schools with high adaptive capacity, leaders and teachers are deeply knowledgeable about the content of what is taught and how to teach it, and they create organisational structures, situations and routines to develop it further.

Whilst it is critical that teachers need deep knowledge and a broad understanding of the subject, Stein and Nelson (2003) contend that leadership content knowledge is vital for administrators who profess to be instructional leaders. The authors define leadership content knowledge as the knowledge of subjects and how students learn them and suggest that whilst school leaders cannot have master of all subjects, all administrators
should have solid mastery of at least one subject (how it is taught and learnt). Later, administrators’ gain expertise in other subjects by ‘postholing’; which means conducting in-depth explorations of an important but bounded slice of the subject. The purpose of ‘postholing’ is to learn how knowledge is built in that subject, what learning tasks should look like, and what good instruction looks like.

Assessment Literacy and Leadership

In recent years, scholars have argued that there is clearly a need for assessment leadership (Noonan & Renihan, 2006) and for teachers to develop assessment literacy (Fullan, 2001) in order to promote productive forms of performance. Dempster and MacBeath (2009) maintain a focus on learning implies developing criteria and indicators which give greater weight to achievements other than exam performance. Hayes (2003) maintains assessment grids with descriptors of standards are an important means of conveying to students the types of performances expected of them, but they also help translate the curriculum into pedagogy. The need to develop imaginative pedagogy and engage in assessment literacy underscores the need for dialogue in collaborative teams to foster professional learning. Fullan (2001) maintains assessment literacy encompasses building capacity to examine student achievement data, make sense of and use data to inform improved teaching practice.

In sum, the literature reveals school leadership is critical for improvement in learning. Early studies of school leadership focused on the school principal as either instructional or transformational leader; however, these models of leadership have become outdated because of their emphasis on the principal as heroic and solo leader and also because of their lack of focus on teaching and learning. Notwithstanding their limitations, these models have their strengths and therefore still exist. Moreover, recent studies have started to focus on investigating the relationship between these approaches and instruction. However, at the start of the new millennium, limitations of traditional models have led to post-transformational models with, despite being in a state of infancy, a steady increase in the number of studies on distributed leadership and teacher leadership. Notwithstanding the need for distribution practice, recent debate points out that distributed leadership has downplayed the importance of individual leaders; hence the contention is that school leadership is hybrid in nature, and the call is for scholars to investigate leadership using analytic tools including configurations as a unit of analysis. There is a dearth of conceptual discussions as well as empirical investigation on hybrid
leadership. Regardless of the approach, the emphasis on school leadership is on teaching and learning, not only the learning of students, but also professionals.

The involvement of educators in activities of professional learning such as disciplined dialogue and conversations about curriculum planning, imaginative pedagogy, and authentic assessment for learning not only requires leadership, but also structures and routines. One organisational structure that fosters such professional learning is subject teams under the leadership of middle level leaders such as Heads of Department.

2.4 Middle Level Subject Leadership

Leading schools is about leadership at all levels and middle level leaders are central to the improvement of educational standards (NCSL, 2003). Brooks and Cavanagh (2009) and Harris, Busher and Wise (2003) contend that one of the most important individuals or groups is at the middle management or subject leadership level. Harris et al. (2003) point out that those working at this level in schools, amongst others, carry with them a wealth of personal experience which is vital for the school to key into if the organisation is to achieve its goals; and interprets, negotiates and enacts the policy and may, indeed, write the relevant policy documents for the initiative for their subject(s). In this way, “middle level leaders are the glue that holds together schools since they are frequently the ones to turn policy into action” (Harris et al., 2003, p. 10).

Whilst there is agreement on the importance of middle level leadership, there is some difference in the ways middle level leadership has been defined in education literature. Gurr and Drysdale (2013) maintain that, the term middle level leaders can depend on the context and structure of the school, thus “multiple terms are used for describing similar roles” (Gurr & Drysdale, 2013, p. 57). Cranston (2009) uses the term middle level leadership in reference to roles such as deputy principal, assistant principal, associate principals, heads of school, and deans of study. In an NCSL (2003) report, Professor Tony Bush defines middle level leaders in terms of the secondary phase of schools as including “not only heads of academic departments but also pastoral heads, key stage co-ordinators, special educational needs co-ordinators (SENCOs) and ICT co-ordinators” (p. 5). Gurr and Drysdale (2013) define middle level leaders as those who have significant responsibility for specific areas within a school and will have titles such
as director of teaching and learning, curriculum coordinator, subject coordinator, head of department, student well-being coordinator or year level coordinator. According to this definition, many teachers also have formal responsibilities and leadership expectations, and might be described as middle level leaders. This definition excludes deputy principals or those with similar overseeing roles; these actors would be included in a senior leaders’ category. For my study, I adopt the view that the Head of Curriculum is a middle level leader responsible for subject leadership, and teachers with formally designated leadership positions (e.g. Leading Teacher) or those who informally assume a leadership role are regarded as teacher leaders.

2.4.1 Subject Departments and Subject Teams

As schools are being asked to do more, the responsibility for leadership of teaching and learning has spread beyond the school principal (Brundett & Rhodes, 2010) to other individuals and to organisational structures such as teams (Harris & Spillane, 2008). Research (e.g. Hall, 2002; Johnson, 2003) has shown that successful schools create teaming structures that allow educators to collaborate on the challenges they face. Thus, various types of teams have emerged in schools, for example, senior management teams (Cranston & Ehlich, 2009); school improvement teams (Zepeda, 2003); departmental (faculty) teams (Hall, 2002; Siskin, 1994) and interdisciplinary teams (Main, 2007). Whilst each of these teams has a specific purpose, a common purpose is collaboration to elicit greater support from colleagues for measures to take to ensure continuous improvement in the classroom (Hall, 2002).

The subject department is the most common organisational unit for organising secondary school teaching (Bush & Harris, 1999; Sawyer, Brock, & Baxter, 2007; Siskin, 1994, 1997). Busher and Harris (2000) provide a useful categorisation of subject departments: (a) ‘federal’ departments are large, where broadly similar subjects might be grouped together in a faculty approach to internal school management, e.g. Science and Humanities; (b) ‘confederate’ departments contains a loosely-knit heterogeneous group of subjects, e.g. Technology; (c) ‘unitary’ departments are single subject areas containing a large number of full-time or part-time staff, e.g. English and Mathematics; (d) ‘impacted’ departments involve a smaller curriculum area containing a few staff, e.g. Geography or Music; and (e) ‘diffuse’ departments comprise variety of staff but not necessarily having any recognisable base in the school, e.g. Information Technology.
Whilst the traditional conception of subject departments still prevails in schools, in recent years, there has been a tendency for some schools, for example in Queensland, Australia, to conceptualise subject organisation in terms of teams. Regardless of whether they are called departments or teams, these organisational structures comprise groups of educators to whom the responsibility for coordinating the subject curriculum is delegated (Witziers et al., 1999); thus playing a key role in teaching and learning. Siskin (1994, 1997) concludes that subject departments are critical sites for teachers’ practices and those who want to effect change in high schools have to deal, one way or another, with subject departments.

Rosenfeld, Ehrich, and Cranston (2008) highlight the ways in which schools responded to changes in subject department structures and functions over the years. In Queensland, the subject departments followed a model described as curriculum-framed departments; identified by particular curricular and led by the Head of Department. These departments were the point where teaching and learning were planned, organised and delivered. The subject department had important professional and socialisation functions for teachers. In later years, with the change in culture, these subject departments were replaced by a model that reflected managerialism; there was a downward delegation of function responsibility and workload that characterised school-based management. As a result, instructional leadership, the core of the Head of Department’s role was displaced by a need for generic management skills; instructional leadership became a function of skilled teachers.

Early studies indicate that the focus of empirical research on subject departments was on team dynamics and effectiveness. In the UK, Harris and colleagues explored the leadership dynamics, specifically effectiveness, in subject departments. After a study of effective subject departments by Harris, Jamieson, and Russ (1995), Harris (1998) investigated the characteristics of ineffective departments; seeking ways of understanding some of the barriers which such departments encounter in their pursuit of improved performance. A more recent study titled An Exceptional Schooling Outcomes Project (2007) involving teams, including subject departments, across 38 secondary government schools was undertaken in New South Wales, Australia, to identify and analyse principles, processes and practices that produce outstanding educational outcomes. Data was gathered through observations, documents, and interviews and several reports were prepared, including Key Learning Areas and Leadership. One of
the major findings in the study of the English Departments by Sawyer, Brock, and Baxter (2007), was that subject heads were drivers of faculty change, translating new curriculum requirements for teachers and setting ground rules for implementation and development of policies; providing clear direction as a foundation on which teachers and teams could build the specifics of pedagogy and practice; creating a climate focused on student achievement and the professional development of teachers; and facilitating professional development of colleagues. The study also found teachers tended to talk about themselves as a team, worked collaboratively with others, made connections between curriculum and pedagogy, and made decisions about pedagogy before going to the classroom. They used effective pedagogy (e.g. student-centred approaches such as constructivism as opposed to the ‘transmission model’) in their teaching of English. Similarly, in their study of Mathematics faculties, Pegg, Lynch, and Panizzon (2007) report that they also found a strong sense of teamwork in the Mathematics faculties. Teachers supported their colleague’s achievements and challenges. Whilst leadership was held by the subject head, leadership of the faculty was frequently distributed, with an acceptance and understanding of who does what.

2.4.2 The Subject Leader
Turner (2003) maintains it is very difficult to separate the subject leader from the subject department in which she/he works. Traditionally called, the Head of Department in Australia (as well as in the UK and South Africa), the subject leader plays an important role in bringing about change and improving student achievement (Bolam & Turner, 1999; Harris, 1998, Sammons et al., 1997). In Queensland, Australia, the role of the HOD as described in the Position Description and Standard Work Profile (Education Queensland, as cited in Rosenfeld et al., 2008) is “Heads of Department focus on curriculum leadership, participating in the development of a vision for learning, promoting a supportive and responsible learning culture and interaction with students, parents, teachers and the community” (Introductory Section, paragraph 1). In recent years, this formal position has been titled Head of Curriculum (HOC); however, the role is similar to that of HOD. Harris (2000) identifies four dimensions of the HOD’s work: (a) bridging or brokering function involves the translation of perspectives and policies of senior staff into the practices of individual classrooms; (b) fostering collegiality within the group by shaping and establishing a shared vision; (c) improving teaching practice of staff and student performance by monitoring school goals; meeting particular prescribed levels of curriculum performance; mentoring and supervising
colleagues development; development of students academically and socially; and (d) liaison or representative role involves being in touch with a variety of actors (individuals) and sources of information in the external environment of the school, negotiation, where necessary, on behalf of members of the department. These four dimensions are both complementary and potentially competing in their demands; and reflect the complexity of the role of the subject leader within the middle of the school’s hierarchy (Bolam & Turner, 1998; Glover & Miller, 1999; Harris, 2000).

The role and experiences of the subject leader have been investigated in a few empirical studies, including Aubrey-Hopkins and James (2002); Busher and Harris (1999); Crowther and McLendon (1998); Dinham, Brennan, Collier, Deece, and Mulford (2000); Feist (2008); Fitzgerald (2009); Friedman (2011); Ghamrawi (2010); Glover, Gleeson, Gough, and Johnson (1998); Harris, Jamieson, and Russ (1995); Harris (1998); and White (2000). A common finding in these studies relates to the complex nature of the role played by subject leaders; a finding also evident in a study by Cotter (2011). Using interviews with principals and senior leaders, curriculum coordinators, middle-level leaders and teachers, Cotter (2011) examined perceptions on curriculum coordinators in three Catholic secondary schools, in Victoria, Australia. This study also found the role of the curriculum coordinators to be complex. The primary role of curriculum coordinators was a narrow one; to promote and support learning and teaching suited to the local context. Much of the work was of managerial nature; lacking a focus on active improvement in learning and teaching. Cotter (2011), thus suggests that the role be reviewed to include dispersing the functions across other senior leadership roles. Furthermore, there should be an emphasis on leadership or learning instead on compliance and administration of externally imposed change at the school level.

An empirical qualitative study undertaken by Rosenfeld et al. (2008) using multiple documents and semi-structured interviews and involving twelve participants from four schools, explored the perceptions of the role of the Heads of Department from the viewpoint of the Head of Department and Principals in Queensland secondary schools. One of the findings of the study was a stark difference in the perceptions of the role held by the two groups. HODs saw their role as characterised by instructional leadership, committed to a particular subject, whilst principals saw the role as one where the HODs would continue to lead a group of teachers, but not necessarily defined by a subject
area. Furthermore, HODs saw the balance between curriculum and whole school role as shifting and the workload growing, whilst principals’ description of the role was consistent with change in the culture of the organisation. Despite these different perceptions of the role, curriculum leadership was still perceived to be an important role.

A study by Keane also highlights the complex nature of subject leadership. Keane (2010) investigated perceptions on learning area leaders (LAL) of English, mathematics, technology, and science in three Catholic secondary schools using document analysis and interviews conducted with principals and senior leaders, LALs, and teachers. The study found that the leadership role of LALs was considered essential to the development of good student learning outcomes. On the one hand, leadership capacity of most teachers was constrained by inadequate preparation and support, lack of time to effectively carry out the role, difficulties with staff management and role ambiguity. On the other hand, leadership capacity was enhanced when the senior leadership of the school adopted a partnership approach involving LALs in developing strategic approaches to teaching and learning; created structures that enabled time to work with staff, and removed barriers serving as impediments to LAL leadership.

Gurr and Drysdale (2013) provide an overview of the research on middle-level leadership in Australia, focusing on the research of Keane (2010) and Cotter (2011), as well as White (2000). The authors conclude that lack of understanding and support by senior leaders, the lack of professional preparation and leadership development by individual middle-level leaders, and underdeveloped professional knowledge and capability contribute to a missed opportunity to make a difference in schools. Gurr and Drysdale (2013), thus argue that middle-level leaders need to be viewed as key to improvement in teaching and learning. It is therefore, important for school structures to reflect this, and developing leadership capacity needs to be prioritised in the school.

In addition to the complex role of the subject leader, Turner (2010) points out two major constraints acting upon subject leaders. First, there is a lack of time to fully address all the expectations placed on them – the teaching load, the management role (working alongside subject staff; facilitating professional development) as well as their whole school administrative role. Second, some subject leaders are required to lead subjects they are not professionally trained in; thus they are constrained by their own lack of
subject expertise and consequent lack of credibility. Despite these challenges, there are some empirical studies illustrating successful curriculum leadership. In a study undertaken by the National College for School Leadership (NCSL), Wright (2006) outlined the focus of the study to be what subject leaders did to raise attainment in their curriculum areas. Data was collected using questionnaires and focus group interviews involving from 40 subject leaders of English, Mathematics and Science across a variety of schools in three districts in the UK. The study found the organisation of schemes of work, monitoring and evaluation, having a specialist team to deliver the curriculum, and the opportunity to bring the team together to plan were important areas in raising standards. Furthermore, building capacity of team members was perceived as important to developing a range of skills, for example, one school employed a primary trained teacher, who was skilled in working with low ability students. The subject leader, needing to develop her skills, observed the teaching of the teacher. In turn, the teacher was afforded the opportunity to observe the subject leader teaching students at higher grade levels.

2.4.3 Subject leadership and distributed leadership
The findings of empirical studies discussed above suggest that a subject leader such as the Head of Department is not the only potential subject leader; she/he can therefore draw on the leadership capabilities of colleagues within the team (Field, Holden, & Lawlor, 2000). As Coleman and Bush (1994) contend that situational leadership is one of the other features of effective teams, the subject leader does not operate in a hierarchical way but distributes leadership – tasks and responsibilities are delegated according to the needs at the time, and the skills and expertise of members. This shared leadership harnesses the strengths of team members, can be used to develop members, and is designed to be an effective way of meeting the team’s purposes and objectives. Furthermore, in effective teams, there is a shared understanding of the purpose of the team, pride in the team, lateral communication, and collaboration (Coleman & Bush, 1994).

The important role of subject leaders, committee leaders and leading teachers have been illustrated in studies focusing on distributed leadership practice e.g. Hayton and Spillane (2011), Melville, Wallace and Bartley (2007); Timperley (2005). These studies have not only found multiple leaders, but also show that classroom teachers, play an important role in leadership of teaching and learning. One of the major studies of leadership of
teaching and learning was the DLS. In one of these studies, Spillane (2005), examined how leadership practice is structured across school subjects, Literacy and Mathematics, in primary schools. Using a mixed methods longitudinal design, data was gathered through observations, structured and semi-structured interviews, social network questionnaires and videotaping leadership routines. The study found that multiple individuals performed leadership routines, sometimes though not always occupying formal positions. The study also found that there were differences in the lived organisation as captured in the daily work of schools. Literacy coordinators played a major role in literacy meetings and informal leaders (classroom teachers) took on responsibility for a variety of tasks. In contrast, in the Mathematics committee, the chair (full-time classroom teacher), was the primary mover and shaker.

Whilst the distribution of leadership is important, the subject leader has a vital role to play. Gilbert (2011) maintains a central responsibility of a curriculum leader must be to understand and be able to lead others to understand the essence of school subjects. This includes a clear understanding of the purpose(s) of the subject and the structure or grammar of subjects which gives them their essential intellectual value. Harris (2000) adds that the subject leader has a direct influence upon the quality of teaching and learning and learning within a subject area. As discussed earlier, the subject leader is the person who works closest with teachers in the team. Considering the important role that teachers play in the learning of students (Hattie, 2003; Hoy & Hoy, 2006) and the need for quality teachers (Baber & Mourshed, 2007), the subject leader has a key role to play in monitoring and improving the practice of teachers (Brundett, 2004; Gold, 1998; Harris, 2003). This need to continuously improve the practice of teachers (and leaders) was discussed earlier and includes a focus on improvements in pedagogy; assessment literacy and the alignment of curriculum, pedagogy and assessment. Hence, subject leaders have an important role to play in leading their own professional learning; and they have a boundary spanning role to play in leading the professional learning of teachers. This leadership for teaching and learning can take place in subject teams that function as PLCs.

2.4.4 Subject Teams and Professional Learning
In addition, to management functions (Rosenfeld et al., 2008) and curriculum improvement responsibilities (Brundett & Rhodes, 2010), subject teams influence the quality of education and teacher development (Visscher & Witziers, 2004). A school
community which is committed to improvement recognizes that for students’ learning to improve, teachers have to learn too (MacBeath, 2009; Swaffield & MacBeath, 2009). Johnson (2003) maintains that effective teams are characterised by their use of a variety of collective learning opportunities, most of which involve routine sharing and joint work. The main options include (a) shared talk (regular and systematic talk among staff); (b) shared work (collaborative development of policy, programmes and activities); (c) observation of teaching (regular and systematic observation of one another’s classes); and (d) collaborative problem-solving (development and implementation of feasible solutions). Thus, subject teams are viewed as an important entity for promoting professional communities (Visscher & Witziers, 2004). These learning opportunities suggest that there are pedagogical gains from such teams.

Wong (2010) explored how teachers learn collaboratively and develop their subject-based PLCs, Teaching Research Groups (TRGs), within their teaching organisations; and the factors affecting development and sustainability of two TRGs. Data was collected through interviews with six Mathematics teachers and five English teachers in a junior secondary school in Shanghai. The study found stark differences between the two TRGs. On the one hand, the Mathematics TRG was a strong PLC with teachers learning through collaboration and reflection-on-action. The TRG adopted an experimental approach with support given by outside educational experts. As a result, new teaching and learning ideas emerged and they linked content knowledge to the broader social context. On the other hand, the English TRG was a weak PLC. Teachers adopted an individualistic approach to develop pedagogical skills and knowledge, and individual teachers did not have a strong sense of improving the TRG as a whole; thus, collaboration was instrumental with weak bonds between members and outside experts. As a result, members of the weak PLC enacted traditional teaching practices.

The findings of a similar study undertaken in Netherlands were different. Visscher and Witziers (2004) investigated whether the Mathematics departments in Netherlands function as professional communities (PCs); and if there is a relationship between practices in those departments characteristic of PCs on the one hand, and student Mathematics achievement levels on the other. Data was gathered using a survey questionnaire, performance scores on a Mathematics test involving 975 students, and students’ background from 39 Mathematics departments involving 169 teachers. The study found these departments did not function as PCs. The departments regulated the
behaviour of teachers intensively with respect to teaching goals, instructional content, and nature of testing. Consultation between teachers was limited to planning teaching activities, accomplishing the planning, the nature and content of testing, pace of teaching and the teaching content; with little consultation on aspects of the didactics (methods) of teaching, and the problems teachers meet in daily practice. School leaders and department heads also consulted to a very limited extent with teachers; and their influence was very small. Whilst the study found a positive relationship between department policy and student achievement; there was a negative relationship between extent to which department heads act as team leaders and the degree of consultation and cooperation and student achievement. The authors point out that in these departments there were infrequent and therefore neglected opportunities for teachers’ professional development which include reflective dialogue, classroom observation, providing feedback on each other’s work and preparing lessons together. The study also found that whilst some elements of practice have a negative relationship with student achievement, others had a positive relationship. Student achievement was high in departments that (a) had a consistent structuring of the teaching process across grades; (b) made teaching priority and the way they will be accomplished explicit; (c) had a policy on evaluating student achievement; and (d) delivered feedback and remedial work based on student evaluation. The researchers concluded that to improve student achievement; the focus needs to be on revolving professional activities around student achievement data; this serves as feedback mechanism for improving teaching and learning. This limited collaboration in Mathematics professional communities, was also found in a network study by Hayton and Spillane (2011), will be discussed in a later section.

In sum, the limited empirical base of research on subject leadership focuses on a variety of areas, including, team dynamics and effectiveness, role and experiences of subject leaders, sources of leadership and professional learning. Whilst some studies focus on leadership of teaching and learning through the day to day interactions of colleagues, these are very limited in number. At the turn of the millennium, White (2000) maintained that the empirical base of research on the subject leader is limited. Similarly, Visscher and Witziers (2004) contend that research into departments is scarce. Aubrey-Hopkins and James (2002) also observe that studies of subject leaders and departments are relatively few. Recently Gurr and Drysdale (2013) claimed that middle level research has not captured the research interest that it deserves. One of the observations from this synthesis is, despite the importance of collaborative interactions of educators
through dialogue, there is a paucity of empirical studies of such aspects of leadership of teaching and learning in subject teams. In recent years, interaction of educators using advice and information has been a form of dialogue that has been observed to occur in some teams, formally as well as informally, through networks.

2.5 Social and Organisational Networks

In schools, educators are part of networks of relationships within schools, between schools, and indeed within the broader educational community. These relationships can be viewed as a web of nodes, consisting of individuals, schools and other related organisations. In recent years, there has been a steady increase in the number of studies that have adopted a social network perspective to investigate school leadership (e.g. de Lima, 2008; Hayton & Spillane, 2011; Moolenaar, Sleegers, & Daly, 2011; Penuel et al., 2006; Penuel et al., 2009; Spillane & Kim, 2012; Warfield, 2009).

2.5.1 Definition of Social Network

In schools, a social network approach has been used to investigate the relationships between actors. The term *actor* refers to “discrete individual, corporate, or collective social units”, for example, people in a group (Wasserman & Faust, 2008, p. 17). It does not imply that they have volition or the ability to ‘act’.

Mayo, Meindl and Pastor (2003) define a social network as:

“A set of individuals with a routine and established pattern of interpersonal contacts who can be identified as members of a network exchanging information, resources, influence, affect, or power” (Mayo *et al.*, 2003, p. 195).

This definition highlights some important aspects of a social network. First, it is not the individual, but an entity consisting of a collection of individuals and the linkages among that is the unit of analysis in network analysis. Second, relationships are fundamental in a social network approach as actors are viewed as interdependent rather than independent. Third, the relational ties between the actors are channels for the transfer or flow of resources (material or non-material). A fourth important aspect is that, in a
social network, the network structural environment is viewed as providing opportunities or constrains on individual action.

Moolenaar (2012) points out that whilst there are several social networks prevalent in schools (e.g. discussing work, collaboration, asking advice, spending breaks, personal guidance, contact outside school, and friendship), it is the advice and information networks that are seen as critical to the leadership of teaching and learning. Hence, for the purpose of this research study, the focus is on the patterns of contacts and exchange of advice and information between subject leaders and teachers.

2.5.2 Types of Networks
Ibarra (1995) posits three types of networks relevant to management in organisations. *Task networks* help leaders accomplish work, including that which involves new challenges. Task networks facilitate the exchange of resources aimed at accomplishing tasks. Such resources may include information, expertise, materials, and task-related political access. *Career networks* involve relationships with actors (individuals) who can facilitate career progress by providing career advice, offering mentoring and sponsorship, aiding in the securing of key developmental assignments, facilitating career enhancing visibility, and engaging in advocacy for promotions. *Friendship/social support networks* at work address relationships that are based more on closeness and trust than on task-related needs. These usually emerge from common backgrounds and/or interests and then to be more informal linkages based on emergent friendship than patterned along formal structural lines. Such networks; however can facilitate work accomplishments.

Whilst some networks are purposefully created, other types of networks arise informally. McLaughlin (1997) maintains informal relationships operating at various levels and locations provide powerful occasions for teachers to unlearn old assumptions, beliefs and practices and learn new practices.

2.5.3 Functions of Networks
Lingard *et al.* (2003), maintain networks serve a pedagogical function in that they seek to improve the learning of their members. In their comparative analysis of literature on teacher networking, McDonald and Klein (2003) observe that networks can play a number of functions to advance serious school reform, including (1) developing
teacher’s content knowledge; (2) enhancing teacher’s pedagogical content knowledge; (3) providing teachers access to content-focused expertise otherwise not available, and scaffolding the emergence of new practice with respect to content; (4) providing sustained professional development to teachers such that new content-focused practice may have time to become established; (5) creating a common discourse and norms for the development and maintenance of a community of practice within and across schools, one tuned to larger perspectives on content and teaching of it; (6) enhancing members’ sense of teacher efficacy even in the face of predictable difficulties in implementing content-focused reform; and (7) providing leadership opportunities for teachers whereby their sense of the complexities of reform in practice may affect the development of policies within and beyond the school, particularly policies affecting what gets taught and how (McDonald & Klein, 2003).

2.5.4 Advice and Information
The provision of advice and information is almost a daily activity in everyday life, including teaching and learning. Advice and information are the building blocks of knowledge, particularly knowledge about teaching and learning (Spillane et al., 2010). An advice and information network is composed of relations through which actors share information and knowledge related to the completion of their work (Ibarra, 1993). Actors who are more central in advice networks are connected to a greater number of colleagues and may have more influence than those who are connected to few actors.

Contexts for advice giving
There are a number of different contexts in which advice is provided. A review of literature indicates that some of the contexts of advice giving/receiving that have been studied include: everyday advice (e.g. De Capua & Huber, 1995); advice in face-to-face health care settings (e.g. Heritage & Sefi, 1992; Silverman, 1997); call-in radio programme settings (e.g. Hutchby, 1995); online advice columns (e.g. Locher, 2006); human-computer interaction (e.g. Dawson, Buckland & Gilbert, 1990); and advice in face-to-face educational settings (Silverman, Baker & Keogh, 1998). In schools, the provision of advice and information occurs in both formal contexts (e.g. staff in-service; team meetings) and informal contexts (Spillane, 2005; Spillane et al., 2010).
Defining Advice and Information

A review of the literature on advice giving and receiving reveals the term ‘advice’ is narrowly defined. Cross, Borgatti and Parker (2002) argue that there is a need for a broader conceptualisation of advice. One of the types of advice that has been receiving attention in the literature is the provision of information. Information as a type of advice, has been suggested in the organisational literature (Bonaccio & Dalal, 2006; Cross et al., 2002); communication literature (e.g. Goldsmith, 2000); conversational analysis literature (Heritage & Sefi, 1992; Silverman, 1997, Pilnick, 1999); and advice-taking literature (Gibbons, 2003). However, the distinction between advice and information is not always clear-cut, neither in the literature nor in the naturalistic data (Locher, 2006). This view is supported by Pilnick (1999), who argues that advice and information giving may be essentially the same activities, but are often seen as having different connotations for the involved parties.

Drawing upon the definition proposed by Heritage and Sefi (1992), Silverman (1997) has gone on to draw further distinction between advice and information, defining advice as “those sequences in which the professional describes, recommends or forwards a preferred course of action to the client, or in which she approves or supports a past course of action or present state of affairs” (p. 111). Whilst he suggests non-specific and non-personalised talk is likely to be produced and treated as advice, Silverman (1997) maintains non-personalised information can be interpreted as advice in the appropriate context, such as the “Advice-as-Information” sequences, (p.154). Silverman (1997) and Heritage and Sefi (1992) point out that, what is taken to be information or advice is a locally managed matter.

For my study, I adopt Silverman’s definition of advice (stated above); however, unlike Silverman (1997) and Heritage and Sefi (1992) who see advice as ‘personalised’, in my study, advice-giving is viewed as both personalised and non-personalised. This is based on the assumption that in the context of meeting talk, participants will direct their talk to individuals, more than one person, and at times to the entire group (team). In differentiating between advice and information, I adopt the view of Dalal and Bonacio, (2010) that information is a type of advice and is presented in a factual or non-normative framework (Heritage & Sefi, 1992). In addition, I support the view of Pilnick (1999) that the only valid distinction than can be made between information and advice
is a member’s distinction; and therefore the responses by members need to be included in an interpretation.

Benefits of seeking advice
It will be recalled that Spillane et al. (2010) maintain that advice and information are the building blocks of knowledge. Cross (2000) goes further to identify and distinguish between five benefits of seeking advice; these are (1) arriving at solutions (know what and how); (2) acquiring meta-knowledge (pointers to databases or other people); (3) reformulating problems (thinking differently about their problem); (4) validating plans or solutions; and (5) legitimation from contact with a respected person.

Advice and Information Networks and Leadership
Specifically related to advice and information networks, Hoppe and Reinhelt (2009) outline the provision of advice and information as an action of leadership. Amongst other forms of leadership, these researchers define peer leadership as the capacity of people to provide each other with information, advice and support. The authors further suggest that peer leadership networks support personal and professional growth, and leadership development. Whilst the authors’ framework for conceptualising leadership networks were intended for the business sector, their view of advice and information is also applicable to school leadership.

In their work on school leadership for instruction, Pitts and Spillane (2009) investigated how teachers seek advice and information from school staff related to teaching particular school subjects to influence classroom instruction. These researchers investigated teachers seeking advice and information in the following dimensions of instruction: planning and selecting course content, approaches to teaching content, assessment, and assisting low achieving students. These researchers go as far as stating that at times ‘advice-seeking’ itself may be a leadership interaction, for example, the school principal seeking advice; hence, the “advice-seeker is as much a leader as the advice-giver” (Pitts & Spillane, 2009, p. 198).
2.5.5 Empirical Research: Leadership of Teaching and Learning through Advice and Information Networks

In this section, I discuss selected studies undertaken across the world that employed network analysis to investigate leadership of teaching and learning. Most of these network studies have used the method of social network analysis (SNA).

**Empirical Studies in the USA**

Hayton and Spillane (2011) examined the structure and function of teachers’ professional communities surrounding Mathematics and Literacy instruction in four elementary schools using interviews and social network data (advice networks). The study found differences between Mathematics and Literacy based professional communities with the latter being much stronger. Teachers in the PLC communicated more frequently, and with more colleagues, about literacy instruction than about Mathematics instruction. Observations of meetings and teacher reports corroborated the results of the network data. Another finding was discussion in the PLC centred on different topics. On the one hand, in the Mathematics PLC, discussion was commonly around practical matters of immediate concern, e.g. textbook and materials, lesson plans, time shortage, and sequencing of content. On the other hand, in the Literacy PLC, discussion was expanded to include more fundamental issues of teaching and learning, e.g. how to facilitate learning, scheduling and its impact on reading instruction, curriculum, the crucial nature of reading to other school subjects, and how to encourage love of reading in students. The study found that PLCs differ in form and function because teachers’ conceptions of Mathematics and Literacy differed in terms of flexibility, enthusiasm, and moral purpose. These findings are similar to the study by Spillane (2005) and Sherer (2007). Sherer argues that, these differences reflect particular attitudes about teaching Language Arts and Mathematics. Thus, school leaders need to be supported in examining their assumptions about the nature of subject-specific professional communities, particularly subject matter, how Mathematics, Reading, and Writing should be taught (such as what tools and social structures are necessary to support instruction) and how difficult each subject is to teach.

Whilst Hayton and Spillane (2011) examined the structure and function of teachers’ professional communities, Warfield (2009) investigated the distribution of leadership across the faculty in an elementary school and a middle school. This study examined
how leadership is distributed around several instructional issues; and how formal school leaders identified and utilised informal leaders to improve pedagogy. Data comprised social network surveys and interviews with thirty-one faculty members in the middle school faculty and twenty-two in the elementary school. The survey asked teachers who they went to for advice about instructional activities, including differentiated instruction; planning and presenting subject content; writing instruction and classroom management. One finding of this study was that leadership was distributed among the faculty in two buildings. Teachers sought advice from their peers for a variety of teacher related issues, including differentiated instruction; planning and presenting subject content; writing instruction and classroom management. Analysis of the survey results and sociograms indicated the emergence of leaders within each faculty; and as the situations change, so do the informal leaders. Another finding was that informal meetings were viewed as very powerful times when teacher leadership occurred.

Spillane and colleagues’ (2010) study examined the work of leading and managing Mathematics instruction and Language Arts or English instruction in the formal organisation (formally designated leaders) and the informal organisation (staff who have no formal leadership designation but who occupied an influential position in school network). Data was gathered using surveys of school staff from twenty-eight elementary schools in one mid-sized urban school district in the US to analyse degree centrality and betweenness of actors. The study found that more than half of all advice interactions were directed toward formally designated leaders in any position; and in just under half of the advice seeking interactions, staff members with no formal leadership designation were sought out for advice or information about instruction. Another finding was that on average only 22% of all Mathematics and 21% of Language Arts advice of relationships were directed toward coordinators. The study also found formal leaders were more likely than their colleagues without such designation to connect staff members who weren’t otherwise connected, suggesting formal leaders may serve as intermediaries among school staff.

**Empirical Studies in Europe**

In Europe, studies using a social network approach have been done predominantly in the Netherlands and Portugal. Unlike, the studies in the US which focused on instruction, studies in Europe focused on other aspects. In one study in Netherlands, Moolenaar, Sleegers, and Daly (2011) explored the relationship between school-level
social network structures and shared decision making in support of a school’s innovative climate. Data was collected using a survey of 775 educators (teachers and principals) conducted in 53 Dutch elementary schools. The survey of each school level team asked participants who they turned to for advice, assessing two types of advice relationships, viz. work-related (instrumental) advice and advice on personal matters (expressive advice). The study found social networks of personal advice tended to be slightly more dense and reciprocal than work-related advice. On average there were more personal than work-related advice relationships in the school teams, with personal advice relationships being generally more mutual than work-related relationships. Also, work-related advice relationships were slightly more centralised around a few actors than expressive relationships. Results of correlation analysis partially confirmed all three hypotheses. The authors concluded that school teams with more densely connected relationships around advice are characterised by a more innovative climate than less densely connected teams.

In Portugal, de Lima (2008) undertook a case study involving 12 curriculum departments examining the extent to which department coordinators actually exercise professional leadership in relation to colleagues; and whether professional leadership was distributed beyond the formal roles. Data was collected using social network questionnaires focusing on department colleagues’ impact on one another’s professional development; and on their collaborative relations within the department. The findings of the study revealed, in a policy system, that formally distributed leadership among departments, teacher leadership in the two case-study schools and their departments took on distinct configurations in networks: (1) Focused, formal leadership: In four departments the coordinator was perceived as the most influential actor; she or he was regarded by her or his colleagues as the person that most strongly influenced their professional development; (2) Multiple leadership: In five departments the coordinator was regarded as a key actor, but, other staff also played a similar, influential role; (3) Alternative, informal leadership: In one department the coordinator was a less central actor, whilst the most central position was occupied by a different colleague; and (4) Leadership void: In two departments the department coordinator was one among a majority of isolated members. No one else in the department emerged as an alternative, strong leader that performed this professional role. This study is significant because the various configurations show that systems of leadership that are formally distributed may comprise a variety of informal network patterns of leadership, many of which do not
confirm the supposed virtues of the leadership distribution. Thus, (de Lima, 2008) maintains that:

“It is only by looking empirically at the teacher’s attributions of influence and their actual professional ties to one another that we can determine if a given system of leadership is really distributed and what structural form this distribution takes” (de Lima, 2008, p. 177).

Another key finding of this study was the low levels of leadership communication reflected by the low density scores; similar to the finding by Hammer’s (2009) study of communication in the transport sector (to be discussed later).

**Empirical Study in Australia**

Whilst there have been empirical studies of leadership of teaching and learning in teams in Australia, a review of literature to date revealed that just one study has been undertaken using sociometric techniques to investigate school leadership. Gronn (2009) investigated participants’ perceptions of forms of leadership and the dynamics of leadership relations in a secondary school in Australia. Adopting a case study approach, data was gathered using a sociometric technique, documents, interviews, and observations. One of the major findings of the study was “hybridity”- mixed leadership patterns of individualism and partnering manifest in the school. In some instances, for example, individuals monopolised leadership while in others leadership was shared. Another finding of the study was participants’ responses displayed a mixture of both individual and (partnering) shared leadership when attributing leadership. Teachers’ attributions to leadership included formal and informal groupings as well as individuals, for example, two participants associated leadership with individuals; twelve selected a group/team; and one nominated both an individual and a group. This study is significant because the data yielded a picture of practice different from existing categories of leadership. For example, leadership can be focused or distributed; undertaken by individuals or a team. The findings are different from many studies of distributed leadership where participants attributed the status of leader to a range of colleagues.

Whilst empirical investigations in schools’ leadership have adopted social network methods, organisational studies have used either ONA or SNA as a method of study. ONA is an application of SNA. It is a descriptive, empirical research method for
mapping and measuring the relationships between people, groups, and organisations with the resources, knowledge and tasks that are used to perform work. Cross (2009) observes that research shows that appropriate connectivity in networks within organisations can have a substantial impact on learning, innovation, and performance. Furthermore, benefits also accrue from well-connected networks between organisations. Thus, understanding the connectivity in networks as vital for improved outcomes has been an important focus not only in schools but also in other organisations.

### 2.5.6 Empirical Research: Organisational Networks

A review of literature revealed that ONA, a tool that employs techniques of SNA, has been employed to investigate advice and information networks and knowledge sharing in the transport, health, and the business sectors in the US. Hammer (2009) investigated where information sharing is occurring and where it is impeded in the transportation sector. The purpose of the study was also to introduce ONA and apply its methods to the transportation sector. Data for the study was collected from 94 employees in two different state transportation agencies in the US using a survey developed at the University of Virginia. The study found many employees were key to determining the information sharing efficiencies of others. Whilst both networks were found to have overall effective ratings of information transfer, one network was at risk of serious knowledge loss and breakdown in communication if several key individuals were removed. A key finding of the study emerged from the density scores of the two networks and revealed there was a high number of missing connections. This indicated even though individuals work together, and should, in theory, be sharing information with one another, they may not be.

Under the leadership of Rob Cross, The Network Roundtable at the University of Virginia has undertaken several case studies in organisations, particularly, in the business sector. One study investigated the transfer of knowledge across drilling initiatives and the assessment of the ability as a group to create and share knowledge amongst executives in the exploration and production division of a large petroleum organisation. Amongst other findings, Cross (2009) reports that three important points emerged from the use of ONA: the central actors, peripheral actors and subgroups in the networks. First, amongst the key people identified in the network, middle level managers were found to be critical in terms of information flow. Second, highly
Peripheral people that essentially represented untapped expertise and underutilised resources for the groups were identified. In particular, many of the senior people had become too removed from the day-to-day operations of this group. The author emphasised this is a common finding; concluding as people move higher within an organisation their work begins to entail more administrative tasks that makes them less accessible and less knowledgeable about the day-to-day work of their subordinates. Third, through ONA, the study found a sub-group had become separated from the overall network. Several months prior to the study, these members had been physically moved to a different floor in the building. This physical separation had resulted in a loss of communication that occurred due to re-location. As an intervention, structured meetings were set up to help avoid problems which the group had been experiencing due to loss of communication.

In sum, the limited empirical base of research on networks revealed that the focus has been on a variety of networks, including personal advice and advice related to teaching and learning. Some studies investigated faculty; others, departments or committee networks. Whilst some studies focus on both formal and informal leaders, most have focused on informal interactions. Furthermore, studies of networks in schools have been predominantly undertaken internationally, particularly in the USA, Portugal and the Netherlands. Most studies in schools have used the method SNA involving sociograms and measures such as centrality and density. Finally, there is recent trend of analysing networks using ONA; however this has not, as yet, been adopted in school leadership research.

2.7 Summary of Chapter

This chapter commenced with a review of contemporary approaches to school leadership, revealing that despite its limitations, transformational leadership still has its place in schools. Notwithstanding its earlier decline in popularity, there has been a recent “reincarnation” of instructional leadership, with a focus on teaching and learning. The review revealed much of the literature has been written from the perspective of the school principal. However, the capabilities of one person are inadequate to meet the challenges facing schools, resulting in a reconceptualisation of leadership to include other talented actors and aligned to a mixed-methods approach to leadership. In some
instances the principals is the sole leader, in other instances leadership is distributed among formal leaders, yet in other instances there is a broader distribution to include informal teacher leaders; indicating a greater degree of leadership hybridity. It is therefore not surprising that Gronn (2009a, b, 2011) has questioned the emphasis on distribution and the de-emphasis on individual (focused) leadership; thus re-focusing scholarship towards scrutinising school leadership research from a hybrid leadership perspective. This chapter also highlighted the shift of studies of leadership towards the core business of teaching and learning; however there are very few empirical studies that document the dimensions of teaching such as curriculum, pedagogy and assessment. The limited research in these areas is not surprising since the focus on teaching and learning has occurred at the start of the new millennium. The review also illustrates middle level leadership and subject teams are organisational structures that play a vital role in improving teaching and learning. Amongst the many functions, teaming structures serve as PLCs with networks that can facilitate professional learning. However, the literature indicates the empirical base on teaming and professional learning through advice and information networks is limited, particularly in Australia. From a methodological perspective, the review revealed that most studies of instructional leadership and transformational leadership have been largely quantitative in nature, and studies of teams using a distributed perspective have been largely qualitative in nature. Whilst, an increasing number of studies have been undertaken using SNA, to date, not a single study of leadership of teaching and learning in schools has employed the method of ONA.

In the next chapter I provide an exposition of the conceptual framework that guides the analysis of the study of leadership of teaching and learning in subject teams through advice and information interactions.
CHAPTER THREE
CONCEPTUAL FRAMEWORK

3.0 Introduction

It will be recalled that the focus question guiding this study is: How is leadership of teaching and learning through advice and information interactions practised in school subject teams? In Chapter Two, the review of literature on leadership of teaching and learning found that whilst principal leadership is critical to school improvement and achieving improved student achievement, the capabilities of a single individual are inadequate for the many leadership roles, tasks, and challenges facing schools of today. As a result leadership in schools is shared or distributed across many talented individuals, including middle level leaders (e.g. Head of Department) and teacher leaders (formal and informal leaders). In addition to leading as individuals with responsibility and accountability for improving student outcomes, collaborating in teams through a network of actors facilitates the professional learning of educators. Drawing on these key findings from a review of the literature, in this chapter, I outline the main theoretical concepts that underpin this study.

A theory provides a lens through which to study a phenomenon, deepen our understanding, and thereby inform action. Gubrium (as cited in Silverman, 2001) maintains that theory “... provides a framework for critically understanding phenomena and a basis for considering how what is unknown might be organised” (p. 4). This study is informed by four main theoretical perspectives: network theory, hybrid leadership distributed leadership, and Conversation Analysis (CA) and Ethnomethodology.

In this chapter, I first present the conceptual model that frames the study by drawing on the findings from the literature and put forward the research questions posed in this study. I then provide an exposition of each of the four theoretical perspectives that underpin this study, beginning with the network perspective, followed by an outline of hybrid leadership and then the distributed leadership perspective. Finally, I present a discussion of the main concepts of CA explored in talk-in-interaction in the context of the routine of team meetings.
3.1 Conceptual Model for Examining Leadership of Teaching and Learning in Subject Teams

The model in Figure 1 puts forward the five research sub-questions posed in this study to develop an understanding of how leadership of teaching and learning through advice and information interactions is practised in subject teams. In this model, subject teams are seen as comprising networks through which advice and information flows during the interactions of actors, in formal and as well as informal contexts.

Drawing on distributed and hybrid leadership perspectives, the model illustrates that leadership practice is constituted in the interaction of three elements; leaders, followers, and aspects of their situation. The role of leader and follower is interchangeable, depending on the situation. Drawing on network perspectives, the model hypothesises that leadership is exercised through a network of actors. In the network, the interaction of actors involves a flow of advice and information. In this instance, the advice and information flow focuses on curriculum, pedagogy, and assessment.

The interactions between actors occur in both formal contexts (team meetings) and informal contexts (outside of meetings). Depending on the situation, leadership is provided by formally designated leaders and/or teachers who emerge as informal leaders. Moreover, this leadership can be provided by individual or multiple leaders. In both formal and informal contexts, patterns and configurations of leadership emerge from the interactions as a result of the frequency of contacts and the extent to which actors are key advice givers. In the routine of team meetings, the talk-in-interaction influences/is influenced by the leadership configurations. Furthermore, the actors employ interactional resources to accomplish the task of ‘doing leadership’. In the informal interactions, the patterns and configurations of leadership is affected by the perceptions of influence colleagues have on the work of teachers and leaders.

It is from the advice and information interactions between formal leaders and informal teacher leaders, in both the formal and informal contexts, that the research questions are drawn, and can be understood using an integrated analytic framework comprising a network approach, hybrid leadership and distributed leadership perspectives, and conversation analysis (talk-in-interaction).
Adapted from Spillane et al. (2004)
3.2 The Network Perspective

To understand the leadership of teaching and learning through advice and information interactions of members in teams, I first adopt a network perspective, using the tool of ONA. ONA draws on social network theory (Merrill, Bakken, Rockoff, Gebbie, & Carley, 2007); thus the use of ONA warrants a discussion of social network theory. As a conceptual framework, social network theory has been used in empirical studies on school leadership, e.g. Hancock (2008); Warfield (2009). Wasserman and Faust (1994) assert that a social network approach is both theory and method, therefore it is impossible to exclude a discussion of the method when discussing theory. Notwithstanding the overlapping concepts between theory and method, in this chapter I focus on the fundamental principles and theoretical concepts ONA and briefly make links with methods; however discussing the method in more detail in Chapter Four.

Wasserman and Faust (1994) maintain network analysis is grounded in important social phenomena and theoretical concepts; and a social network perspective provides a formal conceptual means for thinking about the social world. Spillane et al. (2010) contend that “social network theory and methods provide useful conceptual and methodological tools for examining how advice and information – the key ingredients of knowledge development – flow in organisations” (p. 130). As the study of leadership as a social influence interaction in school must attend to both formal (or designed organisation) and the informal (or lived) organisation (Meyer & Rowan, 1977; Spillane et al., 2010), social network theory provides a set of core constructs and measures to investigate relations between the formal and informal organisation (Spillane et al., 2010).

In my study, I used a network approach to investigate the interactions of actors in the formal organisational routine of team meetings; as well as the informal interactions, that is, the interactions that occur outside the context of formal team meetings. Moreover, in both contexts, I use a network approach to investigate the role of formally designated leaders in the teams’ teaching and learning advice and information network and expand the focus beyond formally designated school leaders to also include informal leaders, that is, teachers who are key advice givers but who have no formal leadership position. The adoption of such an approach to the investigation of formal (positional) leaders’ and teachers’ social networks about teaching and learning, allows for “a more
Fundamental principles of the network perspective

The focus on relations between actors and the patterns of relations is a fundamental principle in the network perspective (Borgatti & Ofem, 2010; Wasserman & Faust, 1994). As compared with traditional social science or attribute-based approaches where the focus is on qualities or attributes of organisations or individuals, relational ties among actors are of primary concern in the network perspective; and attributes of actors are secondary. In addition to the use of relational concepts, Wasserman and Faust (1994) note the following as the central principles underlying the network perspective: (1) actors and their actions are viewed as interdependent rather than independent autonomous units; (2) relational ties between actors are channels for transfer or “flow” or resources; (3) network models focusing on individuals view the network structural environment as providing opportunities for or constraints on individual action; and (4) network models conceptualise structure (e.g. social, economic, and political) as lasting patterns of relations among actors.

The concept of Network

Borgatti and Ofem (2010) maintain that whilst the relational orientation is integral to the network perspective, the relational orientation is not what makes it clearly distinctive, but the fundamental concept of the network. A network consists of a set of nodes or actors (represented by the circle), along with a set of ties (represented by the line) of a single type that connect the nodes (Refer to Figure 2).

Figure 2

Example of Nodes and Ties
The *nodes* can be persons, teams, departments, organisations, industries, or any other type of entity that is capable of having some relationship with another entity. *Ties* may be any relationship between units, for example, friendships between individuals, material transactions, communication patterns between departments, flow of resources or support, behavioural interaction, group co-memberships, affective evaluation of one person by another (Wasserman & Faust, 1994).

Social networks comprise ties of different sorts and with diverse strengths. The direct contact of an individual is said to belong to the first-order zone of nodes, whereas indirect contacts via a first-order person belong to a second-order zone. The ties within the network can be strong or weak. Both strong and weak ties are necessary within a network because they provide access to different kinds of information (Tenkasi & Chesmore, 2003). Strong ties, often measured by quantity (intensive contact) or quality (how good the interaction is) have been found to support the transfer of tacit, non-routine, or complex knowledge (Reagens & McEvily, 2003), joint problem solving, and the development of coordinated and innovative solutions (Uzzi, 1997). In contrast, weak ties allow brokering opportunities; and access to non-redundant and novel information (Burt, 1997; Granovetter, 1973). In my study, the nodes are the educators (who I refer to as the actors) in the teams (refer to example in Figure 2). The relationship ties are their advice and information interactions. For most networks, I measure relations in terms of the strength of ties, for example, frequency of contact and strength of influence.

For my study, I focus on the advice and information interactions between members of school subject teams in the formal context of team meetings as well as the advice and information interactions in informal contexts; and the interactions of formal leaders as well as informal leaders to gain a fuller understanding of the leadership of teaching and learning. A team’s advice network is defined as the pattern of relationships among members in which one member seeks advice from one or more other members (Wasserman & Faust, 1994). An understanding of advice (and other) networks can be accomplished by an examination of networks at three levels, depending on the research question (Borgatti & Ofem, 2010; Wasserman & Faust, 1994).

**Three levels of analysis**
As mentioned earlier, the network perspective is both a theory and a method. It is, therefore difficult to separate a discussion of theory without some discussion on
methods. The method of ONA will be discussed in Chapter Four but I will briefly discuss here some of the concepts related to both the theory and method. In the network perspective, theorising can take place at three levels of analysis: the dyad, the node, and the network as a whole (Borgatti & Ofem, 2010).

The dyad level considers only properties of pairs of actors. Network data is always at the dyadic level. I examine the advice and information interactions between actors, that is, the provider of advice and the recipient of advice, and use this to understand various aspects of the interaction in the network. In network studies, dyadic measures may include geodesic distance between two pairs of nodes (i.e. the number of links in the shortest path from one to the other) and structural equivalence (i.e. the extent to which a pair of nodes has ties – or does not have ties – to the same third parties). In my study, these are not the focus. I briefly touch on reciprocal ties in the network but my main interest is network centrality.

The node level involves characterising how and where a node is connected in the networks. Constructs examined and measured include network size (i.e. the number of other nodes a node is directly connected to), structural holes (the number of nodes that a focal node is connected to that are not connected to each other), and centrality (the family of concepts describing position of the node in the network), such as betweenness, which measure how often the shortest path between two other nodes passes through the focal node). With respect to leadership, one of the concepts associated with centrality is leader prestige. Traditionally, team leaders are those whom the organisation designates as formal leaders and authorises to set agendas, run meetings, and ensure performance team members. However, having formal position does not automatically mean that others (e.g. subordinates) will seek out the team leader for personal, professional, or task-related advice (Balkundi, Barsness, & Michael, 2009). Respect engendered by being prestigious in the informal advice network, however, is likely to complement the team leaders formal power as prestigious leaders are approached by many subordinates for work related advice and guidance (they have a high in-degree centrality in the team advice network). Whilst the team leader or other formal leaders may feature a most central actor in a network, a social network perspective brings to the fore other leaders, for example, teachers who emerge as informal leaders in the network. In my study, I employ the concept of centrality, in particular, in-degree centrality, to identify key
advice givers, the most prominent actor/s, the central actors, the peripheral actors, and emergent informal leaders in networks.

The network as a whole is the highest level of analysis and involves the group. At the group level, a typical aspect investigated in the structure of the network. One concept examined is centralisation (the degree to which the network revolves around a single node). A high team centralisation suggests there are one or few leaders; and a low centralisation implies that leadership is distributed among many actors in the network (Mayo et al., 2003; Mehra et al., 2006). Figure 3 provides examples of these two structures.

Figure 3
Team Leadership Structures

Star shape graph - centralised network
As an entity, networks can be dense (many actors communicate with each other) or sparse (not many actors communicate with each other). Network Density (the proportion of relations that are actually present in the network, relative to the total of relations that are theoretically possible in that network) is another concept examined at the group level. Teams with more ties connecting members for advice exchange have dense, rather than sparse, advice networks; teams in which the advice ties are focused on one or few members have more centralised advice networks (Scott, 2000). From a leadership perspective, a high density implies that leadership is distributed because there will be several people (in both formal as well as informal roles), and not only one, who are regarded by other network members as influential. However, in densely connected networks actors may facilitate redundant information and inhibit the introduction of novel information (Burt, 1992; Szulanski, 1996). In sparsely connected networks, on the one hand, actors have access to non-redundant and novel information (Burt, 1992, Granovetter, 1973); but on the other hand, actors tend to be unable to exchange vital ideas and tacit knowledge (Hansen, 1999). Hence, by implication, sparse networks must rely on a few members to act as brokers (Daly & Finnigan, 2011). I employ the concepts of team network centralisation to determine the pattern of leadership in networks (centralised or decentralised) and density to investigate the degree advice and information communication in the network (e.g. high density or low density).
Thus, my study uses network theory as one framework to understand the leadership of teaching and learning through advice and information interactions, providing a fuller understanding of leadership of teaching and learning in both the formal and informal organisation. However, it does have its limitation as Tichy, Tushman, and Forbrun (1979) maintained that “although the combination of theory and research shows that there has been interest in a network approach, there has yet to emerge a comprehensive model based on network thinking that is capable of guiding our understandings of social and, in particular, organisational processes” (pp. 508-509). Thus, this statement made many years ago may very well still apply today. To address this gap, in addition to the network concept, I use the concept of hybrid leadership (Gronn, 2008, 2009a, b, 2010, 2011) to further understand the leadership of teaching and learning.

3.3 Hybrid Leadership

Traditionally, the responsibility of leadership of teaching and learning is accrued to leaders in a way that is generally designed by an organisation such as a school. Over the years, the dominant pattern of leadership has been a hierarchical form of leadership where leadership has been perceived as the role of positional leaders with the school principal being at the top of the organisation, followed by other leaders in the hierarchy. In recent years, scholars have articulated the importance of other forms of leadership, in particular, a distributed pattern of leadership (Gronn, 2002; Spillane, 2006, 2007) where leadership is perceived to be distributed to multiple leaders across the organisation. Whilst distributed patterns of leadership have been found in empirical studies (e.g. Spillane, 2007; Timperley, 2005), the focus of these studies has been mainly on the distributed phenomenon, with little attention paid to individuals who play prominent leadership roles. Gronn (2008, 2009a, b, 2011), however, hypothesises that leadership in an organisation includes individuals, teams, and networks; arguing that hybrid is a more appropriate descriptor for school leadership than distributed. Gronn (2009b) contends that a hybridity does not refer to a new type of leadership, “hybrid leadership means mixed leadership patterns” (p. 17). Thus, to understand the pattern of leadership in teaching teams, I draw on literature on Gronn’s (2009a, b, 2011) perspective of hybrid leadership. Two empirical studies which have used this as their conceptual framework are Gronn (2009b), and Higgins and Bonne (2011).
Theoretical foundations
In postulating the concept of hybrid leadership, Gronn (2008) draws on Kontopoulous’s (1993) theory of logics of social structure and the concepts hierarchy and heterarchy. This theory postulates that with hierarchy “each level is successively implicated in the higher level, whereas with heterarchy, various levels exert a determinate influence on each other in some particular respect” (Kontopolous, 1993, p. 55). Situations lacking any clear ordering of elements are quintessentially heterarchical (Gronn, 2008). Gronn (2008) argues that hybridity has the potential to be “a more accurate representation of diverse patterns of practice, which fuse or coalesce hierarchical and heterarchical elements of emergent activities” (p. 155). Hence, the intermingling of both hierarchical and heterarchical modes of ordering responsibilities and relations indicate a hybrid leadership pattern.

Hybrid Leadership and Leadership Configurations
According to Gronn (2009a, b, 2010, 2011), a hybrid perspective, with its focus on understanding configurations, is a useful tool for the analysis of leadership patterns. Gronn (2010) suggests that leadership, as practised, comprises a configuration (a pattern or an arrangement of practice); proposing configurations and role-sets as the core components of units of leadership analysis (Gronn, 2011). The unit of analysis is a way of highlighting the sets of relations which Gronn (2009a) emphasises is dynamic rather than static. A role-set is defined as “that complement of role-relationships in which persons are involved by virtue of occupying a particular social status” (Merton, 1957, p. 110, as cited in Gronn, 2011). Role-sets are structured relations in which fellow role-set members (persons and groupings) communicate their set of expectations to leaders. In hybrid practice, role set membership includes plural-member units as pairings and partnerships, for example, principal-teacher (Gronn, 2011).

Gronn (2009a, b, 2011) argues that it is important to consider all structural configurations to capture the whole of leadership practice in a school, rather than only the practice associated with the hierarchical structure (typically solo leadership), or only leadership broadly construed as distributed. According to Gronn (2009a, b, 2011), from a hybrid perspective, leadership can be both focused as well as distributed, and he provides a range of hybrid patterns that appear in studies of school leadership and in other contexts, as discussed in Chapter Two (see pages 46-48).
For my study, I use configurations and role-sets to understand the sets of leadership relations and patterns of leadership in subject teams as Gronn (2009b) maintains that, in any organisational setting there is a constantly shifting leadership mix or configuration which should be understood as a response to the situational challenges that are specific to that context. A hybrid perspective, allows for the likelihood that, over time, in each organisational context, where leadership may be manifest, different kinds and degrees of both individualised (focused) and distributed patterns of leadership will co-exist (Gronn, 2009b). For my study I examine the roles of formal leaders and informal leaders. Pielstick (2000) defines formal leaders as those in a position of leadership; and informal leaders those not in a position of leadership but recognised as leaders nevertheless (p. 99). To draw inferences about the patterns of relationships, participants were classified according to roles: (a) formal leaders are positional leaders that include HOC and LT; (b) informal leaders include ST and Integrating Facilitator (IF) or Integrated Support Staff Teacher (ISST) who emerge as leaders.

For the analysis of configurations, I use a modified typology of configurations found by de Lima (2008) in a study of subject departments. In de Lima’s study the configurations were: (a) focused, formal leadership - the department coordinator was perceived as the key actor in the department; (b) multiple leadership - the department coordinator was regarded as a key actor, but this network position was shared with others; (c) alternative, informal leadership - the department coordinator was a less central actor, whilst the most central position was occupied by a different colleague; and (d) leadership void - the department coordinator was one among a majority of isolated members in the department. Whilst in de Lima’s (2008) study the configuration was based on the department leader being the formal leader, in my study the formal leaders are the Key Learning Area subject leader (the HOC) and the LTs. The modified typology of configurations used in my study is indicated in the Table 1.
Table 1
Typology of Leadership Configurations

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focused, formal</td>
<td>Head of Curriculum (HOC) is the most central actor.</td>
</tr>
<tr>
<td>Multiple, formal</td>
<td>HOC is a central actor, but this position is shared with a LT.</td>
</tr>
<tr>
<td>Multiple, formal and informal</td>
<td>HOC is a central actor, but this position is shared with a LT and a Supporting Teacher (ST)/Integrating Facilitator (IF)/Integrated Support Staff Teacher (ISST).</td>
</tr>
<tr>
<td>Alternate, formal</td>
<td>LT is the most central actor.</td>
</tr>
<tr>
<td>Alternate, formal and informal</td>
<td>LT is most central, but the position is shared by a ST or IF or ISST.</td>
</tr>
<tr>
<td>Alternate, informal</td>
<td>ST or IF or ISST is the most central actor.</td>
</tr>
</tbody>
</table>

(Modified from de Lima, 2008)

Whilst the hybrid leadership perspective is useful to study patterns of leadership; the study of leadership also involves other important aspects, particularly, the *practice* aspect (Spillane, 2006) of leadership. Thus, in addition to the concept of hybrid leadership, the study of subject team leadership can be complemented with the use of the distributed leadership perspective (Spillane, 2006, 2007), in particular, the analysis of routines such as team meetings.

### 3.4 Distributed Leadership Perspective

To extend my analysis and understanding the subject team leadership, I draw on the distributed leadership perspective of Spillane (2006; 2007). This perspective has been adopted in recent studies of school leadership including the following, Coldren and Spillane (2007); Sherer (2007); Timperley (2005). According to Spillane (2006) a distributed perspective on leadership is “a framework for thinking about and analysing leadership” (p. 10). Leadership practice from a distributed perspective is “a product of the joint interaction of school *leaders, followers*, and aspects of their *situation* such as tools and routines” (Spillane, 2006, p. 3). Harris (2004) contends that this model is a powerful analytical tool. Spillane (2006, 2007) and Sherer (2008) contend that distributed leadership is a useful theory for studying instructional leadership.
Consequently, I adopted the distributed leadership framework to analyse particularly the leadership *practice* in subject teams.

**Theoretical roots of distributed leadership perspective**

Spillane (2006, 2007) puts the focus on practice, rather than leadership roles and functions or those responsible for them, and so supports the view of leadership as activity, not a position. While not specifically referring to the theoretical foundations in the current analytical framework, to develop their theory of leadership practice, Spillane and colleagues (2001, 2004) appropriate concepts from activity theory and distributed cognition.

**Activity theory**

Activity theory was developed by the Russian psychologists L.S. Vygotsky (1978) and A.N. Leont'ev (1978) who sought to understand human activities as complex, socially situated phenomena. The work by Finnish theorist Engeström (1999) builds on the work of Leont’ev and Vygotsky. Engeström’s activity theory suggests that human activity is mediated by artefacts (e.g. tools used, documents, recipes, etc.) Activity is also mediated by an organisation or community; and the community may also impose rules that affect activity. The subject works as part of the community to achieve the object.

**Distributed cognition theory**

Distributed cognition theory of psychology, developed by Edwin Hutchins (1995), expands our knowledge of human activity by bringing our attention to social contexts as an integral component of intelligent activity. Distributed cognition proposes that human knowledge and cognition cannot be adequately understood solely in terms of an individual’s mental capability. Instead, the activity of cognition happens in the interaction of multiple components (Pea, 1993; Resnick, 1991); learning is ‘stretched across’ people and elements of the situation (such as artefacts and tools people use within their particular context).

Spillane and colleagues (2001, 2004) argue that the socio-cultural context is a constitutive element of leadership practice, and fundamentally shapes its form. In addition to material tools and routines, action is distributed across language; theories of action, and interpretive schema, providing the means that enable and transform intelligent social activity. Actors develop common understandings and draw on cultural,
social, and historical norms in order to think and act. Thus, even when a particular

cognitive task is undertaken solely by an individual, the individual relies on a variety of
socio-cultural artefacts and language that are social in origin.

Building on activity theory and distributed cognition theory, Spillane et al. (2001, 2004)
move beyond individual activity and the behaviours of leaders to formulate an
integrative theory of leadership that examines the interaction of the leader’s thinking
and action in the situation; and focuses on tasks, routines and tools around which school
leaders organise their practice.

**Figure 4**

**The Distributed Leadership Perspective**

![The Distributed Leadership Perspective](Spillane, 2006, p. 3)

Spillane’s (2006, 2007) distributed perspective on leadership involves two main aspects:
the leader-plus aspect and the practice aspect.

**Main aspects of the distributed perspective**

**The Leader Plus Aspect**

A distributed perspective acknowledges that the work of leading and managing teaching
and learning involves multiple individuals; people in formally designated leadership
positions and those without any formal leadership designations (e.g. teachers) can and
do take responsibility for leading and managing in schools (Spillane & Diamond, 2007).
Spillane (2006) maintains while the leader-plus aspect is vital, it is insufficient on its
own. Leadership practice from a distributed perspective is a product of the joint
interaction of school leaders, followers, and aspects of their situation such as tools and
routines.
The Practice Aspect

From a distributed perspective, leadership practice take shape in the interaction of leaders, followers, and aspects of their situation (see Figure 4); it does not reside in any one of these elements, and each is a pre-requisite for leadership activity. Leadership practice is constituted in the interaction of all three elements.

Leaders and Followers

From a distributed leadership perspective, leadership is stretched over the work of multiple leaders who together have expertise and knowledge that exceed what individual leaders possess. This means that groups of leaders potentially have cognitive properties that are greater than the sum of their individual parts. Thus, leadership routines are often best examined as group or collective processes rather than individual processes (Spillane, 2007). The follower dimension is another essential component of leadership practice (Spillane, 2006, 2007). Classroom teachers, administrators, and others can, depending on the leadership activity, find themselves in the follower role. Leaders influence followers by motivating actions, enhancing knowledge, and potentially shaping the practice of followers in respect of teaching and learning. A distributed perspective acknowledges the centrality of followers to leadership and also regards the followers as an essential element that mutually constitutes leadership practice. Thus, leadership is not simply something done to followers; followers in interaction with leaders and the situation contribute to defining leadership practice (Spillane, 2006, 2007).

Situation

Spillane (2006, 2007) maintains that situation is a main concept within the distributed leadership framework. To study leadership practice, one has to study the interactions between leaders, followers, and the elements of the situation. In the current framework of distributed leadership, Spillane (2006, 2007) contends that aspects of the situation, tools and routines that are part and parcel of day-to-day practice, are integral to investigations of leadership. Spillane (2006, 2007) acknowledges others aspects, such as structures and culture, are also fundamental to the leadership practice, as outlined in the earlier version of the theory (Spillane et al., 2001, 2004). For my study, I focus on two aspects of the situation: organisational structure and routines.
(a) Organisational structure

Leadership practice, amongst other aspects of the situation, is extended through organisational structures that enable the movement and generation of knowledge and incentives in the organisation. Spillane (2005) maintains that institutional structure “refers to the cultural or normative ideas that organise how people interact with one another; structure as a cultural phenomena that guides social action – roles, positions, expectations” (p. 386). In this study, I view structure as a formally defined way of organising (Sherer, 2008) and focus on positions and roles of actors in subject teams.

(b) Routines

Leadership and management practices in organisational structures are enacted in great part through organisational routines (Spillane & Coldren, 2011). Routines refer to a repeated and recognisable pattern of interdependent actions involving two or more individuals (Feldman & Pentland, 2003). From a distributed perspective, routines and tools, as aspects of the situation, are a key constituting component of leadership practice. That is, routines are not just accessories of, or arenas for leadership, but act to fundamentally shape leadership practice. From a distributed perspective, leadership practice is stretched over individuals who have responsibility for leadership routines.

Sherer (2006) maintains because organisational routines are a key mechanism through which leaders enact their practice, they offer an important window into leadership practice. For example, the work of Burch (2007), Diamond (2007) and Spillane (2005) on routines of team meetings illustrate how leadership practice is constituted in the interactions among different school leaders. Spillane and Coldren (2011) suggest routines can be analysed in terms of the following components: (a) functions - what the routine is designed to accomplish; (b) tasks involved; (c) who is responsible for leading; and (d) tools involved in the routine. In addition, these authors emphasise the importance of analysing the routines causal theory (why the routine should work, pinpointing advantages; and thinking through disadvantages); and connecting the routine to teaching and learning. For my study, I employ these aspects of the distributed leadership perspective to understand the interactions of actors in the routine of subject team meetings.
Meetings are where agendas are raised, information and ideas are shared, and decisions made (Boden, 1994). In my study, I observed the formal team meetings; the visible interaction of teachers and leadership practice, focusing on the interactions of members of the Mathematics Key Learning Area (KLA) team and the English KLA team to understand the leadership of teaching and learning. As Spillane and Coldren (2011) maintain, to understand the practice, we have to go beyond an exclusive focus on the leadership roles/ functions and who fills them or with routines and who performs them roles actions of individual leaders; close attention must be paid to how the practice of leadership is constituted in the interactions of leaders and followers.

To understand the practice of leadership of teaching and learning in the routine of team meetings, I analyse the leadership enactments related to aspects such as curriculum, pedagogy and assessment as Bernstein (1973) conceptualises formal educational knowledge as being realised through these three message systems. He states that “curriculum defines what counts as valid knowledge, pedagogy defines what counts as a valid transmission of knowledge, and [assessment] defines what counts as a valid realisation of this knowledge on the part of the taught” (p. 228). To identify and analyse the advice and information interactions emerging in the three message systems, I focus on meeting talk using the method of CA.

3.5 Conversation Analysis (CA) and Ethnomethodology

CA originally emerged as an offshoot of ethnomethodology (ten Have, 1997). The term ethnomethodology was coined by Harold Garfinkel, the founder of ethnomethodology. Garfinkel was influenced by the phenomenological work of Edmund Husserl and Alfred Schutz, whose methods were grounded in observations and analysis of mundane, routine, everyday life. Although many ethnomethodologists have made the examination of talk-in-interaction a focus of their study, EM studies encompass a much larger range of projects Francis and Hester (2004). Psathas (1995) characterises ethnometodological studies into five categories: (a) the organisation of practical actions and practical reasoning; (b) the organisation of talk-in-interaction; (c) talk-in-interaction within institutional settings; (d) the study of work, that is, how work is accomplished in a social setting; and (e) the haecceity of work; that is, just what makes an activity what it is? Over the years there have been many developments in the approaches to
ethnomethodology. According to Francis and Hester (2004) mention three different approaches to EM which are ‘sequential analysis’, ‘membership categorisation analysis’, and ‘studies of work programme’. In my study, I use CA as this approach offers the analyst the tools and the lens with which to undertake the fine grained, moment-by-moment analysis of interactions of teachers within team meetings.

CA was first formulated by Harvey Sacks and his colleagues, Emanuel Schegloff and Gail Jefferson in the 1960s. CA takes up the problem of studying social action in situ, in the most ordinary of settings, examining the most routine, everyday, naturally occurring activities in their concrete details. Its interest is in finding the machinery, the rules, and the structures that produce and constitute that orderliness (Psathas, 1995, p. 2). As a research method, CA has now been extended to include analysis of not just informal instances of conversational talk but also to interrogate instances of institutional talk, for example in educational settings. Psathas (1995) argues “it is not conversation but talk-in-interaction that is the broader and more inclusive characterisation of the phenomena under study” (p. 2).

In this dissertation, I present a discussion on the method of CA in Chapter Four; however, in this section, I outline the CA analytic framework adopted in this study as ten Have (1997) points out:

“CA … is not without ‘ideas’ or ‘analytic frames’, but these are mostly concerned with, on the one hand, basic issues of the organisation and understanding of human conduct, and on the other the formulation of conceptual instruments to analyse various organisational phenomenena in talk-in-interaction”.

Thus, for my study, I use a modified version of Goldsmith’s (2000) typology of sequences in which advice and information was introduced during subject team meetings (Table 2).
Table 2
Typology of Advice and Information Sequences

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recipient asks for advice (RAA)</td>
<td>Recipients ask for advice in three relatively explicit ways: (a) using a most explicit statement such as “I need your advice”; (b) asking “what should I do?” is an explicit request; and (c) asking the somewhat narrower question such as “should I do X?” , a question indicating that the other’s advice or evaluation of an action is desired and asks for advisability of one particular action.</td>
</tr>
<tr>
<td>Recipient asks for opinion or information (RAO/RAI)</td>
<td>This involves asking for an opinion of some action, for example, “What do you think of X?” This is less clearly solicitation of advice than asking for advice and suggests that the person who asks is attempting to solve a problem, making advice potentially relevant.</td>
</tr>
<tr>
<td>Recipient discloses a problem (RDP)</td>
<td>Advice may directly follow disclosure of a problem. Whilst some researchers suggest that there are circumstances in which advice is an unwelcome response, the interpretations of participants and participant observers suggest announcing a problem can be heard as a way of asking for advice.</td>
</tr>
<tr>
<td>Recipient announces a plan (RAP) of action</td>
<td>Advice follows when the recipient announces a plan. This is unlikely to be heard as soliciting advice; however, to the extent that the recipient verbally draws attention to some act, he or she invites comment. Whilst advice may not be the desired reaction, a reaction is invited by the announcement.</td>
</tr>
<tr>
<td>Advisor identifies a problem (AIP)</td>
<td>Sometimes the problem topic is introduced into the conversation by the advice giver. This category may be seen as a pre-sequence to advice; that is, the advisor’s identification of a problem occurs separately from the turn in which advice is given. Furthermore, it serves to establish one of the preconditions which make the advice relevant. The recipient’s assent to and/or further specification of the problem provides a basis for offering advice in the next turn. Once the recipient has ratified the problem, the situation is somewhat similar to that in which the recipient has announced the problem - the problem is acknowledged and advice about the problem is a potentially relevant response.</td>
</tr>
<tr>
<td>Advisor volunteers advice (AVA)</td>
<td>Advice sometimes immediately follows the giver’s observation of an action he or she views as problematic.</td>
</tr>
<tr>
<td>Advisor volunteers information (AVI)</td>
<td>Advisor voluntarily disseminates relevant information.</td>
</tr>
</tbody>
</table>

(Modified from Goldsmith, 2000)

In addition, I examine these sequences to identify the interactional resources used by participants in their talk. Some of the discursive resources described in the literature include the following: adjacency pairs (a basic two-unit sequence, e.g. questions and answers) (Boden, 1994; Sacks, 1987); directed reported speech (Holt, 1996); prosody (features include intonation, change in loudness, stress rhythm) (Couper-Kuhlen et al., 1998); teaching replays and teaching rehearsals (constructed dialogue to create classroom scenes during collegial conversations) (Horn, 2010); invoking and representing the non-present other (Richards, 2006); three-part list (lists that are
constructed by speakers have a three-part structure) (Jefferson, 1990; Lerner, 1994); voting and marginalising dissent (Sawyer et al., 2005); self-reference “we” and, extraction and aggregation (Lerner & Kitzinger, 2007); “I don’t know” (Beach & Metzger, 1997); “I think” (Aijmer, 1997); formulations (Heritage & Watson, 1979); and crafting (Sawyer et al., 2005). Other resources employed by interactants include the method of facilitation of meetings (Crespo, 2006) and artefacts (Spillane, 2006). The following example illustrates the use of interactional resources by speakers:

Example

In the extract below taken from a subject team professional development session, Jen uses role play and prosody to advise teachers on teaching nominalisation in English.

103. Jen: (.)okay (.) what do I make (0.2) absent into↑
104. (0.2)
105. Jen: >OH AH YES<
106. Eva: absence
107. Jen: LOVELY (.) YOU’VE GOT IT (.) okay (.) so a good clue
[EMT1: 04-08-2009]

In this extract, Jen employs role play and prosodic elements of loudness and faster speech to create excitement. These devices are used to elicit an answer from Eva, role-playing as “student”. Jen follows Eva’s response this with a loud compliment; acknowledging the “student” who has answered the question correctly.

In the next section, I present a summary of the chapter.

3.6 Summary of Chapter

In this chapter, the conceptual framework which underpins the analysis of leadership of teaching and learning through advice and information interactions was presented and discussed. The chapter began by presenting a conceptual model that frames this study. The model draws links between the findings of the literature review, the research questions, and the theoretical underpinnings of this study. The chapter outlined that leadership practice in subject teams is constituted in the interactions between leaders, followers and the situation. Advice and information flows between actors in networks in formal as well as informal contexts and can be provided by formal and informal leaders.
This can result in various leadership patterns and configurations. The chapter outlined that leadership practice can be understood by adopting a conceptual framework that integrates a network approach, the concept of hybrid leadership, the distributed leadership perspective, and conversation analysis. This chapter highlighted that the study of school leadership necessitates the study of both the formal as well as the informal organisation, and the network perspective was deemed valuable for this purpose. This chapter clarified that ONA is a tool derived from SNA; and uses various theoretical concepts related to methods of analysis to understand leadership of teaching and learning through advice and information relations. This chapter also highlighted the importance of understanding leadership structure and patterns in teams by examining the role-sets and leadership configurations. In addition, the distributed leadership perspective was presented as a useful framework that guides this study. With its emphasis on the practice aspects, the distributed leadership perspective complements the other approaches used in this study by providing a powerful analytic lens to understand aspects of the situation such as the routine of team meetings. Finally, this chapter illustrated the importance of CA/Ethnomethodology as a theoretical basis for examining naturally occurring leadership talk in subject team meetings. CA provides a lens to identify the actions of leaders, and can be used to identify and understand the interactional resources employed by leaders to accomplish the task of ‘doing leadership’.

In the next chapter, the research methodology chosen to investigate leadership of teaching and learning is explained.
CHAPTER FOUR
RESEARCH METHODOLOGY

4.0 Introduction

The purpose of this chapter is to explain and justify the research design used in this study. The chapter begins with an exposition of the debates around research paradigms, followed by a discussion related to the choice of adopting a mixed methods approach to the study. This is followed by an explanation of the research design; the mixed-method approach, case study design, methods of data collection and analysis. The chapter then outlines the measures undertaken to establish validity and reliability; and concludes with a discussion of ethical considerations for undertaking this research study.

4.1 Mixed Methods Research Design

The origins of mixed methods research lie in the two major research paradigms, quantitative research (i.e. a positivist paradigm) and qualitative research (i.e. an interpretivist or constructivist paradigm). Historically, quantitative research has been the cornerstone of social-science research with purists calling for researchers to “eliminate their biases, remain emotionally detached and uninvolved with the objects of study and test or empirically justify their stated hypothesis” (Johnson & Onwuegbuzie, 2004, p. 14). Qualitative purists “contend multiple-constructed realities abound, that time-and context-free generalisations are neither desirable nor possible, that research is value bound, that it is impossible to differentiate fully causes and effects, that logic flows from specific to general and that the knower and known cannot be separated because the subjective knower is the only source of reality” (Johnson & Onwuegbuzie, 2004, p. 14).

During the 1980s and 1990s, researchers questioned the benefits of categorising research exclusively into quantitative research paradigms or qualitative research paradigms as many felt these research methodologies were compatible. Consequently, researchers have argued for a framework integrating quantitative and qualitative research, resulting in a range of applications of a mixed methods approach, for example, in psychology, education, sociology, and information systems. Johnson and
Onwuegbuzie (2004) suggest a mixed methods research approach is the “third research paradigm in educational research” (p. 14). Johnson, Onwuegbuzie, and Turner (2007) offer the following broad definition of mixed methods research:

“Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g. use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purpose of breadth of understanding or corroboration” (Johnson, Onwuegbuzie, & Turner, 2007, p. 123).

A mixed methods research approach has its own philosophical worldview; pragmatism, advocating the use of procedures that ‘work’ for a particular research problem under study and that the researcher should use many methods when understanding a research problem (Creswell, 2008). Advocates of a mixed methods approach contend the goal of mixed methods research is not to replace either quantitative or qualitative research, but rather to draw from the strengths and minimise the weaknesses of both approaches (Teddle & Tashakkori, 2009). Many research questions and combinations of questions are best and most fully answered through mixed research solutions, resulting in high quality (superior) research (Johnson & Onwuegbuzie, 2004; Ercikan & Roth, 2006).

Researchers have advocated various approaches to mixed methods research. In their typology of mixed research methods, Johnson and Onwuegbuzie (2004) differentiate between mixed model research and mixed method research. A mixed model involves mixing qualitative and quantitative approaches across or within the stages of the research process. A mixed method refers to the inclusion of a quantitative phase and a qualitative phase in an overall research study. Johnson and Onwuegbuzie (2004) argue that in order to construct a mixed-method design, the research must take two primary decisions, (a) paradigm emphasis decision: whether one wants to operate largely within one dominant paradigm or not, and (b) time order decision: whether one wants to conduct the phases concurrently or sequentially (Johnson & Onwuegbuzie, 2004). Further, these researchers argue that in a mixed method design, the findings must be mixed or integrated at some point, for example, if the quantitative and qualitative phases are undertaken concurrently, the findings must, at a minimum, be integrated during the interpretation of the findings (Johnson & Onwuegbuzie, 2004).
For my study, the conceptual framework, an integration of organisational networks (formal and informal), hybrid leadership, distributed leadership perspective, and conversation analysis/ethnomethodology, served as a basis for choosing a mixed methods design. For investigating the leadership of teaching and learning through advice and information interactions in subject teams, my study adopts a mixed methods multi-strand design, that is, the mixing of qualitative (QUAL) and quantitative (QUAN) approaches both within and across the three stages, viz. conceptualization, experiential, and inferential stages (refer to Figure 5), of the study (Teddlie & Tashakkori, 2009). Furthermore, my study adopts a parallel (or concurrent or triangulations) mixed design (Creswell, 2008; Teddlie & Tashakkori, 2009). This design has two parallel and relatively independent strands; one with QUAL questions, data collection, and analysis techniques; and one with QUAN questions, data collection, and analysis techniques. In this design, equal priority is given to both quantitative and qualitative data. The QUAL and QUAN strands of the study occur concurrently to answer related aspects of the same overarching mixed methods research questions. “The purpose of the parallel mixed methods design [was] to simultaneously collect both quantitative and qualitative data, merge the data, and use the results to understand a research problem” (Creswell, 2008, p. 557). In this way, the qualitative and quantitative methods served the purpose of complementarity; measuring overlapping but also different facets of a phenomenon, yielding an enriched, elaborated understanding of the phenomenon (Greene, Caracelli, & Graham, 1989).

4.1.1 Phase 1: Conceptualisation Stage

The conceptualization stage refers to the implementation of the mixed methods research through the explanation of the ‘sphere of concepts’ (abstract operations), the formulation of research purposes, questions, and so forth. The purpose of this study is to explore, analyse and document the practice of leadership of teaching and learning through advice and information interactions in school teams; and thereby contribute to the limited research base. To achieve this, the study introduces the concept of ONA to school research, and applies it in conjunction with CA.
Figure 5
Parallel Mixed Methods Research Design

Source: Teddlie and Tashakkori (2009)
The research questions

The study is guided by the following research questions:

**Focus question:** How is leadership of teaching and learning through advice and information interactions practised in school subject teams?

**Sub-questions**

1. What are the patterns and configurations of leadership that emerge in the interactions of participants?
2. To what extent do formal leaders provide advice and information to colleagues; and do teachers without formal leadership positions emerge as informal leaders?
3. How do participants perceive the influence colleagues have on their work?
4. What are the leadership actions performed by leaders in formal interactions; and what are the interactional resources used by leaders?

A Case Study

In my study, I use the case study method to capture the leadership practice of teachers within subject teams. MacDonald and Walker (1977) describe a case study as “the examination of an instance in action” (p. 181). Yin (1989) contends that case study methodology is an appropriate method to use in order to understand complex processes like leadership practice. Some researchers identify “case” as the object of study, whilst others consider it to be a research methodology in its own right (Creswell, 2008, p. 476). In my study the term case refers to the object of study, that is, leadership practice through advice and information interactions within subject teams in a single government middle school.

Adelman, Jenkins and Kemmis (1976, pp. 148-150) propose that there are several distinct advantages in selecting case study as an approach and mode of presentation. These are (a) the data are strong in reality; (b) attention is given to the subtlety and complexity of the case; (c) case study recognises the embeddedness of social truths; (d) case study admits subsequent reinterpretation; (e) insights may inform teachers, institutions and policy; and (f) the data are presented in an accessible form.

Stake (2005) categorises case studies into three types that are not necessarily exclusive. An *intrinsic case study* is undertaken because one wants better understanding of this particular case. The case is undertaken because, in all its particularity and ordinariness,
the case itself is of interest. In an *instrumental case study* a particular case is examined mainly to provide insight into an issue or to redraw a generalisation. The case is of secondary interest; it facilitates our understanding of something else. A *multiple case study (collective case study)* involves a number of cases studied jointly in order to investigate a phenomenon. My research study is predominantly an instrumental case study; serving the purpose of illuminating a particular issue, that is, leadership of teaching and learning through advice and information interactions within subject teams. However, my study can also be viewed as an intrinsic case study, since it is likely to provide the researcher and participants with data that will contribute to a better understanding of the leadership practice of formally designated leaders (Heads of Curriculum) leading out of their field (teaching subjects and professional education), and Leading Teachers (classroom teachers with formally designated leadership roles).

My study is a single case study. Yin (1989) argues that overall, the single case design is eminently justifiable under certain conditions – “where the case represents a critical test of existing theory, where the case is a rare or unique event, or where the case serves a revelatory purpose” (p. 44). The choice of using a single case is discussed in the next section of this paper, together with the site and sample.

4.1.2 Phase 2: The Experiential Stage

The experiential stage of mixed methods research refers to sample selection, data generation, and procedures for analysis. This can be divided into two sub stages: the experiential methodological stage (2a) and the experiential analytical stage (2b).

**Phase 2a: The Experiential Methodological Stage**

*Site*

Considering the objectives of the study was to investigate and document leadership practices within subject teams, I used purposeful sampling (Creswell, 2008). As Creswell (2008) points out, “in purposeful sampling, researchers intentionally select individuals and sites to learn or understand the central phenomena” (p. 214), I purposively selected the middle school of *Daleview Gardens College* (pseudonym) in Queensland, Australia for my study. *Daleview Gardens College* is a P-12 government school that was established in 2003. At the time of this study the school had an enrolment of over 2000 students across the junior, middle and senior sub schools. The
middle school comprised 640 students aged between 12 to 14 years. The staff of the middle school comprised the sub school Principal, Deputy Principal, four Heads of Curriculum (plus one HOC working across the College), twenty six teachers and four teacher aides. The criteria for the purposeful selection of this single site for the case study included:

1. The school has team-based structures, including subject teams;
2. The inclusion of participants from a variety of membership positions, including positional leaders such as HOC and LT;
3. The school was a recipient of the Education Queensland Award for Innovation in Teaching; and
4. The ease of access to the site and participants since I was a Head of Curriculum at the school.

Thus, the choice of this single case, particularly with a team leadership structure that included Heads of Curriculum leading out of their field and classroom teachers as LTs, was perceived to be revelatory (Yin, 1989, 2007) and the site and participants were perceived to be “information rich” (Patton, 1990, p. 169).

It is acknowledged that point 4 (of the criteria for the selection of this site) implies the possibility of researcher bias emerging within the study. Aware of this limitation in the study, every effort was made to tackle the possibility of researcher bias. This is discussed in detail under the topic of The Place of the Researcher in section 4.2.

**Sample**
Data for this study was gathered over a period of six months from members of teams responsible for leading teaching and learning in two Key Learning Area (KLA) teams, the English KLA team and Mathematics KLA teams. As the Department of Education, Training and the Arts (2011) has identified the teaching of English and Mathematics as two of the priority areas for improvement in teaching and learning; and has placed a great emphasis on strong leadership, this sample was perceived as important and relevant to provide a cross-section of the practice of leadership of teaching and learning. Furthermore, the qualitative method adopted in this study, CA, involves managing a great volume of data; therefore, it was deemed more manageable to focus on these two teams, particularly in terms of lengthy reporting on the analysis and findings. The
participants in the study were members of the teams, with each team comprising thirteen members that included the HOC, LTs, STs, and either Integrated Support Staff Teachers (ISSTs) or Integrated Facilitators (IFs). Despite the limitation of investigating a small sample of teams and participants, the small sample permitted me “access to the deep caverns that call for detailed exploration” (Slekar, 2005) of leadership of teaching and learning in subject teams.

**Negotiating Access to the Setting**

The various protocols were followed to obtain permission to conduct the study at the site. A letter requesting authorisation as well as the necessary documents were completed and submitted to Education Queensland as well as the school Executive Principal for approval to conduct the research at the school (see Appendices).

**Introducing participants to the study**

Several meetings were held to introduce participants to the study and gain their consent for participation. Separate meetings were held with the College Executive Principal, the Middle School Principal, and the Middle School staff. At the meeting of staff, I informed participants that I planned to approach each of them personally to gain their consent for participation in the study and answer any questions they may have. Prior to meeting participants, I e-mailed a copy of the Introductory Letter and Information sheet (see Appendices). Over a period of two weeks, I visited each potential participant; answered questions related to the research project, and gained their consent to participate in the study by completing the consent to participate in the study document (see Appendices).

**Data Gathering Phases**

After gaining the consent of all participants in the school to participate in the study, data was collected mainly through observations, survey, and interviews. These are outlined briefly in the table below.
Table 3
Data Gathering Phases

<table>
<thead>
<tr>
<th>Data Gathering Tools</th>
<th>Number</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observations of KLA team meetings</td>
<td>7</td>
<td>July to December, 2009</td>
</tr>
<tr>
<td>School Staff Social Network Survey</td>
<td>25</td>
<td>August, 2009</td>
</tr>
<tr>
<td>Semi-structured Interviews</td>
<td>15</td>
<td>August to December, 2009</td>
</tr>
<tr>
<td>E-mail Interview</td>
<td>1</td>
<td>November, 2009</td>
</tr>
<tr>
<td>Follow up e-mails</td>
<td>21</td>
<td>Conducted until July, 2012</td>
</tr>
</tbody>
</table>

(a) Observations

One of the main sources of data for my study was observation. Creswell (2008) defines observation as “the process of gathering open-ended, first-hand information by observing people and places at a research site” (p. 221). According to Moyle (2002), observation is a very powerful research tool since it can give direct access and insights into complex social interactions; give permanent and systematic records of interactions and settings; be ‘context sensitive and ecologically valid’; enrich and supplement data gathered by other techniques; use varied techniques, yielding different types of data; and be used to address a variety of types of research questions.

Silverman (2001) also maintains the aim of observation is “to gather first-hand information about social processes in a ‘naturally occurring’ context” (p. 14). Cohen, Manion, and Morrison (2007) point out observations allow the researcher to gather “live” data; the researcher can look directly at what is taking place in situ than relying on second-hand accounts (p. 397). Observational methods have been used extensively to collect network data (e.g. Bernard, Killworth, & Sailer, 1980, 1982; Farrell, 1999; Freeman, Freeman & Michaelson, 1988, 1989). Thus, for my study, I observed the interactions among participants to collect network data through ‘meeting talk’ related to leadership of teaching and learning.

Team meetings are increasingly becoming a site for the observation of educational research (e.g. Duff, 2011; Gronn, 1983, 1984; Hall & Danby, 2003, 2005; Jervis-Tracey, 2005). There are many purposes and benefits of team meetings. Meetings often involve knowledge sharing and an orientation to decision making (Barnes, 2007; Boden,
Team meetings are also routines of a learning community where educators come together to discuss teaching practice (Crespo, 2006; Farrell, 1999). These meetings open or close opportunities for intellectual and collaborative conversations around subjects taught and analysis of students’ work (Crespo, 2006). Thus, if groups of teachers come together to discuss and reflect on their teaching, then it will be important to recognise various types of interactions that may or may not provide opportunities for learning (Crespo, 2006; Duff, 2011; Farrell, 1999).

For my study, I observed the formal team meetings; gatherings that provided data of visible interaction of teachers and leadership practice. The purpose of the observations of team meetings was to seek answers to research questions in the formal contexts of the routine of team meetings. During the study, I undertook multiple observations of team meetings in order to obtain authentic data from participants. I observed three meetings of the Mathematics KLA team and four meetings of the English KLA team. The team meetings of both teams were held every five weeks, at the same scheduled time after school. One of the English KLA team meetings observed was held during a Student Free Day (SFD) at the same time the Mathematics KLA team meeting was held. The duration of the meetings was generally between thirty to forty-five minutes.

During observations, I assumed the role of a non-participant observer (Cresswell, 2008) which allowed me to sit on the periphery and be as unobtrusive as possible whilst the participants interacted within their teams.

The proceedings of team meetings were recorded using a digital audio voice recorder. The audio recordings were then transcribed verbatim into text for analysis of data. The procedure of recording and transcribing meeting talk has many advantages: it helps to correct the natural limitations of our memories and of the intuitive glosses that we might place on what people say; it allows more thorough examination of what people say; it permits repeated examinations of the talk; it opens up the data to public scrutiny by other researchers, who can evaluate the analysis that is carried out by the original researchers; it therefore helps to counter accusations that an analysis might have been influenced by a researcher’s values or biases; and it allows the data to be reused in other ways from those intended by the original researcher (Heritage, 1984, p. 238).
I also made field notes during observations using an observation protocol. This included a record of information on the date, place, time, location and purpose of contact, a portrait of individuals, and a map of the setting, and chronology of events (Refer to Appendices).

**(b) Social Network Survey**

A second source of data in my study was the use of a social network survey related to advice and information interactions. Social network approach is increasingly being used in educational research (e.g. Kochan & Teddlie, 2005; Peneul et al., 2006) in general and school leadership in particular (e.g. de Lima, 2007, 2008; Pustejovsky, Spillane, Heaton & Lewis, 2008; Spillane et al., 2010). Balkundi and Kilduff (2006) maintain that “the potential synergy between leadership research and social network approach is huge” (p. 435).

Whilst observations of team meetings provide data on formal interactions of teachers, my study also included the use of social network surveys to gather data on the informal advice and information interactions of participants. The purpose of the social network survey was to gather data from participants to understand how teachers enacted their informal practice leading teaching and learning through advice and information. Methodologically, this is an appropriate way to identify leadership distribution “not only among appointed leaders but also among de facto leaders” (Spillane, 2006, p. 32).

The purpose of the survey was to seek answers for the following research questions:

- What are the patterns and configurations of leadership that emerge in the interactions of participants?
- To what extent do formal leaders provide advice and information to colleagues; and do teachers without formal leadership positions emerge as informal leaders?
- How do participants perceive the influence colleagues have on their work?

For my study, I used School Staff Social Network Questionnaire (refer to Appendix E), an adapted and simplified version of the School Staff Social Network Questionnaire (SSSNQ) of Pitts and Spillane (2009). This instrument is designed to study school leadership practice related to instruction. The SSSNQ captures data on interactions between leaders and followers, measured from the perspective of the follower (Pitts & Spillane, 2009; Pustejovsky et al. 2008). In my study, data was collected using a sociometric technique which provides each respondent with a fixed roster of her or his
colleague in the school and asks her or him to describe their interactions with KLA relevant persons on the roster, according to the relation types. The advantage of this sociometric approach is it provides information on all interactions researched which occur within each team (de Lima, 2007).

Reliability and Validity
Whilst SNA is increasingly used in the study of school leadership, a key question that remains is that of validity. To examine the validity of the SSSNQ, Pitts and Spillane (2009) conducted two studies. The first involved administration of the SSSNQ in twenty two middle schools and K-8 schools. The researchers conducted qualitative interviews with a sub-sample of school staff in six of these schools, involving a sample of 49 staff members (formal leaders, informal leaders, and followers (teachers who were not formal or informal leaders). The intent with this first set of interviews was to determine whether the advice-seeking interactions interviewees described were instances of leadership for instruction operationalised as social influence interactions. After the study, the SSSNQ was revised (Pitts & Spillane, 2009). The second study involved cognitive interviews with 10 elementary and middle school teachers from different schools in which interviewees were asked to “think aloud” as they completed a revised version of the SSSNQ. Concerned about whether the SSSNQ captured leadership for instruction, the researchers had two primary purposes: first, they wanted to know whether survey respondents interpreted the survey prompts as they had intended; and second, they wanted to identify aspects of leadership that might not be picked up by the SSSNQ prompts. The findings of the study indicated that the SSSNQ did indeed identify leadership operationalised as social influence interactions. Furthermore, the SSSNQ allowed the researchers to move away from an exclusive focus on formally designated leaders to include non-positional leaders; capturing informal leadership interactions that would have been missed had they focused solely on formal organisational routines; thus, the SSSNQ offers an important research instrument for examining school leadership (Pitts & Spillane, 2009; Pustejovsky et. al., 2008).

The School Staff Social Network Questionnaire (SSSNQ)
For my study, to get a better understanding on the leadership roles within teams, each member of the middle school was asked to complete a survey regarding advice and information networks. Out of a total of 35 participants, 34 survey questionnaires were completed and returned; thus, the response rate was 97.14%. The first part of the
survey asked respondents about biographical details such as their gender, position, the number of years in the position, the number of years in the school, teaching experience, management experience (if any), education qualifications, and specialised area/s of teacher education.

The second part of the survey focused on the interactions of participants with regard to advice on teaching and learning. The first and second questions asked respondents who they turned to for advice or information regarding the teaching of a particular Key Learning Area (KLA), e.g. English or Mathematics; and the frequency advice was received (daily, once or twice per week, once or twice per month, once or twice per term; or once or twice per year). The third question asked respondents about the types of advice received (deepening content knowledge; curriculum planning or selecting curriculum materials; approaches to teaching content; strategies to assist low performing students; assessing student understanding; or other advice or information). Question four asked respondents to outline what “other” advice was received; and the last question in this part of the survey asked respondents about the influence of the advice or information had on their work (no influence, very little, some influence, strong influence, or very strong influence).

The third part of the survey gave participants the opportunity to comment on leading and managing teaching and learning in their teams/school or make comments on the survey itself.

(c) Interviews

A third source of data for my study was interviews with participants. One of the distinct purposes of the interview technique is that it can be used in conjunction with the other methods of research (Cohen et al., 2007). For my study, I gathered interview data to probe deeper into the ‘life world’ teaching and learning of the participants in the study as well as for the purpose of triangulation (Creswell, 2008) with survey and observation data; thus the purpose of the interviews was to contribute to fully understanding the phenomenon of leadership practice being investigated.

Creswell (2008) maintains that interviews have several advantages: they provide useful information when you cannot directly observe participants; they permit participants to
describe detailed personal information; and when compared to the observer, the interviewer has better control over the types of information received, because the interviewer can ask specific questions to elicit this information. However, interviews do have some disadvantages: they provide only information “filtered” through the views of the interviewers (i.e. the researcher summarises the participants’ views in the research report); similar to observations, interview data may be deceptive and provide the perspective the interviewee wants the researcher to hear; the presence of the researcher may affect how the interviewee respond; and the interviewee responses may also not be articulate, perceptive, or clear.

Creswell (2008) identifies four types of interviews: one-on-one, focus group, telephone and electronic E-Mail interviews. For my study, I used one-on-one interviews and E-Mail interviews.

*Semi-Structured Interviews*

One-on-one (face-to-face) semi-structured interviews were conducted with twenty three purposefully selected participants. These included eight members from each of KLA teams (including the Heads of Curriculum), the middle school principal, the Executive College Principal, and the Associate Principal. These interviews followed a semi-structured interview method (Cohen & Manion, 1994). This type of interview may be described as an open situation where the interviewer and interviewee have greater flexibility and freedom. Although the research purposes govern the question asked, the interviewer has control of the content, sequence and wording; “[h]owever, this does not mean that the semi-structured interview [was] a casual affair, for in its own way it has to be carefully planned” (Cohen & Manion, 1994, p. 273).

The semi-structured interview protocol (Refer to Appendices) allowed for an unstructured part at the beginning of the interview, which was intended to obtain biographical details of the respondent and at the same time establish a climate in which the interviewee could respond more authentically to the questions raised during the interview. Whilst interview protocols were “adjusted” for participants according to their position in the school, in the main, the semi-structured questions focused on the same aspects: leadership and management, organisational structure, teachers as leaders, and social networks. The last part of the interview asked participants whether they had any
other insights/ ideas/ observations to share in relation to leadership and management of teaching and learning. Examples of questions include the following:

- With reference to the team/s you lead (or are a member of): What is your understanding of the purpose (goals) of this team?
  Probe: Can you elaborate a little more about what you mean?
- How would you describe the impact of the advice received from colleagues has on your work?

The use of open-ended questions allowed the “flexibility and freedom of asking immediate follow-up questions” (Cohen & Manion, 1994, p. 293) to probe and delve deeper into the experiences of the participants; to clarify misunderstandings; encourage cooperation and establish rapport; and to allow me to make a truer assessment of what the respondent really believes. With the consent of participants, the interviews were recorded using a digital audio recorder and transcribed verbatim into text for analysis. The benefits of recording the interviews were similar to those of the ‘meeting talk’ data.

**E-Mail interviews**

I also collected electronic E-Mail interview data from twenty two participants. Except for one e-mail (semi-structured) interview that was conducted due to an illness of the participant, the purpose of these e-mail interviews was to follow up on conversations held during the semi-structured interviews as well to clarify points made by some participants in the survey response. These interviews helped to extend my understanding of the central phenomenon being studied (Creswell, 2008).

***(d) Documents***

In my study, selected documents were used to provide further sources of data and other perspectives on issues emanating from observations of meetings and interviews. These documents included team meeting agendas, minutes of meetings; and artefacts such as student work and assessment criteria sheets. Creswell (2008) contends that documents provide valuable information in helping researchers understand central phenomena.

**Phase 2b: Experiential Analytical Stage**

This stage consists of the parallel mixed data analysis approach (Teddlie & Tashakkori, 2009) involving two separate processes: (a) Quantitative analysis of social network survey data and meeting talk data, using descriptive statistics and graphs; and (b) Qualitative analysis of meeting talk and interview data from transcripts. Although the
two sets of analyses were conducted independently, each method provided understandings of the phenomenon under investigation which were linked or integrated and intended to lead into inferences (Teddlie & Tashakkori, 2009).

**Organisational Network Analysis (ONA)**

For the purpose of understanding the leadership networks in both the formal and informal interactional contexts, the data gathered from team meetings and survey data were analysed quantitatively using ONA, an application of SNA. One of the reasons for choosing ONA is because of its strong emphasis on analysing network diagrams and drawing insights (Cross & Thomas, 2009) from visual illustration of networks. A second reason was that ONA was useful to determine not only who the leaders are but also the extent to which formal leaders provided advice; an aspect deemed important to my study. The value of drawing insights using ONA is further explained below.

**Benefits of Using ONA**

Researchers employing ONA (e.g. Cross, 2009; Hammer, 2009; Merrill et al. 2005, 2007) have suggested many benefits of using ONA in organisations. Cross (2009) observes research shows that appropriate connectivity in networks within organisations can have a substantial impact on learning, innovation, and performance. ONA aids organisations in the identification and visualisation of how information is shared between actors. ONA can be used to investigate the position of actors, who the key actors or leaders and who are the peripheral actors in networks. Furthermore, ONA allows researchers to move away from an exclusive focus of the formal organisation to investigate the informal organisation as Cross, Thomas, and Light (2006) maintain:

“One of the ways in which organisations go wrong is by relying too heavily on an organisation’s formal structure as a map of how work gets done. In doing so, they fail to understand or leverage the power of informal networks” (Cross, Thomas, & Light, 2006, p. 8).

**Potential problems with using Network Data**

Penuel, Sussex, Korbak, & Hoadley (2006) observe that one challenge when using network data is to gain consent of the maximum possible number of network members for participation, because missing data make sociograms much less accurate portrayals of communities they represent. For my study, one participant did not return the
completed survey; the procedure for handling this missing data is explained later. Another issue in network studies is the potential ethical challenges related to anonymity. Network data are sensitive as the data describe the relationships and positions of specific individuals in the organisational network. For the data to be meaningful the researcher must be able to record the link between individuals; thus anonymity is not entirely possible (Borgatti & Molina, 2003; Merrill et al. 2007). For my study, each participant was informed about who will see the data. However, every possible attempt was made to protect the confidentiality of participants. Borgatti and Molina (2003) maintain that to avoid harm, academic researchers can hold on to the results until they are no longer timely, as is the case in this study. Furthermore, every effort was made to maintain anonymity of participants, including the use of pseudonyms. This is discussed further in the section on ethical considerations.

**Investigating leadership in networks**

According to Balkundi and Kilduff (2006), to gain an understanding of who is a leader from a network perspective, it is necessary to investigate the social-structural positions occupied by particular individuals in the system. This can be undertaken using both statistical and graphical methods of relational data using networks analysis. Hence, I took a two-fold approach to analysis of advice and information networks. First, I used network visualisation tools to gain intuition about the network positions of actors. Second, I calculated network measures to quantitatively describe their team network patterns, the intensity of interactions among participants, and the centrality of actors.

**Organising the Observation Data from Team Meetings for Analysis**

The team meeting data was analysed using descriptive quantitative methods as well as qualitative methods. The following questions guided the quantitative analysis:

- What are the patterns and configurations of leadership that emerge in the interactions of participants?
- To what extent do formal leaders provide advice and information to colleagues; and do teachers without formal leadership positions emerge as informal leaders?

First, the meeting talk data was transcribed. The analysis focused on the ties between participants’ in respect of advice and information interactions, that is, who interacted with whom? Conversations were categorised into advice and information messages rather than the number of turns taken by participants. The advice and information
messages were regarded as a unit of analysis in order to equalise the weight of messages (de Laat, 2002) since some participants’ proffered advice and information in a single turn; whilst others presented a single advice and information message over many different turns.

After reading through the transcript several times, I used Goldsmith’s (2000) typology (discussed in Chapter Three), with a slight modification, to identify the sequences in which advice and information was introduced, viz. recipient asks for advice, recipient asks for opinion or information, recipient discloses a problem, recipient announces a plan, advisor identifies a problem, advisor volunteers’ advice, and advisor volunteers’ information. In my data, I found a recurring pattern of the HOC voluntarily disseminating information related to teaching and learning. Since Goldsmith’s typology does not have a category for this, I modified the typology to include what I refer to as Advisor Volunteering Information (AVI). According to Goldsmith (2000) advice is most likely to be seen as solicited when the recipient explicitly asks for advice, acknowledges a problem, and introduces the problem topic. When these conditions are not met, advice is least likely to be seen as solicited. Advice sequences that meet some (but not all) of these conditions should fall midway on a solicited-unsolicited continuum.

Once advice and information sequences were identified, they were given a topic (e.g. Problem: Limited time to complete assessment). I identified who proffered the advice. Participants who repeated the advice of the previous speaker were omitted. I then identified who the recipient of the advice was, that is, who asked for advice or information/opinion; disclosed the problem or announced a plan. Unless the advice or information given was personalised (in response to a specific speaker/s), all participants were regarded as recipients, except for the advisor. Figure 6 below is an extract of a transcript illustrating the analytical procedure adopted.
I then collated the advice and information messages for each meeting according to topic, participant who introduced the sequence, recipient/s and advisor/s, and entered this data into Excel spreadsheets. Table 4.1 below is an example that illustrates this step.

**Table 4.1**
Example of summary of Meeting advice and information interactions

<table>
<thead>
<tr>
<th>MEETING 1: Sequence</th>
<th>Topic</th>
<th>Introduced by</th>
<th>Recipient/s</th>
<th>Advisor/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVI</td>
<td>Importance of nominalisation</td>
<td>Judy</td>
<td>Gwen</td>
<td>Judy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Jen</td>
<td>Judy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Nell</td>
<td>Judy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eva</td>
<td>Judy</td>
</tr>
<tr>
<td>AVA</td>
<td>Student writing sample</td>
<td>Jennifer</td>
<td>Gwen</td>
<td>Jen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Judy</td>
<td>Jen</td>
</tr>
</tbody>
</table>
Next, I counted the number of advice and information messages received by each recipient from each advisor in each of the meetings, as illustrated in Table 4.2 below.

### Table 4.2
**Example of number of messages a recipient received from advisor/s**

<table>
<thead>
<tr>
<th>Meeting 1: Recipient</th>
<th>Advice Proffered by</th>
<th>No. of Messages from advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gwen</td>
<td>Jen</td>
<td>5</td>
</tr>
<tr>
<td>Gwen</td>
<td>Judy</td>
<td>3</td>
</tr>
<tr>
<td>Gwen</td>
<td>Jen</td>
<td></td>
</tr>
<tr>
<td>Gwen</td>
<td>Judy</td>
<td></td>
</tr>
<tr>
<td>Gwen</td>
<td>Judy</td>
<td></td>
</tr>
<tr>
<td>Gwen</td>
<td>Judy</td>
<td></td>
</tr>
<tr>
<td>Gwen</td>
<td>Eva</td>
<td>1</td>
</tr>
<tr>
<td>Gwen</td>
<td>Jen</td>
<td></td>
</tr>
</tbody>
</table>

I then collated the data as node data (Table 4.3) and tie data (Table 4.4) into Excel spreadsheets. For the tie data, I recorded whether node (e.g. Gwen) received advice from colleague (e.g. Jen) by indicating the frequency of contact for each meeting using a weighting (Table 4.5)

### Table 4.3
**Example of Node data**

<table>
<thead>
<tr>
<th>PSEUDONYM</th>
<th>GENDER</th>
<th>TEACHING EXPERIENCE</th>
<th>PERIOD WITH TEAM</th>
<th>ROLE IN TEAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liz</td>
<td>F</td>
<td>25 years</td>
<td>1 year 6 months</td>
<td>Head of Curriculum</td>
</tr>
<tr>
<td>Jen</td>
<td>F</td>
<td>34 years</td>
<td>1 year 6 months</td>
<td>Leading Teacher</td>
</tr>
<tr>
<td>Judy</td>
<td>F</td>
<td>27 years</td>
<td>1 year 6 months</td>
<td>Leading Teacher</td>
</tr>
<tr>
<td>Ross</td>
<td>M</td>
<td>1 year 6 months</td>
<td>3 months</td>
<td>Leading Teacher</td>
</tr>
<tr>
<td>Eva</td>
<td>F</td>
<td>9 months</td>
<td>9 months</td>
<td>Leading Teacher</td>
</tr>
<tr>
<td>Gwen</td>
<td>F</td>
<td>1 year 6 months</td>
<td>1 year 6 months</td>
<td>Supporting Teacher</td>
</tr>
</tbody>
</table>

### Table 4.4
**Example of Tie Data (Observation data)**

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
<th>Meeting 1</th>
<th>Meeting 2</th>
<th>Meeting 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gwen</td>
<td>Jen</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Gwen</td>
<td>Judy</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Gwen</td>
<td>Liz</td>
<td>0</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Gwen</td>
<td>Zoe</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Gwen</td>
<td>Ross</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>
Table 4.5
Weighting (Tie Strength) for Frequency of Ties (Observation data)

<table>
<thead>
<tr>
<th>Frequency of Advice/Information provided</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>No advice/information</td>
<td>0</td>
</tr>
<tr>
<td>One time per meeting</td>
<td>1</td>
</tr>
<tr>
<td>Two times per meeting</td>
<td>2</td>
</tr>
<tr>
<td>Three times per meeting</td>
<td>3</td>
</tr>
<tr>
<td>Four or more times per meeting</td>
<td>4</td>
</tr>
</tbody>
</table>

Organising the Social Network Survey Data for Analysis

The social network survey data were analysed to seek answers to the following questions:

- What are the patterns and configurations of leadership that emerge in the interactions of participants?
- To what extent do formal leaders provide advice and information to colleagues; and do teachers without formal leadership positions emerge as informal leaders?
- How do participants perceive the influence colleagues have on their work?

Similar to the observation data, for each team in the study, I collated the survey data as node data and tie data (example illustrated in Table 5.1) into Excel spreadsheets. For the tie data, I recorded the following:

- Whether node (e.g. Iris) received advice from colleague (e.g. Bill).
- The frequency of contact (refer to Table 5.2.1 for codes for tie strength)
- Whether each type of advice in terms of the dimensions of teaching and learning was received. This was done in two stages. First I recorded if there was advice received or not; then I added the total number of types of advice received to get the tie strength (refer to Table 5.2.2)
- The influence strength (refer to Table 5.2.3 for codes for tie strength).

Table 5.1
Example of Tie Data (Survey Network Data)
In some of the surveys, there was missing data. For example, a few participants occasionally did not check a box to indicate the presence or strength of a relationship; and one participant did not submit a completed survey. de Lima (2010) maintains that there are several ways of handling missing data which include strategies such as imputation, reconstruction and triangulation. I handled missing survey data by using reconstruction and triangulation methods. Reconstruction involves reconstructing the missing part of the network by using the value provided by a member of a dyad to impute that value to the other (non-responding) member. This approach assumes that if one member of a dyad describes a relationship with the other member, then a relationship does exist between them; and the relation is defined by ascribing the respondent’s description of the tie to the non-respondent (de Lima, 2010). In addition, I used the triangulation method to handle missing data by using alternative data sources.
such as interviews to confirm relationships, supplement and validate informants’ reports (de Lima, 2010).

Creating Graphical Representations and Computing Descriptive Statistics
After creating the Excel Spreadsheets with node data and tie data, I then used the software programme, UCINET for Windows (Borgatti, Everett, & Freeman, 2002) and Netdraw (Borgatti, 2002), to generate sociograms (graphical representations of interactions) and compute descriptive statistics. Studies of school leadership that have used UCINET and NetDraw include de Lima (2008), Hancock (2008), and Warfield (2009).

Sociograms
One type of graph used to illustrate networks is known as a sociogram (Borgatti, 2002). In my study, I used sociograms to illustrate the advice and information networks among teaching colleagues within each team. In a sociogram, actors are represented by nodes or vertices (e.g. the circle shown in Figure 7; and ties (links) between actors are represented by lines or edges. In my study, the lines represent links associated with advice and information related to various dimensions of teaching and learning.

Figure 7
Example of Sociogram (taken from this study)
Sociograms were first used by Moreno (1934) to pictorially represent relational interactions. Borgatti (2002) contends sociograms are a useful tool for gaining insights about the associates and provide rich detail about the network positions of the associates. By representing the relationships of a given type between all actors in a team or organisation, a sociogram allows one to see larger patterns or structural features of the social network that are not apparent by studying the relationships individually (Pustejovsky et al., 2008). For my study, the sociogram shows who goes to whom for advice or information; and therefore graphically represents who is more central and who is more peripheral in these networks (Pustejovsky et al., 2008). A sociogram can further be used as a guide for further examining the distribution of leadership and density and in the network (de Lima, 2007, 2008). The network of relations can be analysed by using methods and techniques of ONA such as measures of centrality, centralisation, and density of the advice networks.

**Computing Measures and Using Descriptive Statistics for Analysis**

There are many network measures that can be calculated from a given graph. I used the sociogram to calculate in-degree, network centralisation and network density scores of each network. I explain the calculation and uses of each of these measures below.

**Actor Centrality: In-degree**

Network centrality refers to the extent to which an actor is central to the network. We can distinguish between in-degree and out-degree. To identify the central actors in the network, I calculated the in-degree score of actors in each network as it is a more accurate form of data since it is not based on self-reported data like out-degree. In-degree is the number of direct ties an actor receives. The in-degree was calculated by counting the number of arrows that pointed towards an actor (Spillane & Pitts, 2009). In an advice and information network, it is a measure of the number of people to whom an individual provides advice (Pustejovsky et al., 2008). In the sociogram above, there are four arrows pointing towards Iris. This indicates she has an in-degree score of four; she provides advice to four actors in the network. Josh, however, has no arrows pointing towards him and, therefore has a null in-degree score.

**Key Advice Givers**

I used the in-degree scores to determine the Key Advice givers (Spillane et al., 2010) in terms of their role positions for each of the relations under investigation. I identified
individuals with an *in-degree* of two or greater, given the potential for influence that is present in triadic relationships (Spillane *et al.*., 2010; Krackhardt, 1998). Here, I examined who the key advice givers among formal leaders and informal leaders were; determined the extent to which formal leaders provide advice and information to colleagues; and identified teachers emerging as informal leaders.

*Most Prominent Actors*

According to social network theory, an actor who receives many ties is more prominent in the network. The actor is more central and is often said to have high prestige because many other actors seek to direct her/him ties (Wasserman & Faust, 1994). Prestigious individuals tend to influence co-workers with less prestige and who are more dependent on the prestigious individuals (Burkhardt & Brass, 1990, as cited in Umphress, 2003). Among the many network centrality measures that have been proposed, I focused on the *in-degree* of actors to calculate the actors’ centrality scores (prestige) (de Lima, 2008) in each of the relations under investigation. As mentioned earlier, the *in-degree* scores were calculated from the sociograms. To identify the most prominent leader/s in the network, I applied the decision rule as those who have an *in-degree* score greater than one standard deviation above the mean (Hancock, 2009; Warfield, 2009). The identification of the most prominent actor/s was then used to determine the leadership configuration in each of the network relations.

*Team Network Structure*

The team network structure was determined using the measures of network centralisation and network density.

*Network Centralisation*

Centralisation is the degree a network’s ties are focused on one person or a set of people. A high team centralisation suggests there are one or few leaders; and a low centralisation implies that leadership is decentralised among many actors in the network. As discussed in Chapter Three, a star graph illustrates a highly centralised network structure where the interactions are focused around a single actor; and a circle shape network illustrates a fully decentralised network. To calculate team centralisation of the frequency of interactions/contacts (who colleagues turned to for advice and how often participants turned to colleagues for advice and information), I used weighted
values (tie-strength) for the formal interactions and informal interactions (Refer to Table 4.5 and Table 5.2.1).

Team network centralisations can be calculated in various ways. For my study, I used Freeman’s (1979) formula for the calculation of network degree centralisation (CD) of the team network:

\[ CD = \frac{\sum (\text{Max}(C_{Di}) - C_{Di})}{n - 2} \]

where \( \text{Max}(C_{Di}) \) is the maximum centrality score in the network, \( C_{Di} \) indicates the individual centrality in scores, and \( n \) is the network size.

In order to compare networks of different sizes, I normalised (standardised) the centrality scores by dividing the in-degree scores by the maximum possible in-degrees and expressed the result as a proportion or percentage (Hanneman, & Riddle, 2005).

**Network Density**

Network density provides a value that can be used to determine the strength of a network. The network density measure indicates the proportion of relations that are actually present in the network, relative to the total of relations that are theoretically possible in that network (Mayo et al., 2003). For the various relations under study, I calculated the density of the network using data from the in-degree scores, using the formula for directed graphs (Scott, 2000).

\[ D = \frac{l}{N(N - 1)} \]

where \( l \) is the actual number of lines (ties), \( N \) is the size of the network.

Density values range from 0 to 1. An index of 0 is the lowest density value and indicates a low density; while an index of 1 indicating the highest level of interaction among the members in the network (Scott, 2000). Warfield (2009) maintains the analysis of network density is more meaningful when there is a focus on a particular issue. Warfield (2009) argues a zero density value does not necessarily mean that there is no communication among individuals in the network; it only suggests advice is
limited around that particular area. For my study, I expressed the network density score as a percentage.

Teams with more ties connecting members for advice exchange have dense, rather than sparse, advice networks; teams in which the advice ties are focused on one or few members have more centralised advice networks (Scott, 2000). From a leadership perspective, a high density implies that leadership is distributed because there will be several people (in both formal as well as informal roles), and not only one, who are regarded by other network members as influential. Furthermore, it may suggest that leaders are encouraging their colleagues work together to improve their professional practice, and develop their potential as leaders themselves. As a result, high leadership density levels will prevail within these networks (de Lima, 2007). According to Scott (2000), density can play a “powerful role” in the comparative study of social networks (p. 79). In my study, I use network density to determine the frequency of interaction within each team; and to compare the level of leadership distribution within each team and between teams.

In addition to quantitative methods of analysis, for my study I use the qualitative method of CA.

**Conversation Analysis (CA)**

CA has increasingly become a method to study interactions in team meetings (see Barnes, 2007; Clifton, 2009; Sawyer et al., 2005). In my study, I used CA to qualitatively analyse the routine of meetings using data gathered from observations of meeting talk to seek answers to the following questions:

- What are the leadership actions performed by leaders in formal interactions; and
- What are the interactional resources used by participants?

**Benefits of using CA**

As a research method, CA analysis has many advantages. ten Have (2007) maintains that CA:
- Operates closer to the phenomena than most other approaches, because it works on detailed renderings of interactional activities, recordings, and detailed transcripts.
- Is less ‘artificial’. It favours naturally occurring data rather than ‘researcher provoked ones’, because it considers talk-in-interaction as a ‘situated’ achievement rather than as a product of personal intentions.
- Adopts a perspective on human interaction as organisational and procedural. When people talk with each other, this is not seen as a series of individual acts, but rather as an emergent collectively organised event. The analytic purpose is not to explain why people act as they do, but rather to explicate how they do it (ten Have, 2007, pp. 9-10).

Sawyer et al. (2005) maintain that CA offers the analyst the tools and the lens with which to undertake the fine grained, moment-by-moment analysis of interactions of teachers within teaching teams. CA “… emphasises contexts are not fixed in advance of an encounter; instead, they are created and continually negotiated by the participants through their talk”; and (2) “it emphasises the importance of a close empirical focus on the flow of interaction between participants by transcribing what people say and do and then analysing the transcript” (Sawyer et al., 2005, p. 172).

Approaches in CA
Heritage (2004) contends that there are at least two kinds of conversation analytic research going on today, and although they overlap in various ways, they are distinct in focus. The first type studies the social institution of interaction as an entity in its own right. That is, the focus is purely local functioning of conversational devices and interactional formats such as ‘turn-taking’ or ‘opening up closings’. This is what is referred to as ‘pure conversational analysis’ (ten Have, 2007). The second approach to CA studies the management of social institutions in interaction. This approach is what is termed, ‘applied conversation analysis’. In my study, I use ‘applied conversation analysis’ to analyse the team meeting talk of teachers in subject teams.

CA projects, like most qualitative enquiries, do not in general, have a strictly predefined ‘research design’. For CA, the general outline for research projects would at least involve the four phases of: (1) getting or making recordings; (2) transcribing the tapes, in whole or in part; (3) analysing selected episodes; and (4) reporting the research. As
my study followed case study research design adopting a mixed-methods approach to data gathering data and to the analysis of data, CA is one of the approaches used to analyse the recorded meeting data. It is used to complement ONA in order develop a fuller understanding of the leadership practice in subject teams.

**Justification for audio-recording**
CA researchers use audio recordings of episodes of 'naturally occurring' interaction as their basic data. As outlined earlier, the talk in team meetings were digitally recorded. The benefits of audio recording were outlined in an earlier section.

**The transcription process**
Transcripts of audio recordings are an increasingly important part of qualitative research. After observation and recording, team meeting talk was transcribed (Refer to Appendices). In my study I use the transcript conventions developed by Jefferson (1984) which are commonly used by conversation analysts. This system is particularly useful for capturing aspects of speech production and the temporal positioning of utterances relative to each other (Wooffitt, 2006). The system focuses on, first, the properties of turn-taking, such as the onset of simultaneous speech and the timing of gaps within and between turns; and second, it captures features of the production of talk, such as emphasis, volume, the speed of delivery and the sound stretching. These conventions cannot reproduce what is on the audiotape but are meant to remind the reader of the details of the conduct that can be heard on tape.

**Analytic Procedures**
The qualitative analysis of meeting talk data is conducted in three steps: identification of advice and information sequences; examination of the actions of advisors and advisees; and examination of the interactional resources used by participants.

(a) **Identification of advice and information sequences**
The first step involves examining each transcript for ‘episodes’ where advice and information was solicited or proffered. There are a few ways of determining sequences in which advice is introduced, for example, Silverman (1997) uses a framework in the medical context, and Heritage and Sefi (1992) provide a framework in Health Visits context. As discussed in Chapter Three, for my study, I use Goldsmith’s (2000)
typology of advice solicitations to guide this analysis as this typology was derived from observations of advice-giving situations in the context of an education setting.

(b) Examination of the actions

In my study, I use the analytic tools of Pomerantz and Fehr (1997) to inform my analysis of the actions of participants in the advice and information sequences. Pomerantz and Fehr (1997) contend that the “objective of conversation analysis is to illuminate how actions, events, objects, etc., are produced and understood rather than how language and talk are organised as analytically separable phenomena” (p. 65). An analysis of a practice involves describing both the knowledge that the participants use, and when and how they use it. These researchers suggest five fundamental areas to consider in developing analyses. First, select a sequence of talk and interaction. Second, characterize the actions in the sequence by identifying if it were a greeting, a request or a sharing of news, etc. Third, examine the packaging of the actions. Packaging is “the ways in which speakers form up and deliver actions” (Pomerantz & Fehr, 1997, p. 72). Consideration is given to the understandings tied to the packaging, as well as the alternatives that may have been used, but were not, at that particular time; and the range of options that are left open for the recipient by the way the speaker has formed up and delivered the package. Fourth, explore the timing and taking of turns by describing how the speaker obtained the turn, the timing of the initiation of the turn, the termination of the turn, and whether the speaker selected a next speaker. Finally, consider the implications of the packaging and turn taking for identities, roles and relationships between participants (Pomerantz & Fehr, 1997).

(c) Examination of Interational Resources used by Participants

Whilst engaging in the above analytical procedures, I also examined the transcripts for the interactional resources used by participants in their talk. CA literature describes a range of interactional resources used by participants in ‘talk’. As discussed in Chapter Three, the following are the main interactional resources that guided this analysis: adjacency pairs, crafting, formulations, I don’t know, I think, invoking and representing the non-present other, direct reported speech (DRS), prosody, self-reference we and, extraction and aggregation, teaching replays and teaching rehearsals, three-part list, voting, and marginalising dissent. In addition to these discursive resources, two other interactional resources were examined, viz. facilitation/co-facilitation and artefacts.
Analysis of Interview Data

The analysis of interviews involved identifying and selecting participant comments as they reflected on their lived experiences. These provided support (as well as refutation) of the research questions and enhanced the results of the study (Bowden, 2002). Furthermore, in my study, I found a recurring pattern of low density scores in the ONA data; suggesting low levels of leadership communication. To understand the factors affecting leadership practice, I employed template analysis (Crabtree & Miller, 1992; King, 2004; King & Horrocks, 2010) to analyse interview data. I constructed a simple a coding template using concepts from the review of literature on leadership of teaching and learning and the research questions that guided this study. The codes included participants’ understandings of leadership and management; purpose of the team; benefits of the team membership; challenges facing team members; perceptions of advice received as act of leadership; influence of colleagues’ advice and information on the participant’s work.

Constant Comparison Method

The analysis and interpretation of the meeting talk data and interview data was done using the constant comparison method of Glaser and Strauss (1967). Furthermore, the constant comparison method was adopted to compare interactions in each team and across both teams. Here, I first compared the formal interactions with the informal interactions of each team using the quantitative data (within-team comparison). Then, I compared the formal interactions and the informal interactions of the two teams using both the quantitative data and qualitative data (between-team comparison).

4.1.3 Phase 3: The Inferential Stage

The sphere of inferences involves explanations, understandings, and interpretation, and the formulation of conclusions and generalisations stemming from both quantitative and qualitative strands and extending them beyond the results (Teddlie & Tashakkori, 2009). During the analysis stage, I recorded and interpreted these results. I then began making inferences from the findings of the study by making links and drawing comparisons to the literature in the field.
4.2 Limitations

As pointed out earlier, this study has its limitations. The limitations of the research were to a large extent those associated with the methodology. For this study, the use of Conversation Analysis and Organizational Network Analysis aligned closely with the purpose of the research. Nevertheless, the use of these methods comes with their limitations which are discussed below.

First, the observational data collected was limited to a total of seven meetings of the two teams; four meetings of the English Key Learning Area team and three meetings of the Mathematics Key Learning Area team. The limited number of meetings observed was due to both team meetings being scheduled on the same day and time. Moreover, the absence of the Head of Curriculum (HOC), Mathematics, from two team meetings limited the analysis of her leadership role in the formal interactions to an extent.

Second, the use of conversation analysis involves handling large amounts of data from observations of naturally occurring talk. As the transcripts (refer to Appendices) show, considerable data is generated from each meeting observed. In order to make data handling manageable, it is was deemed appropriate to limit the data gathering to two teams. This, however, limits the sample under investigation to a small one, which has its limitations, as discussed in the following paragraph.

Third, the small sample limited generalisations in this study. The research was a descriptive single case study with the purpose of documenting the practice of leadership of teaching and learning through advice and information interactions in school subject teams, thereby contributing to the limited research base. The purpose of the study included investigating the use of the methods of Conversation Analysis and Organisational Network Analysis to understand leadership practice. Whilst there are limitations on generalisations, the depth of analysis and results of the study are perceived to be useful for the teams in the school involved in this study as well as for other teams in the school and schools with similar characteristics.

A fourth limitation was in respect of employing the method of Organisational Network Analysis. Here, there were two issues. First, in some of the surveys, there was missing data. A few participants occasionally did not check a box to indicate the presence or
strength of a relationship; and one participant did not submit a completed survey. The missing survey data was handled by using reconstruction and triangulation methods (de Lima, 2010). Second, in the literature there is an absence of normative values of network measures such as centralisation, density, and centrality. This lack of a normative base can be attributed to the fact that the use of such measures are in a stage of infancy in school network research. Whilst some of the data from other contexts provided some comparison, the lack of a normative base limited comparison to other data to an extent. As de Lima (2008) asserts, further empirical research using network concepts and techniques in the contexts of schools would help develop a knowledge base from which comparisons can be drawn.

A fifth limitation of the study was the potential for bias to influence the interpretation of the data, particularly due to the role of ‘insider researcher’. Aware of this, field notes taken at observations and interviews contributed to reflection with transcripts. I was guided to steer away from subjectivity and bias by constant reflection. In addition, I discussed my interpretations with a critical friend, my supervisors and participants, and at conference proceedings. These strategies are discussed in greater depth in the following section.

4.3 Validity and Reliability

Given that this study used a lone observer and lone interviewer, who was also a staff member, it was important to address the potential for misinterpretation of participants’ meanings, spurious inferences, and research biases. Validity and reliability of results were assured through a number of strategies.

The place of the researcher
As a HOC at the site where the study was undertaken, I was aware of the issues that confront the ‘insider researcher’. The term ‘insider research’ is used to describe projects where the researcher has a direct involvement or connection with the research setting (Robson, 2002). Such research contrasts with traditional in which the researcher is an ‘objective outsider’ studying subjects external to his/herself (Denzin & Lincoln, 2000). Aware that with ‘insider researchers’ there is a problem of validity (Kvale, 1995), I was
guided to steer away from subjectivity and bias by using Rooney’s (2005) questions that threaten validity. I constantly reflected by asking myself, amongst others, the following questions:

- Will my relationships with participants have a negative impact on their behaviour such that they behave in a way that they would not normally?
- Will my tacit knowledge lead me to misinterpret data or make false assumptions?
- Will my insider knowledge lead me to make assumptions and miss potentially important information?
- Will my politics, loyalties, or hidden agendas lead to misrepresentations?
- Will my moral/political/cultural standpoints lead me to sub-consciously distort data?

Such questions kept me on guard to distance myself from normal, everyday beliefs and to suspend judgments on social issues for the duration of their research, thereby helping me deal with the claim of subjectivity and bias. In addition to this, in my study, to prevent researcher bias, I was unobtrusive during team meetings; and during the interviews, I kept control of dialogue to a minimum. This allowed the participants to talk and interact freely, thereby providing an authentic account of their practice.

As an ‘insider researcher’, I was also aware of was that there could be participants who respond to please or impress the researcher. This problem was overcome through the use of both qualitative data and quantitative data tools and adopting a rigorous method of triangulation of data by examining data from various sources such observations, surveys, interviews and documents. Further, since self-reporting has issues of participant bias, I endeavoured to build trust with participants so that they reported on their leadership practices quite honestly.

Whilst the notion of ‘insider research’ comes with questions of validity, some argue that insiders have a wealth of knowledge which the outsider is not privy to (Jones, as cited in Tedlock, 2000). Furthermore, some argue that interviewees may feel more comfortable and freer to talk openly if familiar with the researcher (Tierney, 1994.). From an anti-positivist perspective therefore, insider researcher has the potential to increase validity due to the added richness, honesty, fidelity and authenticity of the information acquired (Rooney, 2005).
The use of the Validation Framework

Whilst there are various methods of achieving trustworthiness in both quantitative paradigms and qualitative paradigms, in recent years, there have been a few frameworks suggested by scholars for establishing validity in mixed methods research, e.g. Onwuegbuzie and Johnson (2006); Dellinger and Leech (2007). For my study, I used the Validation Framework (VF) (Leech, Dellinger, Brannagan, & Tanaka, 2010) as a tool to maintain a valid and reliable study of leadership of teaching and learning. Dellinger and Leech (2007) contend that the VF is “a useful and unified method to frame the idea of validity in mixed methods research and to provide a guide for organising the necessary evidence needed to support data meaning” (p. 321). The framework uses traditional concepts about validity, including the terminology and criteria from the quantitative and qualitative traditions with some additions. The VF consists of five elements that include the following: the foundational element, the elements of construct validation for quantitative, qualitative, and mixed research, inferential consistency, the utilisation/historical element, and the consequential element.

The Foundational Element

This element reflects researcher’s prior understanding of a construct and/or phenomenon under study. The foundation element rests on an examination of past theory and empirical literature that often occurs prior to conducting a study. As outlined in earlier chapters, particularly in Chapter Two and Chapter Three, a thorough and critical review of literature (empirical and theoretical studies) on leadership of teaching and learning, teams, and advice and information was undertaken for this study. The review included focus area of empirical studies, methods of data collection, and findings of empirical studies. A synthesis of this review revealed the gaps in the literature and helped inform the research problem, conceptual framework, research methodology adopted for this study.

The Elements of Construct Validation for Quantitative, Qualitative, and Mixed Research

In this element, validity evidence is distinguished by its role in design, measurement, or inference elements. This study adopts a case study research design using social network survey data, observation data, and interview data to address the same research problem. The qualitative and quantitative methods served the purpose of complementarity; measuring overlapping but also different facets, yielding an enriched, elaborated
understanding of the phenomenon (Greene et al., 1989). In terms of validity, the three main methods addressed the same research problem serving the purpose of methodological triangulation (Denzin, 1978; Denzin & Lincoln, 2000) as multiple sources bring more credibility to an investigation.

**Construct validity**

Construct validity is a vital concept in the quantitative paradigm (Bryman, 2004). As discussed in this chapter, the validity of the SSSNQ survey used in this study was established by the researchers conducting two studies, and concluding that the SSSNQ was valid and offered an important research instrument for examining school leadership (Pitts & Spillane, 2009).

**Reliability**

**CA:** According to Peräkylä (2004), the key aspects of reliability in CA, involves selection of what is recorded, the technical quality of recordings and the adequacy of transcripts. As discussed in this chapter, I use the analytic tools of Pomerantz and Fehr (1997) to analyse the actions and practice of participants describing both the knowledge the participants use, and when and how they use it. The interpretation of meeting talk data was checked at various stages by several prominent CA analysts. First, one of the Supervisors of this study, an experienced CA analyst, reviewed the CA chapters and followed this with lengthy discussions to corroborate interpretations. Second, I presented transcripts and discussed interpretation at the Transcript Analysis Group (TAG) data sessions attended by CA scholars (academics and Research Higher Degree students) from three universities in Brisbane, Australia. Third, interpretation of data was also discussed at a CA conference in Wellington, NZ (see List of Conference Presentations).

**ONA:** For the ONA component, reliability of data collection, analysis and interpretations was achieved in several ways. First, I regularly met with a Social Network Analyst at Griffith University to discuss aspects such as data collation, storage, use of UCINET and NetDraw software, and computing and generating sociograms. Second, the Network Analyst and Supervisors of this study reviewed the analysis and interpretations at various stages in this study. Third, the methodology and interpretations of ONA data were also discussed at two Research Higher Degree Conferences.
Member Checking

Member checking (Lincoln & Guba, 1985) was undertaken to circumvent potential inaccuracies. Interview transcripts were checked by participants for accuracy before analysis, and follow-up face-to-face and telephone discussions and e-mail interviews clarified understandings and interpretations, enhancing the quality of results.

External validity

External validity is concerned with generalisability or the extent to which the findings can be generalised beyond the specific research context. Writers such as Yin (1994) maintain that validity is attained through generalisability. Others such as Denzin (1983) reject generalisability as a goal. Peräkylä (2004) suggests that, from a CA perspective, the question of generalisability can be approached from a different direction: the concept of possibility, that is, what participants in other settings possibly do. This view is supported by Gay, Mills, and Airasian (2006) who contend:

“The power of qualitative research is not in its generalisability although there may be some applicability and transferability of the findings from one qualitative study to a similar setting. It is in the relevance of the findings to the researcher and the audience of the research” (p. 407).

Stake (1994) also concludes:

“... the methods for casework actually used are to learn enough about the case to encapsulate complex meanings into a finite report but to describe the case in sufficient descriptive narrative so that readers can vicariously experience these happenings, and draw their own conclusions” (p. 243)

Inferential Consistency

This element refers to whether the inferences are consistent given what is known from prior understandings, past research, and theory. In this study, inferences were guided and made with reference to understandings of leadership, subject teams, and advice and information networks gleaned from prior research outlined in Chapter Two. In addition, the conceptual framework of network approach, hybrid leadership and distributed leadership presented in Chapter Three provide an integrated conceptual framework that was useful in making inferences in this study, particularly with the use of the methods.
of ONA and CA outlined in Chapter Four. Furthermore, the method of constant comparison analysis was consistently used to make within-team and between-team comparison and to draw inferences.

**The Utilisation/ Historical Element**

This element refers to the utility and evidence of use. The information comes from review of literature; how measures used to assess constructs were created and used in other studies that provide evidence of validity.

*The STSNQ*: The STSNQ was adapted from the SSSNSQ, a survey used extensively by Spillane and colleagues in the DLS. The survey has also been used by many others, with some modification, e.g. Warfield (2009) investigated how leadership is distributed across social networks around several instructional issues; and how formal leaders identified and utilised informal leaders to improve pedagogy.

*ONA*: The investigation of leadership in teams using ONA has been undertaken by Cross and Thomas (2009) to investigate how leaders drive results through networks. Hammer (2009) used ONA to examine the flow of information in organisations in the transport sector. Whilst ONA has not been used to examine leadership and schools, the techniques are applicable to the study of school leadership through advice and information interactions. Hence, this study affords the opportunity to identify the value of ONA in an educational organization.

*Conceptual frameworks*: The network conceptual framework used in this study has been used by Cross and Thomas (2009) and Hammer (2009) to investigate information flow in organisations. The hybrid leadership conceptual framework was used by Gronn (2009b) in a case study of informants’ perceptions of forms of leadership and the dynamics of leadership relations in a secondary school in Australia. The distributed leadership conceptual framework used in this study has been used in several studies. For example, Spillane’s (2005) study examined how leadership practice is structured across school subjects in primary schools.

**The Consequential Element**. This element of validity is determined by judging the social acceptability of consequences that occur as a result of using a study’s findings, measures, or inferences. This aspect of validity is expected to become evident upon
writing up of the report and sharing the findings participants at the site under study; and an examination of any actions that might arise from these findings, for example, programme decisions such as professional development programmes and leadership training programmes. Whilst not directly a consequence of the findings of the study, during the time of the study, opportunities arose to discuss the topic of KLA team leadership between the researcher, Heads of Curriculum and middle school principal. Midway through the completion of my data gathering, the Heads of Curriculum were re-organised to ensure the positional leaders of English KLA and Mathematics KLA teams held the subject area expertise.

4.4 Ethical Considerations

Ethical considerations play an integral role in all research studies. Griffith University requirements necessitate consideration of the ways in which ethical issues will be addressed prior to conducting the actual research. Ethical clearance was sought from the University’s Human Research Ethics Committee for this study (Refer to Appendix M). Approval was also granted by the Queensland Government, DETA (Refer to Appendix N). Participants were provided with clear information about the research purpose and methodology before they decided to participate in the study. Further, participants were advised that participation was voluntary and they were free to withdraw from the research at any time. During the study, written consent was sought from all participants prior to digital recording of each team meeting as well as before the semi-structured interviews (Refer to Appendix K). Consent was also obtained from participants for their inputs to be published as research. The data collected was kept in strict confidence. All practical steps were undertaken to ensure the anonymity of the site and participants in the research report. Identities are protected through the changing of identifying information and the use of pseudonyms.
4.5 Summary of Chapter

In this chapter, the methodological bases for the study reported in this dissertation have been outlined. The case study research design using a mixed-methods approach, and data collection and analysis procedures were explained and justifications for each aspect were provided. The qualitative research component of the study involves the collection of data primarily collected from observations; an approach consistent with network approach and CA. Observational data was collected from formal meetings, and analysed using CA and ONA; however, they provided only one dimension of the practice of leadership of teaching and learning. In order to gain a fuller and better understanding, social network surveys were undertaken and ONA was adopted to examine the informal interactions of teachers. In addition to observation and survey data, interview data allowed for use of multiple sources of data thereby enabling, not only a fuller understanding of the phenomenon under investigation, but also methodological triangulation. This chapter also outlined issues of reliability and validity of the research methods and instruments, claiming that various measures were undertaken to produce high quality and credible research. It concluded by outlining the ethical considerations and steps that were undertaken to maintain confidentiality and protect the identity of the participants so that no harm may arise from the research study.

In the next chapter, using the research questions and the analytical framework that guides this study, I provide the analysis and results of the data gathered from the Mathematics Key Learning Area team. This is then followed by that of the English KLA team.
CHAPTER FIVE
PRESENTATION, ANALYSIS OF DATA AND RESULTS
MATHEMATICS KEY LEARNING AREA (KLA) TEAM

5.0 Introduction

This chapter, presented in two parts, provides the analysis and results of the data collected in this study of leading teaching and learning through advice and information interactions in the Mathematics KLA team. I first re-state the questions guiding this study and provide a brief summary of the results. In Part One of the chapter, the profile of the membership of the team is first presented and elaborated. Then, the analysis of the formal interactions through meeting talk data is undertaken, first using ONA and then using a CA approach. In Part Two, the social network survey data of the informal interactions is analysed using ONA.

It will be recalled that the major research question that provided the focus for this study was: How is leadership of teaching and learning through advice and information interactions practised in school subject teams?

The investigation of the focus question is guided through the following sub-questions:

1. What are the patterns and configurations of leadership that emerge in the interactions of participants?
2. To what extent do formal leaders provide advice and information to colleagues; and do teachers without formal leadership positions emerge as informal leaders?
3. How do participants perceive the influence colleagues have on their work?
4. What are the leadership actions performed by leaders in formal interactions; and what are the interactional resources used by leaders?

The results of the study of the Mathematics team revealed the team networks were highly centralised among a few key actors in the formal interactions; however, the networks were less centralised in the informal interactions. Except for the higher percentages of leadership communication involving the prominent actors, in both the formal and informal interactions, there were generally low densities of communication among participants; suggesting low levels of advice and information communication.
However, leadership was provided by formal as well as informal leaders, pointing to a hybrid pattern of leadership with various configurations.

In team meetings, leaders’ actions focused mainly on reviewing and improving the existing curriculum programme and changing pedagogical and assessment practice to include teaching methods such as rotations, problem solving approaches using investigations, and student portfolios. In ‘doing leadership’, the corpus of meeting talk data revealed that formal and informal leaders, proffered advice in various sequences (Refer to Appendix A). There were instances where advice was solicited or perceived as solicited. In thirty six instances, advice was proffered when recipients asked for information or opinion. In twenty one instances advice was proffered where recipients disclosed or identified a problem; and in three instances advice was proffered were recipients announced a plan. Advice was also proffered when unsolicited. There were nineteen instances where the advisor volunteers advice; thirteen instances where the advisor volunteered information; and three instances where the advisor identified a problem and proffered advice. The corpus of meeting talk data also revealed participants used a range of interactional resources to accomplish the task of ‘doing leadership’. The most common resource used was the self-reference “we”; suggesting a team approach to curriculum planning and decision making; ‘the way we do things here’. The second most common interactional device used was the epistemic marker “[I think]” which was used in fifty two instances. Question-answer adjacency pairs were the third most common resource used and was found in thirty five instances across the three meetings. Another epistemic marker, “[I don’t know]”, was used in twenty two instances. Other discursive tools such as formulations, teaching replay, reported speech, three-part lists, voting, and crafting as well as artefacts were also employed by participants.

In the following sections, I present a detailed analysis of the data in the study of the formal and informal advice and information interactions in Mathematics KLA team. I first provide the keys and symbols (Figure 8) used in the study, followed by a presentation of the profile of members of the team.
**Figure 8**

**Keys and Symbols used in this study**

<table>
<thead>
<tr>
<th>Key</th>
<th>Sources of Data</th>
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<tbody>
<tr>
<td>MMT</td>
<td>Mathematics Meeting Transcript</td>
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<tr>
<td>EMT</td>
<td>English Meeting Transcript</td>
</tr>
<tr>
<td>INT</td>
<td>Interview Transcript</td>
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<tr>
<td>EMI</td>
<td>E-Mail Interview</td>
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<tr>
<td>FN</td>
<td>Field Notes</td>
</tr>
<tr>
<td>SNS</td>
<td>Social Network Survey</td>
</tr>
</tbody>
</table>

**Meeting Transcript**

<table>
<thead>
<tr>
<th>KLA Meeting</th>
<th>Date of Meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maths Transcript</td>
<td>minutes</td>
</tr>
</tbody>
</table>

**Transcription Conventions**

- Points to the lines of transcript relevant to the point being made in the text.
- Empty parentheses indicate talk too obscure to transcribe.
- Words in double parentheses indicate transcriber’s comments.
- Numbers in parentheses indicate periods of silence, in tenths of a second. A dot inside parentheses (.) indicates a pause of less than 0.2 seconds.
- Equal signs, ordinarily at the end of one line and the start of an ensuing one indicate a ‘latched relationship’—no silence between them.
- Left-sided brackets indicate where overlapping talk begins.
- Right-sided brackets indicate where overlapping talk ends, or marks alignment within a continuing stream of overlapping talk.
- Talk appearing within degree signs is lower in volume relative to surrounding talk.
- ‘Greater than’ and ‘less than’ symbols enclose talk that is noticeably faster than the surrounding talk.
- Indicates the enclosed speech was delivered more slowly than usual.
- Colons indicate a lengthening of the sound just preceding them, proportional to the number of colons.
- Very emphatic stress. Louder than normal speech.
- Underlining indicates stress or emphasis.
- Pointed arrows indicate an intonational shift—a high pitch on word.
- A hyphen indicates an abrupt cut-off or self-interruption of the sound in progress indicated by the preceding letter(s), e.g. a self-interrupted ‘because’.
Part One

5.1 Profile of Team

In the Middle School at Daleview Gardens College, teachers are organised into four teaching/learning teams (KLAs), viz. English, Mathematics, Science and SOSE. These teams are guided by the philosophy of the Middle School which is to meet the development, social and cognitive needs of young adolescents, as they differ significantly from students in other phases of learning. The Mathematics KLA team comprises thirteen members that include Iris, a formally designated leader, whose position is Head of Curriculum (HOC); five Leading Teachers (LTs); five Supporting Teachers (STs) and two Integrating Facilitators (IFs). Table 6 provides a summary of the profile of the team members.

Roles and Responsibilities

Head of Curriculum

Iris is one of the four Heads of Curriculum that, together with the sub school Principal and Deputy Principal, make up the middle school leadership team. In her education as a teacher, Iris specialised in English Communication and Human Movement; and has taught these subjects for most of her 17 years as an educator. Her teaching career involved teaching mainly English and Health and Physical Education (HPE) at a secondary school level. At the time of the study, Iris was responsible for leading the Mathematics KLA team. It should be noted that in the Middle School, there was not a requirement in the role at this time for the leader (HOC) of the KLA team to have expertise in that KLA. At the time of the study the Curriculum role of the HOC, as outlined in the school’s HOC Roles (2008) document, involved the following:

- Improving student outcomes (ensuring all level of students is catered for)
- KLA responsibility across Middle School
  - Scope and Sequence for KLA – ensure availability and understood by teachers
  - Good knowledge of syllabus documents
  - Leading role in KLA planning
  - Leadership in allocation of students and teachers to classes
- QCAR implementation
  - Essential Learnings covered
  - Standards
  - Queensland Comparable Assessment Tasks (QCATs)
- Developing skills and performance of staff (Leading and Supporting Teachers)
Develop Data Action Plans
Ensuring accurate and transparent data collection of achievement and progress
Leading role in the development of Common Assessment Tasks

As HOC, one of Iris’s roles involves presiding as the chairperson at the team meetings. In addition to her KLA responsibilities, she is responsible for overseeing a POD (a group of between 80-100 students and four to five teachers) of teachers, student welfare and managing student behaviour in a POD. Iris is also a member of the whole college Futures leadership team.

**Leading Teachers and Supporting Teachers**

In their POD environment, teachers work in pairs, teaching two or more classes. When the school reviewed its curriculum programme in 2008, the school leadership team created a structure of LTs and STs (ST). Whilst some teachers were nominated by the HOC, most teachers nominated themselves as either LT or ST in their PODS. The Responsibilities of the LT, as outlined in the schools *Middle School Structure* (2008) document, involves the following:

- Develop units of work with HOC and other LTs
- Share ideas and resources with other LTs
- Good level of curriculum knowledge (Essential Learnings, Standards, Scope and Sequence, Syllabus)
- Good level of curriculum knowledge of types of explicit teaching and Productive Pedagogies
- Support for STs
- Leadership in KLA Planning sessions
- Maintain KLA currency
- Improved outcomes

The Responsibilities of ST as outlined in the *Middle School Structure* (2008) document involves the following:

- Good level of curriculum knowledge (Essential Learnings, Standards, Scope and Sequence, Syllabus)
- Good level of curriculum knowledge of types of explicit teaching and Productive Pedagogies
- Proactively working with LT on Unit development and resources
- Share ideas and resources
- Attend KLA planning sessions
- Improved outcomes
Table 6
Profile of Members of the Mathematics KLA Team

<table>
<thead>
<tr>
<th>ROLE</th>
<th>PSEUDONYM</th>
<th>GENDER</th>
<th>TEACHING EXPERIENCE</th>
<th>PERIOD WITH TEAM</th>
<th>SPECIALISED AREAS OF TEACHER PREPARATION</th>
<th>CURRENTLY TEACHING</th>
<th>OTHER TEACHING EXPERIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Leaders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head of Curriculum</td>
<td>Iris</td>
<td>F</td>
<td>17 years</td>
<td>1 year 4 months</td>
<td>English &amp; Human Movement</td>
<td>English &amp; Health and Physical Educ</td>
<td>Senior school teaching</td>
</tr>
<tr>
<td>Leading Teachers</td>
<td>Bill</td>
<td>M</td>
<td>25 years</td>
<td>1 year 4 months</td>
<td>Mathematics &amp; Science</td>
<td>Mathematics &amp; Science</td>
<td>Senior school teaching</td>
</tr>
<tr>
<td></td>
<td>Leah</td>
<td>F</td>
<td>22 years</td>
<td>1 year 4 months</td>
<td>Mathematics &amp; Science</td>
<td>Mathematics &amp; Science</td>
<td>Senior school teaching</td>
</tr>
<tr>
<td></td>
<td>Kate</td>
<td>F</td>
<td>5 years</td>
<td>1 year 4 months</td>
<td>Mathematics, Science, &amp; Technology</td>
<td>Mathematics &amp; Science</td>
<td>Senior school teaching</td>
</tr>
<tr>
<td></td>
<td>Jess</td>
<td>F</td>
<td>3 years 6 months</td>
<td>8 months</td>
<td>Mathematics &amp; Science</td>
<td>Mathematics &amp; Science</td>
<td>Senior school teaching</td>
</tr>
<tr>
<td></td>
<td>Dan</td>
<td>M</td>
<td>9 months</td>
<td>9 months</td>
<td>Mathematics &amp; Science</td>
<td>Mathematics &amp; Science</td>
<td></td>
</tr>
<tr>
<td>Informal Leaders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supporting Teachers</td>
<td>Brad</td>
<td>M</td>
<td>25 years</td>
<td>1 year 4 months</td>
<td>Mathematics &amp; Science</td>
<td>Mathematics &amp; Science</td>
<td>Senior school teaching</td>
</tr>
<tr>
<td></td>
<td>Josh</td>
<td>M</td>
<td>25 years</td>
<td>1 year 4 months</td>
<td>English Second Language (ESL)</td>
<td>Mathematics &amp; Science</td>
<td>School Principal</td>
</tr>
<tr>
<td></td>
<td>Owen</td>
<td>M</td>
<td>5 years</td>
<td>1 year 4 months</td>
<td>not provided</td>
<td>Mathematics &amp; Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nat</td>
<td>F</td>
<td>4 years</td>
<td>1 year 4 months</td>
<td>Primary school teaching</td>
<td>Mathematics &amp; Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hugh</td>
<td>M</td>
<td>9 months</td>
<td>9 months</td>
<td>Mathematics &amp; Science</td>
<td>Mathematics &amp; Science</td>
<td></td>
</tr>
<tr>
<td>Integrating Facilitators</td>
<td>Ria</td>
<td>F</td>
<td>16 years</td>
<td>9 months</td>
<td>Mathematics and HPE</td>
<td>HPE &amp; Mathematics</td>
<td>Senior teaching; Head of Department</td>
</tr>
<tr>
<td></td>
<td>Sean</td>
<td>M</td>
<td>6 years</td>
<td>1 year 4 months</td>
<td>Technology (Manufacturing, Graphics &amp; Engineering)</td>
<td>Technology &amp; Mathematics</td>
<td></td>
</tr>
</tbody>
</table>

Note: Except for the Head of Curriculum, whose role has been designated by the State Education Department, all other roles have been designated by the school.
Integrating Facilitators

In addition to the LTs and STs, the Middle School comprises teachers who are Integrating Facilitators (IFs). These teachers are responsible for teaching mainly either, Health and Physical Education (HPE), Technology, or the Arts (Music & Drama). The Mathematics KLA team includes two IFs; that is, teachers who teach one or more of the subjects listed above in addition to Mathematics (see Table 6).

In the next section, the comparative analysis of the formal interactions and informal interactions using ONA is undertaken.

5.2 The Formal Advice and Information Interactions and Leadership

This section presents an analysis of the formal interactions of participants in the three meetings observed of the Mathematics KLA team. The analysis first adopts an ONA approach. Each meeting constitutes a separate network. First, the structure of the network is examined at the team level using the team network centralisation and density measures. Second, at the actor level, the central actors in the network are identified as key advice givers and most prominent actors. Then, using CA, a fine-grained analysis of the advice and information interactions related to the relevant meeting topic is undertaken. To draw inferences about the patterns of relationships, participants were classified according to roles: (a) formal leaders are positional leaders that include HOC and LT; (b) informal leaders include ST and Integrating Facilitator (IF) who emerge as leaders.

The analysis of observation data was undertaken using the method of ONA to investigate the first two research questions.

1. What are the patterns and configurations of leadership that emerge in the interactions of participants?
2. To what extent do formal leaders provide advice and information to colleagues; and do teachers without formal leadership positions emerge as informal leaders?
The analysis was guided by the following questions:

- Who provided advice and information? How often?
- What patterns and configurations of team leadership emerged?
- Who were the key advice givers?
- To what extent do formal leaders provide leadership in relation to their colleagues?
- Who were the most prominent advice givers?
- Do teachers without formal leadership positions emerge as informal leaders?
- Which formal leaders occupy a central position? Which formal leaders occupy a peripheral position in the network?

A. Organisational Network Analysis

In investigating the question of who (which colleague) provided advice, sociograms assist in identifying this in the Mathematics Team. Further, it is possible to identify in these sociograms how often advice and information related to teaching Mathematics was provided (see Figures 9-11).
Figure 9
Sociogram of Mathematics KLA Team Meeting One Network

LEGEND

- Leading Teacher
- Supporting Teacher
- Integrated Facilitator
Figure 10
Sociogram of Mathematics Team Meeting Two Network

LEGEND

- Red circle: Leading Teacher
- Green circle: Supporting Teacher
- Blue circle: Integrated Facilitator
Figure 11
Sociogram of Mathematics Team Meeting Three Network

LEGEND

<table>
<thead>
<tr>
<th></th>
<th>HOC Maths</th>
<th>Leading Teacher</th>
<th>Supporting Teacher</th>
<th>Integrated Facilitator</th>
</tr>
</thead>
<tbody>
<tr>
<td>🟣</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>🟥</td>
<td></td>
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<tr>
<td>🟢</td>
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<td></td>
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<tr>
<td>🟦</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Structure of Network

The in-degree scores\(^1\) were used to measure the structure of the network (Refer to Appendix C for a summary of in-degree scores). Table 7 tabulates network measures for the advice and information network for each of the meetings. The more frequent advice giving interactions were determined using a tie strength ≥ 2 which indicates that actors provided advice and information two times or more per meeting. We can compare the centralisation and density of the network.

Table 7

Descriptive and other statistics of the Formal Networks in Mathematics Team

<table>
<thead>
<tr>
<th>Network</th>
<th>Network Structure</th>
<th>In-degree</th>
<th>Key Advice Givers</th>
<th>Most Prominent Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Centralisation</td>
<td>Density</td>
<td>Mean Std Dev</td>
<td>Formal Leaders</td>
</tr>
<tr>
<td>Meeting One</td>
<td>82.22%</td>
<td>25.45%</td>
<td>3.27 4.2</td>
<td>3 60 3 50</td>
</tr>
<tr>
<td>Meeting Two</td>
<td>78.66%</td>
<td>41.07%</td>
<td>2.88 2.93</td>
<td>2 50 2 50</td>
</tr>
<tr>
<td>Meeting Three</td>
<td>92.9%</td>
<td>23.48%</td>
<td>2.5 2.99</td>
<td>4 66 3 50</td>
</tr>
</tbody>
</table>

Network Centralisation: The network data indicates a centralised pattern of leadership in the formal interactions. The network centralisation scores of the meetings networks were high, with the lowest being 78.66% and highest being 92.9%. The high centralisation scores suggest that leadership of teaching and learning through advice and information is centralised among a few actors in the Mathematics KLA team meetings. However, this does not necessarily include the HOC, as she was not present in the first two team meetings.

Network Density: Whilst the network centralisation score indicates the degree of centralisation or decentralisation, network density scores provide an indication of how dense leadership is. The network density scores for each of the meetings were low, with the lowest being 23.48% and the highest being 41.07%. These low scores suggest that advice giving communication is lower than the maximum possible amount of communication. This means that leadership communication is sparse in the formal interactions.

\(^1\) In order to compare networks of different size, the in-degree centrality scores were normalised (Refer to Appendix C for scores).
Key Advice Givers

In the interactions in the Mathematics team, the use of the sociogram enabled the identification of roles and advice givers. The in-degree scores of $\geq 2$ or more (arrows coming in towards actor) were used to identify the key (frequent) advice givers.

In-degree centrality:
In the three meetings, the in-degree scores were between 1 and 11. In Meeting One, Ria, Jess and Owen had a score of 11 (indicating that they provide advice to 11 actors), whilst Bill, Brad and Kate had a score of 2. The other actors had a null in-degree score. In Meeting Two, Kate had a score of 7, Brad had a score of 6, and each of Bill and Hugh had a score of 5. The other actors had a null in-degree score. In Meeting Three, Iris had a score of 11, whilst other actors had a score of 5 and below.

Frequent advice givers according to role: In the formal interactions, between 50% and 66% of the key advice givers were formal leaders across the three meetings; whilst exactly 50% of informal leaders emerged as key advice givers (Table 7). This suggests that despite the organisational hierarchical positions of actors, advice and information was frequently provided by actors regardless of their position in the team or organisation. These interactions also indicate that there is a degree of reciprocity (see red lines in the sociogram) in the frequency of advice and information exchanges among actors within specific role positions and across role positions.

Central and Peripheral Actors: Whilst the formal leaders were identified as key advice givers, the network position of actors provided a picture of the extent to which the formal leaders provided advice. In the formal interactions, two to four formal leaders occupied a less central to peripheral position. In meeting one, LT (Jess) occupied a central position in the network, two LTs (Bill and Kate) occupied a less central position; and two other LTs (Leah and Dan) occupied peripheral position. In meeting two, two LTs (Kate and Bill) occupied a central position in the network, and again, LTs Leah and Dan occupied a peripheral position. In meeting three, the HOC occupied the most central position in the network, one LT (Kate) occupied a less central position, other LTs (Jess and Bill) occupy a peripheral position, with two same LTs occupying the most peripheral position. The less central position and peripheral positions of these leaders suggests that they participate to a lesser extent in the advice giving interactions.
This low level of participation was also reflected in the low network density scores, suggesting that their expertise is underutilised, particularly in the case of Leah who is a very experienced teacher, whilst Dan is a ‘newcomer’ (see Table 6). On the other hand, these leaders are less centrally positioned in the networks as compared with some of the STs/IFs. In Meeting One, these peripheral formal leaders are less centrally positioned in the network as compared with IF (Ria) and ST (Owen) who are equally central as LT, Jess. In Meeting Two some of the formal leaders are less centrally positioned in the network as compared with STs, Brad and Hugh. In Meeting Three, two STs (Nat and Josh) occupied a more central position as compared with some of the formal leaders. The more central network position of these ST/IFs suggests that they are more active participants in the meeting dialogue and a source of expertise to more team members as compared with some formal leaders.

Most Prominent Actors: Whilst there were a few key advice givers in the formal interactions, some actors were more prominent than others, and their varied prominence pointed to a hybrid leadership pattern with various configurations of leadership. Except for one network that revealed a hierarchical leadership pattern, with the HOC being the sole leader, the other networks indicated a heterarchical leadership pattern. In Meeting One, the mean in-degree score was 3.27 with a standard deviation of 4.2 (Table 7). When using the decision rule of identifying the most prominent leaders as those who have a greater than one standard deviation above the mean (i.e. a score ≥ 7.47), a group comprising Ria, Jess and Owen were identified as the most prominent leaders in this network. In Meeting Two, the mean in-degree score was 2.88 with a standard deviation of 2.93, a pair comprising Kate and Brad were identified as the most prominent leaders in this network (i.e. a score ≥ 5.81). In these meetings, the central network position was shared by other formal leaders (LTs) and informal leaders (STs/IF); pointing to an alternate, formal and informal leadership configuration. However, this was different in Meeting Three. With the mean in-degree score being 2.5 with a standard deviation of 2.99, Iris was identified as the single most prominent leader in this network (i.e. a score ≥ 5.49). Thus the meeting three network points to a focused, formal configuration, that is, the HOC was the single most central actor.

In sum, using ONA, the network centralisation scores revealed that leadership in the Mathematics KLA team meetings was highly centralised among a few actors. However, the density of the network was low; suggesting low levels out of all possible
communication among participants, with some LTs playing a peripheral role. However, some informal leaders were more central than some LTs. Whilst the third meeting pointed to a focused, formal leadership configuration, the two other meetings pointed to an alternate, formal and informal leadership configuration. This configuration was similar to the informal interactions.

In the next section, the analysis of meeting talk using CA is undertaken.

**B. Conversation Analysis of Meeting Talk**

In this section, I present the analysis of observation data using the method of CA to investigate the following research question: What are the leadership actions performed by leaders in formal interactions; and what are the interactional resources used by leaders?

**5.2.1. Mathematics KLA Team Meeting One**

**Context**

There were ten members of the Mathematics team present at this meeting held in a section of the school Resource Centre (Library) in the afternoon. In the absence of the HOC, the meeting was chaired by Ria (IF). A pre-circulated agenda, prepared by the HOC, indicated the day, time of meeting, a note that the meeting will be followed by a staff meeting, the venue of the meeting, and two items for discussion. The first agenda item, Rotations in Math, was to be discussed by Ria. The second item, Folio marking sheet, was to be discussed by Kate.

**Topic: Rotations in Mathematics**

The episode of meeting talk in this section was selected to demonstrate informal teacher leadership in this team. In the absence of the HOC, an IF chairs the meeting and leads discussion; with the other prominent leaders joining in the conversation at certain points. This episode was also selected to demonstrate leadership of curriculum and pedagogy in team meetings through advice and information giving/receiving sequences where the recipient announces a plan, seeks teachers’ inputs, and commits teachers to the plan. To accomplish the task of ‘doing leadership’, the leader used a range of interactional resources. This episode was selected to demonstrate the use of “I think”
and formulations by the informal leader. A third reason for the selection of this episode, is to demonstrate that whilst the chairperson led the meeting for large parts in solo, there were times where multiple leaders were involved in the act of leading teaching and learning.

**Introducing the topic: Rotations in Mathematics**

The interactions in this extract reveals Ria (an IF) enacting leadership in pedagogy by announcing a plan, and uses “I think” as an interactional resource, allowing other participants to be drawn into the conversation with their ideas and information. As a result, Ria (and the hearing audience) become the recipients of advice and information. The extract also demonstrates leadership is a practice that is undertaken by individuals; and can also be distributed among multiple leaders, and the role of leader and follower is interchangeable, depending on the situation.

Assuming the role of chairperson, Ria introduces the topic of Rotations in Mathematics using the pre-circulated meeting agenda set by the HOC (FN 18-08-2009). She outlines that teachers had different ideas and asks teachers what they have been doing. Three teachers respond to the question. Josh provides brief information that teachers of English have been doing this in his POD. Sean describes these as clinics. We join the conversation where Jess provides an assessment of rotations as a teaching method, followed by Ria, who takes up the next turn, announcing a plan.

**Announcing the plan using “I think” as an interactional resource**

**Extract 1a: “the plan is”**

[MM1: 18/08/09: 02'22"-. 03'43"]

55. Jess: it it’s fun and I think it’s good
→ 56. Ria: I think the plan is we do do that and we have one
57. lesson (.), and I think we can afford to have it (.), not
58. this term because I think this term has been really
→ 59. disjointed I mean I don’t think I see mine till this
60. Friday (.), I have just one lesson and I think we lose
61. them Wednesday morning
62. Kate: yeah yeah
63. Ria: but whether we aim for at least one I think we have to
→ 64. agree that as from January 2010 (.), that we go for once
65. a fortnight we do one lesson of rotations
66. Kate: Yeah
→ 67. Jess: only once a fortnight (.), I do one [a week]
→ 68. Owen: [I do one] a week
→ 69. Ria: that’s what I’m saying (.), are we doing once a
70. fortnight or are we going once a week (.), we have to
→ 71. decide now and use this time to trial out different
72. things (.), and use term four as a trial basis so that
73. when we come to term one 2010 we’re ready to go (
74. we’ve got our folio sorted out (.) our criteria mark
75. sheet all geared up to compliment what we’re doing (.)
76. any worksheets all of of that so we’re ready to go (.)
77. that’s how I see it we see the end of the year out
78. trialing out doing it once a fortnight once a whenever
79. >babababababa< (.) okay Kate
80. Kate: ( (laughter))can I suggest that we start once a week (.)
81. next term;
82. Ria: Mhm
83. Kate: and (.) because I think once a fortnight will become
84. too long (.) [for] them and we have only three
85. lessons per week
86. Ria: [yeah]
87. Jess: >and its good revision<
88. Kate: [yeah its good revision]

In this extract, Ria begins her turn with “I think the plan is we do do that” (line 56) in reference to the previous talk by Jess where she described some of the activities she did in rotations and assesses the method as “it’s fun” and “it’s good” (line 55). Ria then continues outlining the plan is to “have one lesson” (line 56-57) of rotations. Ria elaborates on the plan further and states that “that we go for once a fortnight we do one lesson of rotations” (lines 64-65). Goldsmith (2000) refers to introducing advice in this way as recipient announces a plan and suggests that whilst this is unlikely to be heard as soliciting advice; the extent that the recipient verbally draws attention to the act invites comment. Ria’s use of the discourse marker “I think” functions as a hedge; it expresses the speaker’s uncertainty about the presentation of the proposition; as well as is used to express a viewpoint or idea (Aijmer, 1997). Notice also that Ria uses “I don’t think” (line 59). This negative assessment also signals the speakers’ uncertainty (Pilcher, 2009); that is, it expresses an element of uncertainty that Ria has in meeting her students for another lesson until “this Friday” (lines 59-60). In this instance, “I don’t think” functions as an important interactional resource that reinforces her position – there are time constraints in the current school, therefore the “plan” that is being offered is to do one lesson of rotations per week. Ria goes on to suggest that teachers need to agree on doing rotations once per fortnight at the start of following school year. Thus, the announcement of the plan invites responses from teachers. Jess responds with a question “only once a fortnight” (line 67), and then goes on to inform Ria (and team members present) that she does rotations once a week. Owen also responds with the information that he does “one a week” (line 68). The comments by Jess and Owen indicate that whilst advice may not be the desired reaction, a reaction is invited by the announcement of a plan of action (Goldsmith, 2000); thereby making Ria the recipient of advice and information.
The comments by Jess and Owen prompt Ria to refine her proposition to ask “are we doing once a fortnight or are we going once a week” (lines 69-70). There is a noticeable shift in her talk from the announcement of a plan to a request for teacher input (information) on the issue of the frequency of rotations. This request is immediately followed by a further elucidation of the plan by Ria, with the advice that teachers “use this time to trial out different things and use term four as a trial basis so that when we come to term one 2010 we’re ready to go” (lines 71-72). Ria’s request for teacher input and elucidation of the plan for 2010 is taken up by Kate with a suggestion, “that we start once a week next term” (lines 80-81); and she justifies her suggestion of once a week by stating that once a fortnight is too long (implying it is too long a period from one rotation lesson to the next). Kate is supported by Jess; and both teachers advise that an additional benefit is that it allows students to engage in revision in Mathematics. This suggestion prompts the Ria to review the proposal and seek teacher input through voting on the proposal.

Whilst some teachers indicate agreement with the proposal, others remain silent; prompting Ria to question Brad about his position on the proposal. Ria’s response invites Brad to give a reason, which he does so in defense, as indicated in the extract that follows.

Recipient discloses a problem
In addition to revealing Brad disclosing a problem, this extract illustrates the disclosure of a problem by a colleague is hearable by participants present as a request for advice. The extract also illustrates that whilst Ria leads the meeting in solo for long periods of time, she is not the sole leader. As observed earlier, LTs, Jess and Kate, and ST Owen, also play an important leadership role, thus indicating that leadership in this team meeting is stretched across multiple leaders, depending on the situation. Additionally, this extract illustrates the role of the leader and follower is interchangeable. Earlier when Ria announced the plan, she was the recipient of advice and information, but now she assumes the role of advice giver as the meeting proceeds.

Extract 1b: “I can’t see that I can afford the time”

[MM1:18/08/09: 03′59″- 04′14″]
→ 99. Ria:  [Brad (.) you] were against it were you (.) do you want
you were against it for any (.) do you want to say why
you’re against it (.) or you’re just (.)
Brad: ahm ((clearing throat))
→ Ria: [or you’re] just abstaining
Brad: [no no no]
Brad: I’m not abstaining
→ Ria: [or not bothered]
Brad: I can’t see (.) that I can afford the time
→ (0.3)
Owen: [see I do it th]is way
Ria: [>once a week<]

In this extract, Brad begins his turn by responding to Ria’s request to explain his reasons for disagreement or abstaining. In his turn in line 107 Brad explains that he “can’t see that [he] can afford the time”. Brad’s explanation in response to Ria’s comment can be described as recipient discloses a problem (Goldsmith, 2000). There is a 0.3 second pause in line 108, which suggests that Ria was expecting Brad to continue his explanation of the problem. Since he does not continue the turn, Owen and Ria take up the turn as indicated by the overlap in lines 109 and 110. Ria’s quick comment of “once a week” (line 110) is a clarification of whether Brad cannot afford the time. It implies that she feels that it is possible that rotations could be done once a week; suggesting that Brad’s explanation of not finding the time appears to be not so much of a problem that he is making it out to be.

Although Brad has not directly solicited advice from colleagues, announcing a problem can be heard as a way of asking for advice (Goldsmith, 2000), and he thus becomes a recipient of advice as illustrated in the extract below.

Extract 1c: “see I do it this way”

[MM1:18/08/09: 04′14″- 05′46″]

→ (0.3)
→ Owen: [see I do it th]is way
Ria: [>once a week<]
Owen: one of my rotations is where I break up the teams into six tables but I when I do the directed teaching (.) its all consolidating what we’ve done
Ria: mhm
Owen: cos I do mine last lesson of the week (.) so that way I have the small groups and they can consolidate what we’ve done in class (.) if they’ve got it then I’ll give them extra (.) if they don’t get it cos I’ve got two tables of low end you know (.) so I spend some time with them to make sure they understand the concept and it’s a bit more where you’re sort of one teacher to ten kids whereas other than one to thirty and you can see what they are doing (.) cos some of the kids are really good at hiding [what they] don’t [know]
In this extract, Owen becomes the advice-giver after the silence (line 108) when he takes up his turn in line 109 and continues through to line 128, providing information as to how he does rotations in Mathematics. Owen provides information to the team as to how he fits the Mathematics rotational activity into his Mathematics programme: he breaks up his class “teams” into “six tables”, does directed teaching involves consolidating what was done in class; does it in the last day of the week; organises students into small groups so that he can consolidate what was done in class; gives them extra work if they “got it”; and if they don’t get it, particularly the two “low end” groups, he “spend[s] some time with them to make sure they understand the concept” working with groups of 10 students. During the course of Owen’s recount as to how he does rotations Ria uses continuers (e.g. “mm yeah”) which are resources by which participants display agreement or an understanding that an extended turn is underway by a co-participant and is not yet finished (Gardner, 2001; Schegloff, 1981). Owen also uses “you know” (lines 121 and 128) which functions as a “verbal filler” (Brown, 1977, p. 102); allowing him to hold the floor and proffer advice as information. Furthermore, Östman (1981) points out, speakers use “you know” when they strive towards getting the recipients to accept the propositional content of the utterance as mutual background knowledge. Thus, Owen provides details of rotations, encouraging the adoption of rotations as a method of teaching Mathematics.

Jess also hears Brad’s disclosure of a problem as a way of asking for advice and she becomes the advice-giver, further illustrating that leadership in this team meeting is stretched across multiple leaders. Jess’s leadership is captured in the following extract.

**Extract 1d: “problem solving activities which is just generally good”**

[MM1 18/08/09: 05'46" - 06'40"]

151. Bill: [just to get an idea of what yeah]
→ 152. Jess: [but in terms of getting through] that content (.) I
→ 153. think Brad (.) I thought that at first too and then I
154. thought well here’s a list of things I want to do that
155. help kids with coordinates [and I thought] well this
156. worksheet which I would do normally in a content class
157. (. I could do that as a rotational activity (. so a
158. lot of my content I just slightly (. I like pulled out
and did that as a rotation and (.) oops sorry spitting dropping ((spilling food on herself)) because ahm (0.2) it is a smaller group and because I can maybe sit with the group some of the harder tasks(.) instead of us doing them altogether (.) I did them at smaller groups and that way I can be there to help them through=
→ 164.  
→ 165.  
→ 166.  
→ 167.  
→ 168.  
→ 169.  
→ 170.  
→ 171.  
→ 172.  
→ 173.  

In this extract Jess assumes the role of advice-giver, directing her advice to Brad when she states “I think Brad” (lines 152-153). Like Owen, she advises by providing information about how she does rotations in Mathematics. However, her advice is more relevant in that she explains how she can fit the content and rotations into the same Mathematics programme, addressing the ‘time trouble’ that Brad stated earlier in the conversation. Jess advises and encourages Brad, by sharing her initial concerns about “getting through that content” (line 152); and goes on to outline that she solved the problem by doing the worksheets (which she would do normally in a content class) as a rotational activity. She adds that’s since she had smaller groups she could sit with smaller groups of students to do the harder tasks and that way she “can be there to help them through” (line 164). Brad’s questions “so you got the worksheet … what’s the third group doing” (in lines 166-167) suggests possible uptake of the advice. Despite an indication of acceptance with reluctance/hesitance as indicated by a very soft “okay” (line 172), he later in the meeting explicitly states he is happy to do one lesson a week. In the discussion that follows, Ria works towards gaining commitment to the plan.

**Gaining commitment: Using Formulations as an interactional resource**

Following the announcement of the plan, a revision of the proposition, and giving/receiving advice, Ria, uses formulations as an interactional tool to summarise and commit teachers to the plan. After a first round of formulation, Ria conducts a simple survey to determine teachers’ willingness to be observed by their peers. In so doing, she advises teachers once again to visit and observe colleagues. Once there is agreement by one teacher that colleagues can visit and observe, Ria repeats the formulation as illustrated in the extract below.
In this extract, Ria begins her turn with “okay” (lines 467) which has a dual function. It is simultaneously responsive to the immediately prior turn, and projects a forthcoming action sequence (Beach, 1993). On the one hand, it signals a closure to the preceding talk; and on the other hand the action sequence it projects is a formulation that sums up the talk-so-far in respect of rotations. Ria thus uses formulations as an interactional resource. Heritage and Watson (1979) maintain formulations, fix the gist of the talk-so-far and “occasions receptions” and “the character of their receptions is sharply constrained to confirmations or disconfirmations, or more generally decisions” (p.141). In this instance, Ria provides a gist of the discussion so far, that is, teachers are going to trial one rotation lesson per fortnight for the rest of the term. Ria then suggests teachers “link up” (line 470), implying that they visit and observe teachers. She then surveys teachers to ascertain their willingness for their peers to observe their lessons. Teachers do not disagree but their responses suggest observation of their classes might not be the ideal idea of how rotations should be done. This lack of enthusiasm to be observed can be inferred from Bill who states “we do rotations but in a very small scale at the moment” (line 474) and Kate who responds with “I do something like that but not not how” (line 475). As a result of this lack of enthusiasm by Bill and Kate, Ria then invites
teachers to observe her classes or Jess’s classes because “Jess’s fine about people sticking their nose in” (line 481).

Ria repeats the formulation. This synonymous formulation follows after a confirmation by Jess through agreement to have teachers visit her class to observe rotations. In this instance, Ria uses the word “so” (line 484). When the word so prefaces a formulation it projects the upshot of the talk-so-far and makes explicit the links between the prior talk and the current turn (Clifton, 2009). In the formulations Ria uses “we” (lines 466 and 484), which serves several purposes. It implicates the other team members in the formulation. It indicates strength in the position taken (i.e. Ria is speaking on behalf of everyone). The use of “we” also presupposes agreement. Thus, Ria asks teachers for agreement at the end of her turn with “boom yes” (lines 488) and Jess and Kate thus respond by repeating “boom yes” (lines 490 and 491). Disagreement would be a dispreferred response (Heritage & Watson, 1979) because the other interactants have helped co-author the talk up to this point. They are thus implicated in the formulation. Also, a dispreferred response may imply a challenge to the chairperson’s identity, and her ability to monitor and process the talk cognitively, and to reproduce its gist (Clifton, 2006).

In the talk that follows, Ria distributes a range of teaching resources to teachers, delegating the responsibility for teachers to prepare questions related to the resources to be share with colleagues. Owen provides information on Teaching Mathematics Online and Kate leads discussion on the improvements to students’ portfolio marking sheet. In addition to Owen and Kate, a small part of the meeting discussion towards the end of the meeting involves two other teachers, Brad and Bill, leading discussion on the Mathematics examination, following a request for examination questions from Leah. The meeting ends on a cheerful note with much laughter, as was evident throughout the meeting, and Jess and Kate teasingly saying “thanks boss” and “thanks HOC”, respectively, to Ria. The teachers then proceed to the staff meeting.

In sum, the analysis of meeting talk revealed that the chairperson – Ria – played the most prominent role in the meeting. Guided by the meeting agenda, the chairperson’s actions focused on leadership of pedagogy and assessment in Mathematics. In enacting leadership, she announced the plan regarding rotations; facilitated advice giving and decision making through the use of interactional tools such “I think”, formulations, voting, and questions, and led discussion and decision making. Whilst the chairperson
led the meeting for long periods in solo, she did not single-handedly lead the team. Instead, leadership was stretched across multiple leaders who emerged from across role positions. Despite their less central role to the chairperson in the advice and information dialogue, a LT and a ST were also prominent, ‘doing leadership’ by advising the chairperson as well as peers on the method of doing rotations in Mathematics. These teacher leaders shared their practice by presenting the strategies used and the success of these strategies. Thus, this episode also demonstrates that the role of leader and follower are interchangeable; depending on the situation. At times the chairperson, LT and ST were the initial recipients of advice; however, they later assumed the role of advisors. This configuration of multiple, formal and informal leadership and the notion of leadership stretched across multiple leaders were also evident in the second meeting of the Mathematics team observed.

5.2.2. Mathematics Team Meeting Two

Context
There were nine members of the Mathematics team present at this meeting held in the same venue and time of day as the Meeting One. Some teachers were attending a meeting of the teachers Union. A pre-circulated agenda, prepared by the HOC, stated the day, time of meeting, a note that the meeting will be followed by a staff meeting, the venue of the meeting, and four items for discussion: Problem Solving in Math, Resources, Data analysis updates, and QCAT - Hand back marked papers to appropriate POD representative. In the absence of HOC (due to illness), the agenda lists Ria as the person who will lead discussion. However, due to Ria’s resignation, the meeting was chaired by Kate (LT), whose specialist teaching area is Mathematics (see Table 6).

This episode of meeting talk was selected to demonstrate formal teacher leadership. In this episode participants used a range of interactional resources to accomplish the task of ‘doing leadership’, including question-answer adjacency pairs and crafting. This analysis focuses on the chairperson’s use of invoking and representing a non-present other to avoid conflict, maintain group cohesion, and influence teachers to consider ideas for an assessment item. This episode was also selected to demonstrate that whilst leadership in a team meeting is enacted by one person for long periods of time,
leadership is also provided by multiple leaders, and the role of leader and follower is interchangeable, depending on the situation.

**Topic: Developing a reflection question**

The analysis of the interactions in this episode reveals Kate enacting leadership in assessment by advocating an approach to assessing students using investigations, an approach strongly favoured by the HOC. Challenged by teachers, Kate repeatedly invokes and represents the HOC. Teachers’ persistence and suggestions, however, prompts her to re-assess the position; and they work collaboratively towards an alternative solution. This episode also illustrates the use of invocation and representation of the non-present other and crafting as interactional devices to accomplish the task of ‘doing leadership’.

In this meeting, Kate assumes the role of chairperson, introducing the topic of problem solving. She draws attention to the problem solving sheets provided by Ria and requests teacher to put these up on the Common G-Drive on the school intranet. Kate then proceeds to the next topic on Problem solving and pauses, allowing team members to make inputs to the student assessment task that was pre-circulated to teachers by the HOC. Three teachers respond: one teacher says he does not like the task because it’s purposeless, another says, it’s confusing, and the third one says there are parts missing to the task. We join the conversation where Bill questions the purpose of the task.

**Presenting a position: Invocation and representation of the non-present other as an interactional resource**

*Extract 2a: “okay so this is what Iris is saying”*[MM2:27/10/09: 02’19”- 02’51”]*

79. Bill: so why we’re doing it then  
80. Dan: it took me thirty seconds  
→ 81. Kate: okay so this is what Iris is saying (.) I don’t  
82. think the point is that they’ve gotta go and research  
83. those alphabets (.) what they’ve gotta do is see  
84. the probability and chance of the letters appearing  
85. Bill: no but you have to know Italian and you have to know  
86. Polish if you want to do that task  
87. (0.2)

In this extract, Kate takes up her turn, responding to the problems identified by teachers in respect of the investigation task, using the interactional resource of invoking and non-
present other (Richards, 2006) when she makes reference to Iris (line 81) – the HOC – who is not present at this meeting. After invoking Iris, Kate continues with “I don’t think” (line 81) pointing out the task does not involve research of alphabets; instead it involves students seeing probability and chance in the data. Whilst the use of “I don’t think” indicates an element of uncertainty, it also suggests disagreement with teachers’ criticisms of the task and is packaged as a counter argument in support of the HOC. This invocation and representation of Iris has the function of avoiding conflict and maintaining group cohesion (Duff, 2011) as well as advancing and gaining support for the idea (Richards, 2006). However, in the conversation that follows, Bill and Brad suggest the investigation should be shelved. Kate suggests waiting for Iris to return before a decision is made. This prompts Brad to ask what was wrong with the proposed examination question.

**Strengthening the position**

**Extract 2b: “Iris said it to me like this … it wasn’t a reflection question”**

[M2:27/10/09: 04'03" - 04'22"]

138. Brad: so what was wrong with the AFL one that you were
139. Kate: thinking about doing (..)the player statistics
140. Leah: `ahm I don’t know`
141. Leah: she wanted (..) Iris said it to me like this that it
142. wasn’t a reflection question
143. (0.4)
144. Leah: she wants a reflection question 'that wasn’t a
145. reflection question''
146. Brad: can we not come up with a reflection question based on

In this extract, Brad takes up the turn asking what was wrong with the question initially suggested for the exam. Kate, however, is unsure and softly responds that she does not know. It is Leah (one of the developers of the Mathematics exam) who now invokes Iris, the non-present other. Leah responds that Iris did not find the task to be a reflection question. Since no other participants takes the floor, after a long pause Leah explains further that Iris wants teachers to come up with a reflection question and softly repeats that the proposed question for the exam “wasn’t a reflection question” (line 144-145). The invocation of the HOC by Leah helps strengthens the point that there is a need for a question assessing student reflection, prompting Brad to suggest teachers to come up with a reflection question.

**Consideration of an Alternate Proposal**

**Extract 2c: “Can we not come up with a reflection question”**
In this extract, Brad suggests teachers come up with a reflection question based on “that data” (line 147) used in the existing exam. He emphasises the difficulty of the investigation task in relation to the use of the Italian language (line 150-151); proposing the use of AFL statistics (line 153). Kate’s “okay lets suggest that yeah” (lines 154-155) indicates agreement with the proposal and implies communicating the suggestion to Iris. In the long conversation that follows teachers propose various forms of data that could be used as a reflection question in the exam. The discussion indicates that whilst Kate is the appointed leader and has led the meeting for most of the time, she is not the sole leader. Instead, leadership is stretched across multiple leaders. Moreover, Kate who is the leader assumes the role of recipient of advice. However, her prominence in the meeting surfaces again where she identifies a problem with one suggestion, prompting Kate to ask teachers, how are they going to assess student reflection. Using crafting (Sawyer, 2005) as an interactional resource, participants propose a solution, identify flaws in the solution, offer an alternate proposal, elaborate on the proposal, and eventually arrive at collective agreement on an idea for a reflection task (Refer to Appendix D). After Bill suggests that the existing data be used to frame a question, Brad elaborates on the proposal, as illustrated in the following extract.

**Elaborating on the Proposal**

**Extract 2d: “can we go left wing or left field”**

[MM2:27/10/09: 21'49"- 22'19"]

154
Brad breaks the silence and takes up the turn by selecting himself as speaker offering an alternate proposal by asking a question “… can we go left wing or left field …” (line 558). He elaborates on the proposition (lines 560-564) suggesting that the reflection question could be one where students use information and data from other subjects like SOSE to look at how it has “changed our lives or their lives” (lines 563-564). In this turn Brad thus assumes the role of advice-giver. The 0.5 second pause (line 565) could be interpreted as either there is no uptake of Brad’s advice or some consideration of the proposition. However, the responses that follow suggest that the pause could be interpreted as a period of consideration of the advice as Kate and Bill then respond with “mmm” (lines 566-567) one after the other. This minimal acknowledgement (Heritage & Sefi, 1992) of the advice suggest that Brad’s idea is probably accepted, but with reluctance or hesitance. However, Hugh’s response “that’s definitely real world” (line 568) suggests possible uptake of the advice. This is followed by Kate’s “… yeah and that’s reflection” (lines 569-570) suggest that she does accept Brad’s advice. This proposal is further expanded by Brad and other participants collaboratively crafting an idea for a reflection question.

After collectively reaching agreement on an idea for the reflective question, Kate then draws the topic to a close and introduces the topic of data analysis. Brad briefly discusses a data source of Education Queensland that could be useful for the Analysis of NAPLAN data and teasingly says to teachers that they call download the data “then you look more professional”. The meeting ends with laughter as it had started, and is concluded by Kate, with teachers proceeding to the staff meeting.

In sum, in the meeting talk, guided by the agenda set by the HOC, the actions of the chairperson focused on the leadership of pedagogical change as well as leadership in assessment. In this meeting, the chairperson adopts a brokering role between the HOC and teachers. On the one hand, she advances the need for change in assessment methods (using problem solving, investigations, student reflection) as suggested by the HOC,
and on the other hand, she takes suggestions from teachers to the HOC. In this meeting, the Leading Teacher uses the interactional device of invoking the non-present other (HOC), to indicate disagreement with teachers; however avoiding conflict and simultaneously maintaining group cohesion to advance a position on the Mathematics assessment task. The chairperson listens to the suggestions of teachers; she identifies a problem and questions teachers’ ideas of the reflection. To arrive at a solution (a reflection question), teachers worked collaboratively; and took turns proffering a spate of advice-giving with regard to the problem of the reflection question for assessment. However, teachers found the proposal of a ST to be one that was a ‘real world’ task for the assessment of student reflection.

Whilst the chairperson played a prominent individual role as leader, this episode also revealed that multiple leaders emerged. Also, while the chair, one with perceived expertise in Mathematics, was leading, she asked teachers for information and advice; thus illustrating that the role of leader and follower are interchangeable, depending on the situation. The idea of multiple leaders is further illustrated with the involvement of a ST, Brad. In the previous meeting, Brad disclosed a problem and was the recipient of advice. In this episode, using questions as an interactional device, Brad was at first the seeker of advice, similar to his role in the first meeting. However, during the course of this meeting, he became the dominant peer proffering advice. Thus, the prevalence of multiple leaders points to a formal and informal leadership configuration; a pattern much different from the one found in the next meeting.

5.2.3 Mathematics Team Meeting Three

**Context**

There were twelve members present at this meeting held in the same venue and time as the previous meetings. A pre-circulated agenda, prepared by the HOC, indicates four items for discussion: Phase 3 Information – Senior School, Planning for 2010 – making it fair, Dates for Math In-Service, and Collect – Hand back ICAS Math Certificates. The meeting is chaired by the HOC.

**Topic: Pedagogy in Mathematics**
This episode was selected to demonstrate leadership by the HOC; enacting leadership of curriculum, pedagogy, and assessment through identifying a problem and volunteering information and information. This episode was also selected to demonstrate that leadership of teaching includes the dissemination of relevant and important information. A third reason for the selection of this episode, is to demonstrate how the formally designated leader uses interactional tools of the self reference “we”, teaching replays and direct reported speech, and the epistemic marker “I don’t know” in the advice giving interactions related to an identified problem to accomplish the task of ‘doing leadership’.

In her role as chairperson, Iris opens the meeting, welcoming all teachers. There is much teasing and laughter as she seeks a volunteer to record the minutes. Iris spends much time, discussing the meeting agenda which includes information on planning arrangements for 2010, the forthcoming professional development programme, and excursion for grade 9 students. One of the important pieces of information relates to the expected approaches for teaching, as discussed below.

Introducing relevant information

Whilst Goldsmith’s (2000) typology of sequences in which advice is introduced was the one of the main analytic approaches informing my study, the typology did not cater for the introduction of advisor introducing information. In this study, there were recurring patterns in which the HOC provided or disseminated vital and relevant information on teaching and learning. At other times, it was actors other than the HOC that introduced vital and relevant information with respect to teaching and learning. This form of unsolicited information giving is what I refer to as Advisor Volunteers Information (AVI) (referred to in Chapters Three and Four). The extract below, is one that illustrates AVI on the important future expectations in the teaching of Mathematics. We join the conversation with Iris disseminating information on a professional development programme she has organised for teachers.

Extract 3a: “you’re going to have to teach a combination of those two philosophies”

[MM3: 17/11/09: 05’33”- 06’45”]

132. Iris: I’ve got three days booked of PD for middle school Maths teachers so what we’re looking at is splitting it into three days ahm (0.2) if you mostly teach level four five you’ll be on one day and it’s a whole day run from nine to five and another day for the five
six teachers will run from nine to five (. ) the name of it is teaching teachers how to teach children to think (. ) so looking at a deconstructive approach which is (. ) having a look at you know you put the problem up there and you deconstruct it (. ) more looking at turning it on its head and having a look at a constructivist approach so (0.2) ahh giving them a problem and then what’s the Maths skill data from it (. ) now (0.2) of course you’re going to have to teach a combination of those two philosophies (0.2) but I notice (0.4) it’s not my agenda (. ) I don’t really (.) I’m not a Maths teacher but its seems to be we need to get children to think differently (. ) whatever KLA it is they need to do some more thinking they need to do some critical reflection critical inquiry in sose some

In this extract, Iris, provides information to teachers about a forthcoming programme of professional development (PD) that she has organised “for Maths teachers”. She outlines the nature of the programme (e.g. “three days”, “nine to five”, “teaching teachers how to teach children to think” – lines 132-139). Another vital piece of information provided is Iris informs teachers that they would need to be teaching “a combination of those two philosophies” (line 147), that is, deconstructivist and constructivist approaches. In providing this information to teachers, Iris also informs teachers that it is “not my agenda” (line 148) and goes on to justify to team members that adopting such an approach is an expectation of all Key Learning Areas, including Mathematics. Thus, this extract, illustrates one of several instances of the provision of information by the team leader. Field, Holden, and Lawlor (2000), maintain that the provision of information is an important part of the role of the subject head.

Following the dissemination of information, Iris proceeds to delegate curriculum planning and review of assessment responsibilities, asking for volunteers but matching teacher expertise with student grade levels (FN 17-11-2009), that is, experienced teachers were delegated the responsibility of planning and reviewing curriculum and assessment for the higher grade levels. Iris then introduces the topic of assessment using Student Portfolios. Whilst Iris leads in solo for most parts of the meeting, teachers sporadically provide advice; suggesting teachers are also enacting leadership. In particular, Kate and Bill suggest items such as skills test, reflection, homework, and some class work to be included in the portfolio. Additionally, Iris builds the three-part list started by Kate and Bill and suggests that pieces of work in the student folio should be linked to and leading into the investigation task. She then brings up the topic of the investigation task; something that has been much of an issue amongst some teachers.
The following episode illustrates an interaction sequence where the HOC identifies a problem in teachers’ pedagogy; clarifies the identified problem; and proffers advice using interactional resources, particularly, the self-reference “we”, reported speech, and “I don’t know” to accomplish the task of ‘doing leadership’.

Identifying and clarifying a problem: Self-reference ‘we’ as an interactional resource

Extract 3b: “we need to be looking at our pedagogy”  
[MM3: 17/11/09: 34'15"- 35'01']

In this extract, Iris begins her turn by requesting that “we need to be looking at our pedagogy” (line 987). This statement suggests that Iris has identified a problem in teachers’ pedagogy. The use of the word “we” (line 987) suggests that the directive is aimed at the team, and has the effect of ‘softening’ the directive to make it appear less authoritative. Goffman (1981) maintains that “as speakers, we represent ourselves through the offices of a personal pronoun, typically ‘I’…” (p. 147). However, “with a
person active in some particular social identity or role, some special capacity as a
member of a group, office ... often this will mean that the individual speaks, explicitly
or implicitly, in the name of ‘we’ not ‘I’ ...” (p. 145). Lerner and Kitzinger (2007) also
point out that “we” refers to a collectivity which also contains the speaker. In this
instance, it can be inferred that Iris adopts a collective approach; the use of the inclusive
pronoun “we” suggests that Iris is speaking as part of the team; thus giving the
statement more strength to gain acceptance from the audience.

The 0.3 second silence (line 988) suggests that teachers anticipate further explanation
from Iris. Since she does not elaborate, Josh responds softly in the form of a question
“we’re not teaching good enough” (line 989). This question has a dual purpose: it
suggests that Josh sees this directive as a criticism of their teaching and questions this in
defense, and it serves to elicit further clarification from Iris. Iris clarifies her point
regarding looking at pedagogy by saying that it is not that teachers are not teaching
good enough. Instead, she advises that teachers need to look at “what aren’t you doing
… what aren’t you looking at” (line 991-992) using “you know” (line 992) between the
rhetorical questions. As discussed earlier, “you know” serves as verbal filler which
serves as the function of holding the floor. Furthermore, it is used by speakers to gain
mutual acknowledgement of the issue being discussed. However, evidence of the
perception of the request as a criticism emerges again when Jess states “that’s what Kim
told us” (line 995), referring to the College Principal telling Mathematics teachers that
they are not teaching good enough. Jess’s perception of criticism of teaching appears
again in line 1000. However, Bill’s responds in defense of Iris, suggesting the strategies
for problem solving given previously by Iris “were good there so the kids are getting
ideas … there’s a difference” (lines 996-999). This defense by Bill leads Iris to continue
with her advice as to what teachers could do; and Iris continues her turn with “okay
that’s fine” (line 1002) in response to Bill’s positive evaluation of the strategies for
problem solving. This positive evaluation leads her to continue with advising teachers to
look at “what method are they using” (line 1002) and “what strategies are they using”
(line 1003). She then advises teachers to “show them all the strategies” (lines 1003-
1004). Brad’s “okay” (line 1007) indicates acceptance of the advice. However, he asks
for clarification, pointing out that Iris’s previous advice to teachers to “stop holding the
students hands” (line 157 of extended transcript) contradicts the present advice of “show
them all the strategies” (lines 1003-1004). Iris agrees with Brad by stating “that’s what
I’m thinking” and goes on to suggest that students should be coming to teachers and
advises teachers to ask the students questions such as “what Mathematics do you use” and “what formula do you use” (lines 1011-1012). Iris goes on to advise teachers on the pedagogy they could use in teaching Mathematics.

The extract below illustrates how the team leader subtly shifts from the use of “we” to the use of “you” as well as how she uses teaching replays and direct reported speech as interactional resources to package the advice given to teachers.

**Volunteering Advice**

**Extract 3c: “You could guide them a little bit”**

[MM3: 17/11/09: 35'03″ - 35'58'"

1022. Bill: like the relative frequency and all none of them are 1023. coming up with that 1024. Iris: =you could guide them a little bit (.) >I don't know< 1025. (.)I just know when I teach English (.) I'm trying to 1026. get them to be self directed thinkers (.) this term 1027. I've been really really happy because they've come to 1028. me (.) they've come to me and gone miss (.)I've found 1029. this (.) should I include this here (.) I said well 1030. that's probably a good idea (.) o:r nah (.) I don't 1031. think you're on the right track (.) miss (.) do I put 1032. this in here (.) well what do you think (.) that's 1033. all (.) that's all (.) I could have got that off the 1034. internet (.) I want you to show me something extra 1035. (.) where's your examples= 1036. Kate: yeah 1037. Iris: =oh yeah didn't think of that (.) so they're coming 1038. I want them to be coming to me asking questions (.) 1039. so if they're coming to you Brad you going what do I 1040. do next (.)you could go (.) well have thought about 1041. what formulas you use (.)have you thought about (0.2) 1042. ahm how do you work that (.) do you work that with a 1043. strategy (.) [where are you] gonna use this (0.2) 1044. have you thought about (.) >I don't know< (.) 1045. >whatever else you think about I don't know< (0.2) its 1046. more that facilitator role perhaps in the 1047. investigations 1048. Jess: [oh my god]

In this extract, Iris advises teachers “you could guide them a little bit” (line 1022). The use of “you” suggests that the advice is non-personalised, that is, it is directed to all teachers. Later Iris continues “so if they’re coming to you Brad …” (line 1037) is an indication of personalised advice. The use of “you” also suggests that Iris subtly shifts from “we” to “you”. This shift in talk from “we” to “you” is a form of extraction (Lerner & Kitzinger, 2007) where Iris removes herself as also being a recipient of her own advice because she is not a teacher of Mathematics. Thus, in this instance, Iris uses “you” to construct the team members as teachers of Mathematics and “I” to speak from a position of HOC proferring advice to teachers in the team.
Iris expands on the idea of guiding students by informing teachers that when she teaches English, she is trying to get “students to be self directed thinkers” (lines 1024). It could be interpreted that this information is intended to get teachers to do the same in Mathematics. She ends her turn by stating that teachers should assume “more that facilitator role perhaps in the investigations” (lines 1044-1045).

**Teaching Replays and Direct Reported Speech as Interactional Devices**

In this sequence, Iris replays (Horn, 2010) the conversations that she had with her students. Horn (2010) maintains that, embedded in collegial conversations, teaching replays provide specific images of classroom interactions that serve two main purposes: they represent the classroom in a way that allows for specific consultation on problems of practice; and when replayed events are linked, they become classes of events that support generalisations about appropriate pedagogical responses. Goffman (1974) points out that replays recount “a personal experience, not merely reports on an event” (p. 504); and are often constructed dialogue between teachers and students, and characterised by second-person (“you”) address of students. In this extract, Iris replays the teacher-student conversation explaining she is happy that students come up to her for advice and support and she in turns asks them ‘thinking’ questions.

In replaying the teacher-student conversation, one other interactional resources employed to recount the dialogic exchange is direct reported speech (DRS). Iris uses reporting verbs “I said” and “he said”, animating and doing ‘voices’ (Couper-Kuhlen, Selting, & Auer, 1998) that alternate between hers and those of a student. She quotes questions asked by her students such as “should I include this here” (line 1027) and follows this by quoting the response she gives to students such as “I said well that’s probably a good idea” (lines 1027-1028). In using direct reported speech to advise teachers how they could guide the students, Iris uses a series of questions and answers that are typical sequences of adjacency pairs. She then advises Brad that if the students come to him asking what they could do next, he could ask questions: “well have you thought about what formulas you use”; “do you work that with a strategy”; where are you gonna use this” and “have you thought about (lines 1038-1041).

A number of authors have pointed out that reported speech can perform several actions at the same time. Li (1986) maintains that a direct quote communicates a more authentic piece of information in the sense that it “implies a greater fidelity to the source of
information” (p. 41). Holt (1996) argues that at the same time as reporting an utterance, reported speech can have an evidential function. That is, “by reproducing the ‘original’ utterance or utterances, speakers can provide access to the interactions being discussed, enabling recipients to assess it for himself or herself” (p. 229). Tannen (1989) points out that direct reported speech can be a powerful strategy for recruiting listener involvement. An examination of the extract suggests that Iris’s use of direct reported speech can be interpreted as serving all the above functions. Whilst she is communicating the interactions in her English class that are involved in guiding students to become self directed thinkers, Iris is conveying to Brad (and teachers) that such conversations should be the practice to develop students as self directed thinkers. However, in the replay of her teaching experience, Iris also employs other interactional devices such as “I don’t know”, downgrading the advice given as discussed below.

*I don’t know’ as an interactional resource

In the identification of the problem in teacher pedagogy, followed with volunteering advice, Iris employs the epistemic discourse marker “I don’t know” on several occasions in the above extract.

- “I don’t know” (line 1017) is preceded by two questions that she advises teachers to ask questions related to the investigations: “what Mathematics do you use” and “what formula do you use” (lines 1015-1016). This is followed by “all I know is” (line 1017-1018).
- “I don’t know” (line 1024) is preceded by “you could guide them a little bit” (line 1024) and is followed by “I just know when I teach English” (line 1025).
- “I don’t know” (line 1044) is preceded by a series of questions: “well have you thought about what formulas you use”; “do you work that with a strategy”; “where are you gonna use this”; and have you thought about” (lines 1040-1044).
- “I don’t know” (line 1045) is preceded by “whatever else you think about” (line 1045).

The talk in this episode reveals that Iris offers broad advice to teachers that to develop students as self-directed learners they need to assume the role of a facilitator. She uses examples from English to support this position. When advising teachers how they could do this in Mathematics, Iris suggests teachers ask a few questions (on formulas and strategies). However, this is followed by a declaration of “I don’t know”. It could be
inferred that since Iris is a teacher of English, (it will be recalled that the teaching of Mathematics is not her area of expertise), her declaration of “I don’t know” is a declaration of insufficient knowledge (Beach & Metzger, 1997; Baumgarten & House, 2010; Tsui, 1991) about the teaching of Mathematics. This can also be inferred from that fact that she repeats the same questions that teachers could ask students. It can also be inferred from the long stretch of talk in “though about: t” and the longer pause (line 1041); suggesting her thinking of or searching for typical questions that teachers could ask students. It can also be inferred that a declaration of “I don’t know” has the function of softening any face-threatening effect of disagreement or negative assessment (Grant, 2010; Tsui, 1991) that might arise from the advice on teaching Mathematics using examples from the teaching of English.

Returning to the meeting talk, the discussion of teachers’ pedagogy is followed by the preparation of a list recommending students for particular levels of Mathematics to be undertaken in year 10 at Senior School. Whilst teachers write up the lists, Iris requests teachers to also record in their diaries, the information dates of the in-service programme for teachers, thus concluding the meeting.

In sum, meeting talk revealed that the HOC plays a pivotal role in the dissemination of relevant information. As a leader, she identified a problem in teacher pedagogy and assessment and proffered advice which could be described as broad (general) pedagogical advice for the teaching of Mathematics. This could be attributed to her lack of expertise in Mathematics. In advising teachers, she draws on her experiences of teaching English. She also confesses that she is not a Mathematics teacher and does not know whether the advice will work for Mathematics. In advising the teachers, the team leader uses interactional resources ‘we’, direct reported speech, as well as “I don’t know” as tools to accomplish the task of ‘doing leadership’. Unlike the prominence of solo and multiple leaders in the previous two meetings, the sole prominence of the HOC in this meeting points to a focused, formal leadership configuration.

**Summary of Part One**

The results of the study of the Mathematics team revealed the team networks were highly centralised among a few key actors in the formal interactions; however there were generally low densities of communication among participants. The study found
leadership was provided by formal as well as informal leaders, pointing to a hybrid pattern of leadership with various configurations. The meeting chaired by the HOC indicated a focused, formal leadership configuration, whilst in the absence of the HOC there were alternate, formal and informal leadership configurations where leadership was provided by a group and pair of prominent formal and informal leaders, in the first and second meetings, respectively. In these meetings, the chairpersons led the meetings for long periods in solo; however, they did not lead alone. Instead, leadership was provided by multiple leaders, in groups of three to four leaders. In team meetings, leaders’ actions focused mainly on reviewing and improving the existing curriculum programme and changing pedagogical and assessment practice to include teaching methods such as rotations, problem solving approaches using investigations, and student portfolios. In ‘doing leadership’ the corpus of meeting talk data revealed formal and informal leaders, proffered advice in various sequences. In most instances advice was proffered when recipients asked for information or opinion or when recipients disclosed or identified a problem; and a few instances advice was proffered were recipients announced a plan. Advice was also proffered when unsolicited. This occurred mostly in the form of advisor volunteers’ advice or information; and in a few instances where the advisor identified a problem and proffered advice. The corpus of meeting talk data also revealed participants used a range of interactional resources to accomplish the task of ‘doing leadership’. The most common resource used was the self-reference “we”, the epistemic marker “I think” and “I don’t know”; and question-answer adjacency pairs. Other discursive tools such as formulations, teaching replay, reported speech, three-part lists, voting, and crafting as well as artefacts were also employed to accomplish the task of ‘doing leadership’. Table 8 below is a summary of the ONA and CA results. The table summarises the leadership configuration that emerged, most prominent actors in each meeting and the interactional devices used by the most prominent leaders who assumed the role of chairpersons in the meetings.
Table 8
Summary of ONA and CA Results of Mathematics KLA Team Meetings

<table>
<thead>
<tr>
<th>Network</th>
<th>Leadership Configuration</th>
<th>Most Prominent Actors</th>
<th>CA TYPES OF INTERACTIONAL DEVICES MAINLY USED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting One</td>
<td>Alternate, formal and informal leadership</td>
<td>Ria</td>
<td>I think, Voting, Formulations, Questions, Self-reference (“we”)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jess, Owen</td>
<td>Questions, Continuers</td>
</tr>
<tr>
<td>Meeting Two</td>
<td>Alternate, formal and informal leadership</td>
<td>Kate</td>
<td>Questions, Self-reference (“we”), Invoking the non-present other</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Crafting, Questions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brad</td>
<td>Questions</td>
</tr>
<tr>
<td>Meeting Three</td>
<td>Focused, formal leadership</td>
<td>Iris</td>
<td>Self-reference (“we”- aggregation, &amp; extraction), I don’t know</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Teaching replay, Direct reported speech</td>
</tr>
</tbody>
</table>

In the next section, Part Two, the informal interactions of the Mathematics KLA Team are analysed from an organisational network perspective.
Chapter Five: Part Two

5.3 The Informal Advice and Information Interactions and Leadership

This section presents an analysis and results of the Mathematics KLA team network survey data, examining advice and information seeking relations across the Mathematics team. Each of the advice seeking relationships examined constitutes a separate network; and each network is referred to by the relationship they tap. First, the Teaching Mathematics advice and information network is examined. This network can be described as an ‘overall’ network that concerns advice related to any aspect of Teaching Mathematics. Next, the Five Dimensions of teaching and learning network is examined focusing on curriculum planning; content knowledge; teaching approaches; assisting low performing students; and assessment. Finally, an analysis of relational data on the reported perceptions of the influence of colleagues’ advice on the work of teachers is presented. For each network of relationships, the structure of the network is examined using the network measures of centralisation and density of ties. Then, the network is examined at the actor level using the in-degree centrality measure to identify key advice givers and the most prominent actors. The results of the survey data were corroborated with interview data and selected excerpts are taken from interviews with participants to support the results.

The analysis of survey data using the method of ONA investigates the first three research questions. The analysis was guided by the same questions as in the formal interactions. Additionally, this section includes an analysis of participants’ perceptions of the impact of the advice received from colleagues on their work.

5.3.1 Teaching Mathematics Advice and Information Network

In investigating the question of who (which colleague) provided advice, Figure 12 assists in identifying this in the Mathematics Team. Further, it is possible to identify
how often advice and information related to teaching Mathematics was provided. This is illustrated in the sociogram below.
Figure 12
Sociogram of Frequent Advice Givers in Teaching Mathematics Informal Network

LEGEND

<table>
<thead>
<tr>
<th>Color</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purple</td>
<td>HOC Maths</td>
</tr>
<tr>
<td>Red</td>
<td>Leading Teacher</td>
</tr>
<tr>
<td>Green</td>
<td>Supporting Teacher</td>
</tr>
<tr>
<td>Blue</td>
<td>Integrated Facilitator</td>
</tr>
</tbody>
</table>

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Structure of Network

In the sociogram, the most frequent advice giving interactions were determined using a tie strength $\geq 3$; indicating actors sought advice and information once or twice per month or more. Table 9 tabulates network measures for the general advice and information relation, then for the dimensions of teaching and learning, and perceived influence relation. We can compare the density and centralisation of each network.

Table 9
Descriptive and other Statistics of the Informal Networks in Mathematics Team

<table>
<thead>
<tr>
<th>Network/Relation</th>
<th>Network Structure</th>
<th>In-degree</th>
<th>Key Advice Givers</th>
<th>Most Prominent Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Centralisation</td>
<td>Density</td>
<td>Mean</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Std Dev</td>
<td></td>
</tr>
<tr>
<td>Mathematics Team</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Frequency)</td>
<td>19</td>
<td>33.97</td>
<td>4.08</td>
<td>6 100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.69</td>
<td>7 100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 1 0</td>
</tr>
<tr>
<td>Five Dimensions</td>
<td>14.36</td>
<td>21.15</td>
<td>2.53</td>
<td>5 83</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.08</td>
<td>5 71</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 2 1</td>
</tr>
<tr>
<td>Curriculum Planning</td>
<td>25.72</td>
<td>24.35</td>
<td>2.54</td>
<td>5 100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2.53</td>
<td>5 71</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 2 1</td>
</tr>
<tr>
<td>Content Knowledge</td>
<td>11.36</td>
<td>17.61</td>
<td>4.38</td>
<td>0 3 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.98</td>
<td>0 3 1</td>
</tr>
<tr>
<td>Teaching Approaches</td>
<td>20.45</td>
<td>20.51</td>
<td>0.84</td>
<td>0 1 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.86</td>
<td>0 1 3</td>
</tr>
<tr>
<td>Assist Low Perform Students</td>
<td>15.15</td>
<td>7.69</td>
<td>2.92</td>
<td>1 1 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.07</td>
<td>1 1 1</td>
</tr>
<tr>
<td>Assessment</td>
<td>20.45</td>
<td>11.53</td>
<td>1.46</td>
<td>1 2 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.01</td>
<td>1 2 1</td>
</tr>
<tr>
<td>Influence</td>
<td>20.36</td>
<td>26.92</td>
<td>1.92</td>
<td>6 100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.07</td>
<td>7 100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 1 1</td>
</tr>
</tbody>
</table>

*Network Centralisation:* The Teaching Mathematics advice and information network had a centralisation score of 19%, suggesting there is a low degree of concentration or centralisation in this whole network. The team network centralisation measure implies that there is a decentralised leadership pattern in this network, that is, leadership is distributed among many actors in this network. This decentralised pattern is different from the formal meeting networks which were highly centralised.
Network Density: In terms of the frequency of ties, the network density is 33.97%. This suggests that approximately a third of all possible communication occurs once or twice per month (frequently). This implies that there is limited communication in respect of sharing advice and information among members. The density score was quite similar to the density scores in the formal meeting networks.

Key Advice Givers

The in-degree scores of $\geq 2$ (arrows coming in towards actor) were used to identify the key advice givers.

In-degree centrality

In this network, all thirteen actors were identified as key advice givers. Iris and Dan had the highest in-degree scores, providing advice frequently to six actors in the network (refer to Figure 13). This was followed by Jess and Nat providing advice frequently to five actors; and Bill, Leah, Kate and Ria providing advice to four actors. The other actors provided advice frequently to three actors, except for Sean who provided advice frequently to two actors.

Frequent Advice Givers According to Role: In terms of role positions, all six formal leaders; and all seven STs/IFs frequently provided advice; with the latter emerging as informal leaders (Table 9). The frequency of advice and information interactions revealed that all formal leaders provided advice to STs/IFs as well as to fellow formal leaders. It also revealed that all STs/IFs emerged as informal leaders. The interactions in terms of role positions suggests that despite the organisational hierarchical positions of actors, advice and information was frequently provided by actors regardless of their position in the team or organisation. These interactions also indicate that there is a degree of reciprocity in the frequency of advice and information exchanges among actors within specific role positions and across role positions.

Central and Peripheral Actors: In addition to the identification of key the advice givers in the Mathematics team, the use of the sociogram provided a picture of the extent to which the formal leaders provided advice as well as their centrality in relation to informal leaders. As discussed earlier, Iris and Dan are most central. One other formal leader, Jess, is less central in the network; however, three other formal leaders (Bill,
Leah, and Kate) occupy a peripheral position; suggesting they participate to a lesser extent in the advice giving interactions (contributing to the low network density score discussed earlier). Bill and Leah are very experienced senior teachers and Kate has had five years of teaching experience, thus their peripheral position suggests their expertise in the team is underutilised. This could also be inferred from their involvement in leadership in some of the meeting networks as well as in the dimensions of teaching and learning networks to be discussed later. Furthermore, the three formal leaders are less centrally positioned in the network as compared to one ST (Nat); suggesting the latter is viewed a source of expertise and accessed frequently by more team members when compared with some formal leaders.

**Most Prominent Actor(s):** Whilst thirteen actors frequently provided advice, some actors are more prominent than others. The mean in-degree score was 4.08 with a standard deviation of 1.69 (Table 9). When using the decision rule of identifying the most prominent leaders as those who had a greater than one standard deviation above the mean (i.e. a score ≥ 5.7), Iris and Dan were identified as the most prominent leaders in this relation; suggesting they were considered particularly prominent actors providing advice to team members most frequently in this network. The prominence of these two actors points to a multiple, formal leadership configuration, that is, the formal leader (HOC) is regarded as a prominent actor but the role is shared with another formal leader (LT).

On the question of who participants’ turn to for advice and the reasons why they do so, the prominence of the HOC as a frequent provider of direction and motivation is captured by a LT in the excerpt below taken from an interview:

> I think Iris is one of the many people that I make contact with often. She’s been a big driver. The HOC. So she’s been a big driver of how we should be delivering. Giving a suggestion or two about curriculum planning, teaching resources and assessment. She’s been the main driver. Yeah.
> [INT 15: 01-12-2009]

The prominence of the LT, Dan, as a frequent advice giver in aspects such as demonstrating concepts and explaining teaching methods is illustrated in the following extract taken from an interview with a ST:
...I go to Dan a lot and ask him about how he explains and demonstrates concepts. We share what we did with the students to explain or demonstrate a concept. I would then trial the method normally something for Mathematics. Much of the curriculum advice I from him seek is around what content is important and why this is important. We also share ideas about integrating ICT with the subjects we teach.

[INT 15: 01-12-2009]

In sum, the low team network centralisation score of 19.53% indicates a decentralised pattern of team leadership, that is, frequent advice and information giving is distributed among many actors in this network. Whilst the network centralisation score suggests that advice and information giving is a distributed phenomenon, the network density of 33.97% suggests that only one third of all possible communication occurs frequently. In terms of role positions, all formal leaders and informal leaders provided advice frequently. The centrality scores also indicate the most prominent actors are the HOC and a LT, and points to a multiple, formal leadership configuration. The network position reveals, on the one hand, three formal leaders are most central and three formal leaders occupy a less central position. On the other hand, one informal leader is more central compared with some of the formal leaders.

5.3.2 Dimensions of Teaching and Learning

The next area of interest was the advice and information received in the dimensions of teaching and learning: content knowledge, curriculum planning; teaching approaches; assisting low performing students; and assessment.

Five Dimensions of Teaching and Learning Network

In investigating the question of who (which colleague) provided advice and information all five dimensions, Figure 13 assists in identifying this in the Mathematics Team. Further, it is possible to identify the number dimensions advice and information related to teaching Mathematics was provided. Leadership involvement was determined using a tie strength ≥ 2, indicating the actor provided advice and information in two or more dimensions. This is illustrated in the sociogram below.
Figure 13
Sociogram of Five Dimensions of Teaching and Learning in Mathematics Team Informal Network

LEGEND

<table>
<thead>
<tr>
<th></th>
<th>HOC Maths</th>
<th>Leading Teacher</th>
<th>Supporting Teacher</th>
<th>Integrated Facilitator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Structure of network

*Network Centralisation:* The Dimensions of Teaching and Learning relation of the Teaching Mathematics network had a centralisation score of 14.36% (Table 9) which was much lower than the frequency network. This suggests that there is a very low degree of concentration or centralisation in this network. In terms of leadership, the team network centralisation measure implies that there is a decentralised pattern of leadership. That is, leadership is distributed among many actors in this network.

*Network Density:* Whilst leadership is decentralised, the network density suggests that the advice and information communication is sparse in this network. The density in this network was 21.15% (Table 9); much lower than the frequency network. This means in the Five Dimensions of teaching and learning network, approximately one fifth of all possible communication is occurring.

**Key Advice Givers**

*In-degree centrality*

Of the thirteen actors in this network, ten actors were identified as key advice givers. Iris, Dan and Nat had the highest in-degree score, each providing advice in more than two dimensions to four actors in the network (see Figure 12). This was followed by Leah, Jess, Hugh and Ria who each provided advice to three actors. Each of Kate, Brad and Sean provided advice to two actors. Three actors, Bill, Owen and Josh had an in-degree of one and were therefore not considered as key advice givers.

*Key Advice Givers According to Role Position:* In terms of role positions, five (83%) formal leaders; and five (71%) STs/IFs were identified as key advice givers (Table 9); with the STs/IFs emerging as informal leaders. The Five dimensions of teaching advice and information network revealed that the five formal leaders provided advice to STs/IFs as well as to fellow formal leaders. Furthermore, the five STs/IFs emerged as informal leaders; suggesting that despite the organisational hierarchical positions of actors, advice and information was frequently provided by actors regardless of their position in the team or organisation. These interactions also indicate that there is a degree of reciprocity in the frequency of advice and information exchanges among actors within specific role positions and across role positions.
Central and Peripheral Actors: Most formal leaders occupy a less central position in this network. Whilst two formal leaders (Iris and Dan) are most central (as well as one informal leader), two LTs (Leah, Jess) occupy a less central position, one LT (Kate) occupies a peripheral position; and one LT occupies a very peripheral position. The less central to peripheral position of these leaders suggests that they participate to a lesser extent in the advice giving interactions. This low level of advice giving communication was also reflected in the low network density score discussed earlier as well as in the low in-degree scores (between 1 to 4). The low level of participation implies that their expertise is underutilised, particularly when one looks at Jess who was quite central in the frequency network, and Kate and Bill who were very central in the formal meeting networks. Moreover, these three leaders are less centrally positioned in the network as compared with a ST (Nat) who occupies an equally central position with the HOC and a LT, Dan. Furthermore, STs and IF (Ria) occupy a more central role when compared to LT (Bill) who occupies a peripheral position in the network. The network position of these STs/IFs suggest that they are viewed a source of expertise by more team members when compared with some of the formal leaders.

Most Prominent Actor(s): The mean in-degree centrality score was 2.53 with a standard deviation of 1.08 (Table 9). When using the decision rule of identifying leaders as those who have a greater than 1 standard deviation above the mean (i.e. a score ≥ 3.61), Iris, Dan and Nat were identified as the most prominent leaders, providing advice to more colleagues two or more dimensions of teaching and learning. Thus, the dimensions of teaching and learning relation points to a hybrid leadership pattern with multiple, formal and informal leadership configuration, that is, the HOC is regarded as a prominent actor; but the role is shared with another formal leader (LT) as well as an informal leader (ST). The prominence of ST, Nat, is illustrated in the following extract taken from an interview with the HOC:

... Nat Friend. Nat is not only willing to make change she’s also a doer. She’ll listen at a meeting she’ll take it on board. She’ll go away and write something and go what do you think about this. She doesn’t just come with complaints.
[INT 21: 09-12-2009]

In sum, the low team network centralisation score of 14.84% suggests a decentralised pattern of team leadership. That is, team leadership through advice and information giving in the various dimensions of teaching and learning, is not centralised. Instead it is
distributed among many actors in this network. However, whilst the network centralisation score suggests that advice and information giving is a distributed phenomenon, the network density of 21% suggests that only one fifth of all possible communication occurs in this network. The centrality scores revealed that the most prominent actors in this network were the HOC, a formal leader, and a teacher that emerged as an informal leader, thus pointing to a \textit{multiple, formal and informal} leadership configuration. The network position reveals that, on the one hand, two formal leaders are most central, three formal leaders occupy an intermediate position, while one formal leader is quite peripheral. On the other hand, one informal leader occupies a central position together with the HOC and LT and other informal leaders are more central compared with some of the formal leaders.

5.3.2.1 Specific Dimensions of Teaching and Learning
The practice of leading teaching and learning in which colleagues interacted with one another was also examined as a specific dimension of teaching and learning. Each dimension is regarded as a specific network relation so as to identify the most prominent actor(s), the configurations of leadership, and analyse the network position of actors. In investigating the question of who (which colleague) provided advice and information in each dimension, Figures 14 to 18 assists in identifying this in the Mathematics Team\textsuperscript{2}.

\textsuperscript{2} Enlarged sociogram illustrations are provided in Appendix B.
Figure 14: Sociogram of Curriculum Planning Network in Maths Team

Figure 15: Sociogram of Content Knowledge Network in Maths Team

Figure 16: Sociogram of Teaching Approaches Network in Maths Team
Figure 17: Sociogram of Assisting Low Performing Students Network in Maths Team

Figure 18: Sociogram of Assessment Network in Maths Team

LEGEND

- HOC Maths
- Leading Teacher
- Supporting Teacher
- Integrated Facilitator
**Most Prominent Actor(s)**

The sociogram and statistical data helped to identify the most prominent leaders and the leadership configuration in each dimension of teaching and learning.

In the *curriculum planning* network, Iris was identified as the most prominent leader that provides curriculum planning advice and information to team members. Thus, the curriculum planning relation points to *focused, formal leadership* configuration, that is, the formal leader (HOC) is regarded as a prominent actor.

In the *content knowledge* network, Dan, Jess, Kate, and Hugh were identified as the most prominent leaders that provide content knowledge advice and information to team members. Thus, the content knowledge relation points to an *alternate, formal and informal leadership* configuration, that is, formal leaders (LTs) are regarded as prominent actors; but the role is shared with another informal leader (ST). The expertise of team members is captured in the following extract taken from an interview with the HOC in relation to the question of who she goes to for advice:

> Jess has been a teacher in senior school. Very analytical mind and willing to promote change. ..... ... my go to person for just about everything in Mathematics would be Kate, again because those people we think we think more alike. Cos Mathematics teachers, this is what I’ve discovered, Mathematics teachers their left brain logic is totally opposite to my creative side so there’s another level of debate. I find these people to have more of the creative side and understand Mathematics from my perspective …
> [INT 21: 09-12-2009]

The prominence of Hugh is illustrated in the following extract of an interview with a LT:

> Who do I attribute that change to is having Hugh next door has been really good for both of us … Just because we’re good mates away from work. We’ve known each other and to land a job working next to each other we’re able to de-stress at the end of the day, get stuff off our chest. You know I can say to him I did this and it worked really well this didn’t work so well. He’ll say I did this and this not so well. So we can bounce ideas off each other and yeah like we talk to each other every day like at school out of school at home whatever.
> [INT 13: 30-11-2009]

In the *teaching approaches* network, Dan, Hugh, Nat and Ria were identified as the most prominent leaders that also provide advice and information to team members related to teaching approaches. Thus, the teaching approaches relation points to an *alternate, formal and informal leadership* configuration, that is, a formal leaders (LT) is regarded as a prominent actor; but the role is shared with three other informal leaders (STs and IF).
In the *assisting low performing students*’ network, Dan, Iris and Ria were identified as the most prominent leaders that provide advice and information to team members related to assisting low performing students. Thus, the assisting low performing relation points to a *multiple, formal and informal leadership* configuration, that is, the formal leader (HOC) is regarded as a prominent actor; but the role is shared with another formal leader (LT) as well as an informal leader (IF).

In the *assessment* network, Iris, Dan, Jess and Nat were identified as the most prominent leaders that also provide advice and information to team members related to assessment. Thus, the assessment relation points to a *multiple, formal and informal leadership* configuration, that is, the formal leader (HOC) is regarded as a prominent actor; but the role is shared with other formal leaders (LTs) as well as an informal leader (ST).

In sum, upon closer examination of each dimension, the centrality scores revealed various team configurations; with various actors rising to prominence in specific networks. The assisting low performing students and assessment network points to a *multiple, formal and informal leadership* configuration with the HOC, LT, and ST appearing as most prominent; the content knowledge and teaching approaches networks point to an *alternate, formal and informal leadership* configuration with LTs and STs/IFs appearing most prominent; whilst the curriculum planning network points to a *focused, formal leadership* pattern with the HOC being the most prominent actor in the network.

### 5.3.3 Influence of Advice Network

The last relation of interest in this study of informal interactions is the influence (as reported by participants) of advice and information on the work of colleagues. In investigating the question of who the influential advice givers are, Figure 19 assists in identifying this in the Mathematics Team. Further, it is possible to identify how influential these actors are in terms of advice and information provided related to teaching Mathematics. The more influential advice giving interactions were determined using a tie strength $\geq 3$; indicating actors providing advice and information related to teaching Mathematics had a strong to very strong influence on the work of colleagues. This is illustrated in the sociogram below.
Figure 19
Sociogram of Influence Network in Mathematics KLA Team

LEGEND

- HOC Maths
- Leading Teacher
- Supporting Teacher
- Integrated Facilitator
**Structure of network**
The more influential advice giving interactions were determined using a tie strength $\geq 3$; indicating actors had a strong to very strong influence on the work of colleagues.

*Mathnet Centralisation:* The influence relation of the Teaching Mathematics network has a centralisation score of 20.36% (Table 9). This suggests that there is a low degree of concentration or centralisation in this whole network. In terms of leadership, the team network centralisation measures implies that the influence of leadership is not centralised among one or few actors but distributed among many actors in this network. Whilst the network centralisation score of the influence network is low, it is higher than the scores of the Teaching Mathematics (frequency) network as well as the Dimensions of Teaching and Learning network.

*Network Density:* The network density is 26.92% (Table 9), a score that lies between the density scores of the frequency network and Five Dimensions of teaching and learning. The density score of the influence network suggests that approximately one quarter of all possible relations are characterised by a strong perceived impact of advice on the work of colleagues.

**Influential Advice Givers**
In the interactions in the Mathematics team, the use of the sociogram enabled the identification of roles and advice givers. The in-degree scores of $\geq 2$ (arrows coming in towards actor) were used to identify the influential advice givers.

*In-degree centrality*
In this network, all thirteen actors had a strong influence on the work of colleagues. Iris, and Ria have the highest in-degree score, each having a strong to very strong influence on the work of five actors in the network (see Figure 18); followed by Jess who has a strong influence on four actors. Each of Leah, Brad, Josh, and Dan has a strong influence on three actors. This is followed by Bill, Kate, Hugh, Owen, Nat, and Sean who each have a strong influence on two actors.

*Influential Advice Givers According to Role:* In terms of role positions, all six formal leaders; and all seven STs/IFs were perceived to have a strong to very strong influence on the work of colleagues (Table 9); with the STs/IFs emerging as informal leaders.
The influence network revealed that all six formal leaders influenced STs/IFs as well as fellow formal leaders. It revealed that the five STs/IFs emerged as informal leaders. This suggests that despite the organisational hierarchical positions of actors, the influence of actors on the work of colleagues occurs in the network, regardless of their position in the team or organisation. These interactions also indicate that some actors have a reciprocal influence on the work of each other.

**Central and Peripheral Actors:** In addition to the influential leaders in the Mathematics team, the use of the sociogram enabled the identification of less central to peripheral actors; providing a picture of the extent to which the formal leaders were influential, as well as their centrality in relation to informal leaders. Whilst all formal leaders are influential advice givers, the network position reveals that two formal leaders (Iris and Jess) as well as an IF (Ria) are most central. Two LTs (Leah and Dan) occupy a less central position, whilst two formal leaders (Bill and Kate) occupy a peripheral position. The less central to peripheral position suggests that these LTs have a lesser degree of influence on the team members which could be attributed to them being an underutilised source of expertise. This could be inferred from the number of missing ties, as reflected by the low density score discussed earlier. On the other hand, the central position of some informal leaders, particularly IF, Ria, (as well as some other informal leaders) suggest that they are viewed as being influential by more team members when compared with some formal leaders.

**Most Prominent Actor(s):** Whilst the in-degree scores indicate all thirteen actors are perceived to have a strong to very strong influence on the work of colleagues, some actors were perceived to be more prominent than others. The mean in-degree of the influence network was 3 with a standard deviation of 1.17 (Table 9). When using the decision rule of identifying leaders as those who have a greater than 1 standard deviation above the mean (i.e. a score ≥ 4.17), Iris, Ria and Jess were identified as the most influential leaders in the Maths KLA team. Thus, the influence relation points to a multiple, formal and informal leadership configuration. That is, the formal leader (HOC) is regarded as a prominent actor; but the role is shared with another formal leader (LT) as well as an informal leader (IF).
The influence of the advice received from Iris and Ria is described in the excerpt below taken from an interview with a LT:

Iris has introduced me to effective curriculum planning through backward mapping. The templates she developed are good, easy to use. Her review and advice helps to develop quality criteria sheets for assessing tasks and student portfolios. She is keen about investigations and the Polar Fresh excursion. The workshops she organised were also very useful. ... When I heard about rotations that Iris was doing then I asked Iris and I asked Ria how they do their rotations. So Iris told me an English version how she does it in the English classes and Ria told me what she does in her Mathematics classes. Ria has also shared some very good resources with teachers.

[INT 12: 25-11-2009]

The LT then explained how the advice received changed her practice, which then impacted positively on student outcomes, as illustrated in the extract below:

I’ve seen kids think of Mathematics differently. I’ve seen kids solve problems differently because before when we started doing the formatting of our exams you know how the formatting of our exams changed. Before it was all just plain knowledge based questions and then some problem solving but they were not categorized. But then it all changed. We had knowledge processes and communication so most of the time you’ll only have maybe a handful of kids who pass all three sections. Majority of them will fail but like to turn to last term the kids were passing the process and communication section. They were doing better and I saw the grades they were getting they were much better like from Ds they were getting Cs or Bs. From Es they were getting Cs …

[INT 12: 25-11-2009]

Whilst network data revealed the LT had a strong influence mostly on the experienced teachers, interview data revealed that she was also strongly influential on two less-experienced teachers. Her influence is captured in the following extract taken from an interview with a ST.

Jess is a learning leader. She has helped me become organised and enabled me to also incorporate a senior school approach to teaching as well as behavior management of students, especially after observing her teaching.

[INT 15: 01-12-2009]

In sum, the influence of advice and information relation centralisation score of 20.36% indicates a distributed pattern of team leadership, that is, the influence of advice and information giving, is not centralised in the team. Instead many actors in the team have an influence on the work of their colleagues. However, whilst the network centralisation score suggests that influence is distributed, the network density of 26.92% indicates that only quarter of all possible influential communication is occurring. The centrality scores revealed that the most prominent actors in this network were two formal leaders and one informal leader, pointing to a multiple, formal and informal leadership configuration, similar to all dimensions of teaching and learning network. The network position
reveals that, two formal leaders and one informal leader are most central. Furthermore, some informal leaders are more central compared with some of the formal leaders.

Summary of Part Two

The results of the study of the Mathematics team revealed the team networks were highly decentralised in the informal interactions; however there were generally low densities of communication among participants. The study found leadership was provided by formal as well as informal leaders, pointing to a hybrid pattern of leadership with various configurations. Most networks, including the frequency of contacts and influence of advice and information, indicated a *multiple, formal and informal leadership* configuration, with leadership provided by two to four prominent leaders, whilst the curriculum planning network indicated a *focused, formal leadership* configuration, with the HOC being the sole prominent leader. In terms of the extent to which formal leaders provided advice, the study found more formal leaders provided advice to colleagues in the informal interactions than they did in the formal interactions. In some networks some formal leaders occupied central positions, whilst others tended to occupy peripheral positions. On the other hand, some informal leaders tended to be more central than some formal leaders; suggesting some informal leaders were seen by more colleagues as a source of expertise than some of the formal leaders. This pattern was evident not only in the dimensions of teaching and learning networks but also in the influence network. Most participants perceived that the advice and information received from the HOC, an IF, and a LT had the strongest influence had the strongest impact on their teaching. This pointed to a *multiple, formal and informal* leadership configuration. Table 10 provides a summary of the most prominent actors and the leadership configurations.
Table 10
Summary of Most Prominent Actors and Leadership Configurations in Mathematics Team

<table>
<thead>
<tr>
<th>Network</th>
<th>Most Prominent Actors</th>
<th>Leadership Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics KLA Team (Frequency of advice)</td>
<td>Iris, Dan</td>
<td>Multiple, formal leadership</td>
</tr>
<tr>
<td>Five Dimensions of Teaching and Learning</td>
<td>Iris, Dan, Nat</td>
<td>Multiple, formal and informal leadership</td>
</tr>
<tr>
<td>Curriculum Planning</td>
<td>Iris</td>
<td>Focused, formal leadership</td>
</tr>
<tr>
<td>Content Knowledge</td>
<td>Dan, Jess, Kate, Hugh</td>
<td>Alternate, formal and informal leadership</td>
</tr>
<tr>
<td>Teaching Approaches</td>
<td>Dan, Nat, Hugh, Ria</td>
<td>Alternate, formal and informal leadership</td>
</tr>
<tr>
<td>Assisting Low Performing Students</td>
<td>Iris, Dan, Ria</td>
<td>Multiple, formal and informal leadership</td>
</tr>
<tr>
<td>Assessment</td>
<td>Iris, Dan, Jess, Nat</td>
<td>Multiple, formal and informal leadership</td>
</tr>
<tr>
<td>Influence</td>
<td>Iris, Jess, Ria</td>
<td>Multiple, formal and informal leadership</td>
</tr>
</tbody>
</table>

5.5 Summary of Chapter

This chapter began, in Part One, with an introduction to the Mathematics KLA team by providing the profile of team members, and their roles and responsibilities. In the analysis, first, an organisational network approach was employed to analyse the formal interactions in team meetings. The network measures of team network centralisation and density were used to determine the structure of the network; and the degree of distribution of advice giving and thus leadership in the team. Network measures of indegree were used to identify key advice givers and most prominent actors in the team, and determine the extent to which formal leaders provide advice and information. Then, a CA approach was used to analyse the meeting talk data. In Part Two, an organisational network approach was used to analyse the informal advice and information interactions. The same network measures used for the formal interactions were also employed to analyse the informal interactions. The study found the meeting networks were highly centralised among a few actors in the formal networks; however the informal networks were decentralised. There were low densities of leadership communication in both
formal and informal interactions. The Mathematics team displayed a hybrid leadership pattern with focused formal leadership provided by the HOC, in some situations, and multiple formal and informal leaders in other situations. In enacting leadership, leaders proffered advice mostly when recipients asked for information or opinion or when recipients disclosed or identified a problem. Advice was also proffered when unsolicited; occurring mostly in the form of advisor volunteers’ advice or information. Participants used a range of interactional resources to accomplish the task of ‘doing leadership’. The most common resource used was the self-reference “we”, the epistemic marker “I think” and “I don’t know”; and question-answer adjacency pairs.

The results of the study in this chapter indicate a strong alignment between ONA findings and CA findings. First, the high centralisation scores corresponded with the few prominent actors leading discussion in team meetings. The most prominent advice givers and influential actors identified using ONA were the key leaders in talk-in-interaction, whereas actors occupying peripheral positions in sociograms participated to a lesser extent in meeting talk. Second, the low density scores corresponded with the low frequency of communication evident in the minimal level of participation of some formal leaders (and other team members) in team meetings.

In the next chapter, the analysis of data related to advice and information interactions of the English KLA team is undertaken.
CHAPTER SIX
PRESENTATION, ANALYSIS OF DATA AND RESULTS
ENGLISH KEY LEARNING AREA (KLA) TEAM

6.0 Introduction

This chapter, presented in two parts, provides the analysis and results of the data collected in this study of leading teaching and learning through advice and information interactions in the English Key Learning area (KLA) team. I first provide a brief summary of the results. In Part One, the profile of the membership of the team is first presented and elaborated. Then, the analysis of the formal interactions through meeting talk data is undertaken, first using ONA and then using a CA approach. In Part Two, the social network survey data of the informal interactions is analysed using ONA.

Similar to the Mathematics KLA team, the results of the study of the English team revealed the team networks were highly centralised among a few key actors in the formal interactions; however, the networks were less centralised in the informal interactions. Except for the higher degree of leadership communication involving the prominent actors, in both the formal and informal interactions, there were generally low densities of communication among participants. Unlike the Mathematics team, the study found only formal leaders were most prominent advice givers in the formal interactions; however, both formal and informal leaders were prominent in the informal interactions, pointing to a hybrid pattern of leadership with various configurations.

In team meetings, leaders’ actions focused mainly on curriculum planning, introducing functional grammar into the English curriculum, assessment planning, alignment of curriculum and assessment, and moderation of marking of student work. In ‘doing leadership’, the corpus of meeting talk data revealed formal leaders proffered advice in various sequences. There were instances where advice was solicited or perceived as solicited. Whilst there was only one instance in which the recipient explicitly asked for advice, in 28 instances advice was proffered when recipients asked for information or opinion; in 6 instances advice was proffered where recipients disclosed or identified a problem; and where recipients announced a plan. Advice was also proffered when
unsolicited. There were 11 instances where the advisor volunteered advice; 18 instances where the advisor volunteered information; and 1 instance where the advisor identified a problem and proffered advice. The corpus of meeting talk data also revealed participants used a range of interactional resources to accomplish the task of ‘doing leadership’. The most common resource used was the self-reference “we”; suggesting a team approach to decision making and planning; ‘the way we do things here’. The second most common interactional device used was the epistemic marker “I think”, being used in 65 instances. Question-answer adjacency pairs were identified in 20 instances across the four meetings. The epistemic marker “I don’t know” was used in 16 instances. Other discursive tools used included formulations, teaching replay and teaching rehearsals, reported speech, prosody, and three-part lists. Furthermore, participants employed facilitation/co-facilitation as well as artefacts to accomplish the task of ‘doing leadership’.

In the following sections, I present a detailed analysis of the data in the study of the formal and informal advice and information interactions in English KLA team. I first present a profile of members of the team.

**Part One**

**6.1 Profile of Team**

The English KLA team comprises thirteen members including Liz, a formally designated leader whose position is HOC, another HOC; five positional leaders called LTs; four STs and two Integrated Support Staff Teachers (ISSTs). Table 11 provides a summary of the profile of the team members.
Table 11
Profile of Members of the English KLA Team

<table>
<thead>
<tr>
<th>ROLE</th>
<th>PSEUDONYM</th>
<th>GENDER</th>
<th>TEACHING EXPERIENCE</th>
<th>PERIOD WITH TEAM</th>
<th>SPECIALISED AREAS OF TEACHER PREPARATION</th>
<th>CURRENTLY TEACHING</th>
<th>OTHER TEACHING EXPERIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formal Leaders</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head of Curriculum</td>
<td>Liz</td>
<td>F</td>
<td>25 years</td>
<td>1 year 4 months</td>
<td>Music</td>
<td>English, Music &amp; Technology (Textiles)</td>
<td>Senior school teaching</td>
</tr>
<tr>
<td></td>
<td>Iris</td>
<td>F</td>
<td>17 years</td>
<td>1 year 4 months</td>
<td>English &amp; Human Movement Studies</td>
<td>English &amp; Health and Physical Education</td>
<td>Senior school teaching</td>
</tr>
<tr>
<td>Leading Teachers</td>
<td>Jen</td>
<td>F</td>
<td>34 years</td>
<td>1 year 4 months</td>
<td>English, History &amp; Geography.</td>
<td>English &amp; SOSE</td>
<td>Senior school teaching</td>
</tr>
<tr>
<td></td>
<td>Judy</td>
<td>F</td>
<td>27 years</td>
<td>1 year 4 months</td>
<td>Primary school teaching</td>
<td>English &amp; SOSE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tom</td>
<td>M</td>
<td>30 years</td>
<td>1 year 4 months</td>
<td>German, Studies of Society &amp; Business Administration.</td>
<td>English &amp; SOSE</td>
<td>Senior school teaching</td>
</tr>
<tr>
<td></td>
<td>Ross</td>
<td>M</td>
<td>1 year 6 months</td>
<td>3 months</td>
<td>English &amp; SOSE</td>
<td>English &amp; SOSE</td>
<td>Senior school teaching</td>
</tr>
<tr>
<td></td>
<td>Eva</td>
<td>F</td>
<td>9 months</td>
<td>9 months</td>
<td>English &amp; SOSE (Middle years of schooling)</td>
<td>English &amp; SOSE</td>
<td></td>
</tr>
<tr>
<td><strong>Informal Leaders</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supporting Teachers</td>
<td>Beth</td>
<td>F</td>
<td>18 years</td>
<td>1 year 4 months</td>
<td>Primary school teaching</td>
<td>English &amp; SOSE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ange</td>
<td>F</td>
<td>5 years</td>
<td>1 year 4 months</td>
<td>English &amp; Drama</td>
<td>English &amp; SOSE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gwen</td>
<td>F</td>
<td>1 year 6 months</td>
<td>1 year 4 months</td>
<td>English &amp; SOSE (Middle years of schooling)</td>
<td>English &amp; SOSE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nell</td>
<td>F</td>
<td>9 months</td>
<td>9 months</td>
<td>English &amp; SOSE (Middle years of schooling)</td>
<td>English &amp; SOSE</td>
<td></td>
</tr>
<tr>
<td>Integrated Support Staff Teachers</td>
<td>Pam</td>
<td>F</td>
<td>5 years</td>
<td>1 year</td>
<td>English, SOSE, Science &amp; HPE (Middle years of schooling)</td>
<td>English</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jill</td>
<td>F</td>
<td>2 years 6 months</td>
<td>9 months</td>
<td>Primary school teaching</td>
<td>English</td>
<td></td>
</tr>
</tbody>
</table>

Note: Except for the Head of Curriculum, whose role has been designated by the State Education Department, all other roles have been designated by the school.
Roles and Responsibilities

Head of Curriculum

In the middle school, Liz is one of the four Heads of Curriculum (HOC) that, together with the sub school Principal and Deputy Principal, make up the middle school leadership team. Her teacher professional education was in Music, a subject that she has been teaching during her 25 years as an educator. Since transferring to the school in 2004, Liz’s role has changed over the years. Initially, she was POD HOC, overseeing the New Basics (NB) Curriculum planning and teaching. NB was adopted by the school prior to changing to a KLA curriculum framework. Later she was responsible for overseeing Interdisciplinary curriculum planning and teaching. During the time of this study, she was responsible for leading the English KLA team; a role delegated to her since the introduction of the QCAR Framework in 2008. The Curriculum role of the HOC was outlined in Chapter Five. As HOC of the English KLA team, one of Liz’s roles involves presiding as the chairperson at the team meetings. Beside her curriculum responsibilities, Liz is also responsible for overseeing a POD of teachers, student welfare and managing student behaviour. She is also a member of the whole college Futures leadership team. Iris (Mathematics HOC) is another member of this team. At the time of this study, Iris taught English, and Human and Physical Education.

Leading Teachers and Supporting Teachers

In their POD environment, teachers work in pairs, each teacher teaching at least two classes. When the school reviewed its curriculum programme in 2008, the school leadership team created a structure of LTs and STs. In the English team, teachers were asked to nominate as either LT or ST in their PODS. All LTs are paired with a ST except for Ross, whose teaching partner is the HOC, Liz. The Responsibilities of LTs and STs were outlined in Chapter Five.

Integrated Support Staff

Two members of this team, Pam and Jill, are Integrated Support Staff Teachers (ISSTs). The main role of the ISSTs teachers involves providing support to students with special educational needs. Such support includes working closely with the HOC and teachers to develop Individual Education Plans (IEPs); and scaffolding and making adjustments to assessment tasks. These ISSTs teach one class of English each.

In the next section, the analysis of the formal interactions is undertaken.
6.2 The Formal Advice and Information Interactions and Leadership

This section presents an analysis of the formal interactions of participants in three meetings of the English KLA team. In the second meeting under analysis, a small episode of a sub-group meeting (grade level team meeting) is included in the analysis to illustrate relevant aspects of the practice of leadership, including the changing roles between leader and follower and interactional devices used by leaders. The analysis first adopts an ONA approach. Each meeting constitutes a separate network. First, the structure of the network is examined at the team level using the team network centralisation and density scores. Second, at the actor level, the central actors in the network are identified as key advice givers and most prominent actors. The analysis also examines the extent to which the formal leaders provide advice and information. Then, using CA, a fine-grained analysis of the advice and information interactions related to the relevant meeting topic is undertaken.

In this section, I present the analysis of observation data using the method of ONA.

A. Organisational Network Analysis

In investigating the question of who (which colleague) provided advice, the sociograms assists in identifying this in the English Team. Further, it is possible to identify how often advice and information related to teaching English was provided. This is illustrated in the sociograms below (Figures 20-22).
Figure 20

Sociogram of English Team Meeting One Network

LEGEND

- **Leading Teacher**
- **Supporting Teacher**
Figure 21
Sociogram of English Team Meeting Two Network
Figure 22
Sociogram of English Team Meeting Three Network

LEGEND
- Yellow: HOC English
- Red: Leading Teacher
- Green: Supporting Teacher
- Blue: Integrated Support Staff Teacher
Structure of the Network
The more frequent advice giving interactions were determined using a tie strength $\geq 2$; indicating actors provided advice and information two times or more per meeting. Table 12 tabulates network measures for the advice and information network for each of the meetings. We can compare the centralisation and density of the network.

Table 12
Descriptive and other Statistics of Formal Networks in English Team

<table>
<thead>
<tr>
<th>Network</th>
<th>Network Structure</th>
<th>In-degree</th>
<th>Key Advice Givers</th>
<th>Most Prominent Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Centralisation</td>
<td>Density</td>
<td>Mean</td>
<td>Std Dev</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Meeting One</td>
<td>100</td>
<td>28.57</td>
<td>1.71</td>
<td>2.49</td>
</tr>
<tr>
<td>Meeting Two</td>
<td>71.4</td>
<td>44.44</td>
<td>3.55</td>
<td>3.97</td>
</tr>
<tr>
<td>Meeting Three</td>
<td>98.18</td>
<td>18.18</td>
<td>2</td>
<td>4.04</td>
</tr>
</tbody>
</table>

Network Centralisation
The network data indicates a centralised pattern of leadership in the formal interactions. The network centralisation scores of the meetings networks were high, with the lowest being 71.4% and highest being 100%. The high centralisation scores suggest that leadership of teaching and learning through advice and information is centralised among a few actors in the English KLA team meetings.

Network Density
Whilst the network centralisation score indicates the degree of centralisation or decentralisation, network density scores provide an indication of how dense leadership is. In the formal interactions, the network density scores for each of the meetings were low, with the lowest being 18.8% and the highest being 44.44%. These low scores suggest that advice giving communication is lower than the maximum possible amount of communication. This means that leadership is sparse.
**Key Advice Givers**

In the interactions in the English KLA team, the use of the sociogram enabled the identification of roles and advice givers. The in-degree scores of $\geq 2$ (arrows coming in towards actor) were used to identify the key (frequent) advice givers.

**In-degree centrality**

In the three meetings, the in-degree scores were between 6 and 11. In Meeting One, Jen and Judy had scores of 6 each, indicating they each provide advice to 6 actors, whilst the others had null in-degree scores. In Meeting Two, Liz, Ross, Eva and Jen had in-degree scores of 8. In Meeting Three, Liz and Ross had in-degree scores of 11, whilst Eva and Zoe had scores of 1. The rest of the actors had null in-degree scores (Refer to Figures 19-21).

Frequent advice givers according to role: In the formal interactions, between 40% and 80% of the key advice givers were formal leaders across the three meetings; whilst none of the STs/ISSTs emerged as key advice givers (Table 12). This suggests that despite the organisational hierarchical positions of actors, advice and information was frequently provided by actors regardless of their position in the team or organisation. These interactions also indicate that there is a degree of reciprocity (see red lines in the sociogram) in the frequency of advice and information exchanges among actors within specific role positions and across role positions. However, the non-emergence of informal leaders in this more hierarchical network was quite different from the Mathematics team networks where informal leaders emerged from the ranks of STs/IFs and the heterarchical leadership pattern of the Mathematics team also included a greater degree of reciprocal ties among actors in the network.

Central and Peripheral Actors: In addition to the identification of the key advice givers in the English team, the use of the sociogram provided a picture of the extent to which the formal leaders provided advice as well as their centrality in relation to informal leaders. In the formal interactions, the HOC and three LTs occupied a more central position, whilst between one to three LTS occupied a peripheral position. In the first meeting, two LTs (Jen and Judy) were most central, whilst two other formal leaders (Tom and Eva) occupied a peripheral position in the network. In the second meeting, the HOC (Liz) occupied the most central position, whilst three LTs, Ross, Eva, and Jen also
occupied central position. However, their position is a little less central than the HOC. One interesting observation is that whilst Eva occupied a peripheral position in the previous meeting network, she occupied a much central role in this network; indicating the role of leader and follower are interchangeable, depending on the situation. A further observation is that one other LT (Tom) also occupied a peripheral position in this network. In the third meeting, Liz and Ross occupy the most central positions. One LT (Eva) occupied a peripheral position, whilst two other LTs (Judy and Tom) formal leaders occupy a very peripheral position. The peripheral positions of these leaders suggest that they participate to a lesser extent in the advice giving interactions. This low level of participation was also reflected in the low network density score discussed earlier. The low level of participation, particularly of the peripheral formal leaders, implies that their expertise is underutilised; particularly Tom and Judy who are very experienced teachers, whilst Eva is a ‘newcomer’ (see Table 11). This is an interesting observation since Eva was very central in the Meeting Two network and Judy was very central in the Meeting One.

Most prominent Actor(s): Whilst there were a few key advice givers in the formal interactions, some actors were more prominent than others; and their varied prominence pointed to a hybrid leadership pattern with various configurations of leadership. In Meeting One, the mean in-degree score was 1.71 with a standard deviation of 2.49 (Table 12). When using the decision rule of identifying the most prominent leaders as those who have a greater than 1 standard deviation above the mean (i.e. a score ≥ 4.2), both Jen and Judy were identified as the most prominent leaders providing advice and information in respect of teaching nominalisation. Thus, the Meeting One network points to an alternate, formal leadership configuration, that is, LTs are regarded as most central actors. In Meeting Two, the mean in-degree score was 3.55 with a standard deviation of 3.97; Liz, Ross, Eva and Jen were identified as the most prominent leaders (i.e. a score ≥ 7.52). In Meeting Three, the mean in-degree score was 2, with a standard deviation of 4.04 and both Liz and Ross were identified as the most prominent leaders (i.e. a score ≥ 6.04). Thus, the Meeting Two and Meeting Three networks point to a multiple, formal leadership configuration; that is, the HOC is central, but the role is shared with other formal leaders (LTs).

In sum, the frequency of contacts in meeting networks indicated that the team networks were highly centralised among a few key actors in the formal interactions; and there
were generally low densities of communication among participants. The study found leadership was provided by formal leaders, nonetheless, pointing to a hybrid pattern of leadership. A multiple, formal leadership configuration was found in two meetings with leadership provided by a group of formal leaders (the HOC and three LTs in the second meeting) and a pair of formal leaders (HOC and a LT) in the third team meeting. In the absence of the HOC an alternate, formal leadership configuration emerged where leadership was provided by a pair of prominent formal LTs.

In the next section, the analysis of meeting talk using CA is undertaken.

B. Conversation Analysis of Meeting Talk

6.2.1. English KLA Team Meeting One

Context
There are seven teachers of English present at the meeting held in a room in the school resource centre (library). In the absence of Liz, Jen assumes the role of chairperson of the meeting, introducing the topic of functional grammar. Jen stands at the front of the room close to the white board. Judy stands at the side of Jen near the laptop computer (on trolley). The other teachers are seated on chairs.

Topic: Functional Grammar
The episode of meeting talk in this section was selected to demonstrate the practice of formal teacher leadership in this team. In the absence of the HOC, a LT assumes the role of chairperson, leading the meeting in solo for most parts but also facilitating a professional development session with another prominent leader, co-leading at certain points in the meeting. This episode was also selected to demonstrate leadership of curriculum and pedagogy in team meetings through advice and information giving/receiving sequences where the advisor identifies a problem and volunteers’ advice to address the problem. In this episode participants used a range of interactional resources; thus, a third reason for the selection of this episode is to demonstrate the leaders use of teaching replays, prosody, artefacts, and co-facilitation to accomplish the task of ‘doing leadership’ in the context of teacher team meetings.
**Introducing the topic: Functional Grammar**

The interactions in this extract reveal Jen enacting leadership in curriculum by assuming the role of chairperson, introducing the topic of Functional Grammar. She provides teachers with information about a five-day Literacy professional development (PD) programme that she and Judy attended. Jen explains to teachers that despite being intensive and exhausting, she found parts that were very useful. We join the conversation where Jen opens up the meeting after pre-meeting chat between teachers.

**Extract 4a: “there’s a couple of bits that just felt useful”**

[EM1: 04/08/09: 03'24"-04'34'"]

1. Jen: okay people (.). let’s go (.) let’s go (.) FUNCTIONAL grammar (.). Beth (.). here (.). ahm (.). I went to the first five day one that most of you are going to get to go to (.). after that I felt as though okay I’ve dipped my toe in something (.). now what do I do with it ahm (.). the one that Judy and I went to then in swiney week (.). ahm (.). by Wednesday (.). by Wednesday our heads were done in (.). we’re driving home ((making sounds goa goa)) ahm they said we’d come out the other side=

11. Judy: =the manual is [about that thick] ((starting the laptop computer))

13. Jen: ={knowing something} (.). and we did come out the other side (.). there’s a couple of bits that just felt useful (.). I mean (.). there was a lot of theory to it (.). but the bits immediately that felt useful (.). one of them is (.). there’s quite a few little bits (.). but the one that I’ve started with (.). with two of my classes is (.). oh log out and log in Again

21. Gwen: no there’s actually a drive network drive icon on your laptop (.). so close that

In this extract, Jen begins her turn with “okay” (line 1), which signals a close in previous talk and a shift to a new topic (Beach, 1993) of “functional grammar” (line 1). Jen thus orients to the role of chairperson and proceeds to provide relevant information that she and Judy attended the “first five day” (line 3) PD programme and the rest of the teachers “are going to get to go” (lines 3-4) to the programme. In her assumed role as chairperson, Jen attempts to ‘sell’ the idea of the programme. She begins by outlining a positive outcome was that after the programme she felt as though she had “dipped [her] toe into something” (line 5). She then outlines some of the challenges she faced. In this regard, she acknowledges that the programme was quite intensive by saying that “by Wednesday our heads were done in” (lines 7-8). Judy also highlights the intensity of the programme with information that “the manual is about that thick” (lines 11-12). Jen then continues with the positives of the programme, stating that “there’s couple of bits
that felt useful” (Lines 14-15). She then indicates a further issue was that “there was a lot of theory to it” (lines 15-16). Jen ends the turn with a repetition of the positive outcomes by repeating that there were bits that felt useful; this time saying that “there’s quite a few little bits” (lines 17-18); and informs teachers that she has started to use these with two of her classes.

It could be inferred that in her assumed role of chairperson, Jen promotes the idea of the PD programme as beneficial for her as well as teachers who are yet to do it. In so doing, she is also ‘selling’ the idea that the discussion that is forthcoming in this meeting would be useful to teachers and will not be very intensive as it will focus on the useful ‘bits’. Jen continues the idea of ‘selling’ the PD programme by highlighting its importance and relevance to the problem of student writing, as illustrated in the extract that follows.

**Presenting a case for teaching nominalisation**

*Extract 4b: “it’s a really good way for … our kids who have babyish writing”*

[EM1: 04/08/09: 05'16"- 05'53"]

In this extract, Jen takes up her turn with “okay” (line 46) to close previous talk by participants on the topic of logging onto computers; and informs teachers that “the bit” (line 46) that she has been “doing is nominalisation” (line 46) which she explains involves making words into nouns. She describes nominalisation as “easy peasy” (line 48) and then asks a rhetorical question “why bother” (line 48). She answers the question beginning with the discourse marker “but” (line 49) to highlight the contrast (Fraser, 1998) that nominalisation appears to be something simple but has the benefit of helping students with “babyish writing” (line 50).

Jen’s description of the writing of students as “babyish” (lines 50) suggests that there is a problem with students writing in English. The description of student writing as
“babyish” is repeated in line 51 but this time it is prefaced by the exclamation “oh”. Schiffrin (1987) argues that *oh* creates a joint focus for attention; it marks a focus of speaker’s attention, which then also becomes a candidate for the hearer’s attention. This allows transitions in information management and marks information as being more salient. In this same turn Jen then volunteers her advice that nominalisation is a “really good way for our kids who have babyish writing” (lines 51); adding that it “can just make them think” (lines 52-53); emphasising the word “think”. Goldsmith (2000) describes advice that immediately follows the giver’s observation of an action he or she views as problematic as *advisor volunteers’ advice*. In the advice and information interactions that follow, using various interactional resources, Jen enacts leadership in pedagogy as she shares with teachers the approach she has used to teach nominalisation.

**Demonstrating teaching using interactional resources**

In advising teachers, Jen deploys several interactional devices including teaching replays and teaching rehearsals, direct reported speech, prosody and the use of student artefacts. The following extracts illustrate the use of teaching replays, prosody and the use of student artefacts.

**Teaching replays**

One of the interactional resources that Jen uses is teaching replays (Horn, 2010) as illustrated in the following extract.

**Extract 4c: “I know you can’t you”**

[EM1: 04/08/09: 05'53"- 07'30"]

53. Jen: them (0.2) think (.) one example is (.) ahm one of the
54. boys in grade seven (0.2) the sentence was just (.)
55. →
56. Hamish is strong (.) and they had to nominalise strong
57. (. to make it the strength (.) so when they changed
58. the sentence around and the kids said (.) oh the
59. strength (0.2) ah the boys strength and then he
60. realised he had to >finish it off with something< (.)
61. the boy’s strength is phenomenal (.)>I said EXCELLENT
62. you’ve picked it up okay that’s a better sentence< (.)
63. that’s more interesting (.)>he said< yeah (.) but I
64. wouldn’t have done that (.) in my writing (.)>I said<
65. (. I know but you can (.) can’t you (.)>he said yeah
66. but I wouldn’t have thought of it< (.>I said Ned >but
67. now you can think of it< (. so the words are in their
68. heads (. most of them (. the vocabulary is there}
In this extract, Jen continues her turn, providing an example of how she taught nominalisation. Using the device of teaching replay, she recounts a specific classroom event by presenting “blow-by-blow renderings of interactions” (Horn, 2010) with a student. In this extract, Jen uses “one example” (line 52) and replays the dialogue between herself and a student (lines 52-66); illustrating to colleagues how she used nominalisation to help a student improve his writing of sentences and make them more interesting. She refers to herself as “I” throughout the extract and refers to the student as “you” (lines 61, 64, 66). She recounts success of the student and her compliment to him with “excellent you’ve picked it up” (line 60-61). Then she recounts the student’s views that he wouldn’t have done that in his writing to which she replied “I know you can’t you” (line 64). Thus, the extract illustrates Jen, replaying her successful teaching of nominalisation using an example of a dialogic exchange between herself and a student. Jen also employs other interactional resources that complement the use of teaching replays.

**Direct Reported Speech and Prosody as interactional resources**

One of the other interactional resources employed to recount the dialogic exchange is direct reported speech (DRS). Jen uses reporting verbs “I said” and “he said” (for example in lines 60 and 62); animating and doing ‘voices’ (Couper-Kuhlen et al., 1998) that alternate between hers and those of a student. As discussed in the previous chapter, using DRS has many benefits. In this instance, it shows the interactional resource also presents a speaker with a broad range of expressive possibilities (Vasquez & Urzua, 2009). In this extract, Jen deploys prosodic devices to cue the voice of speakers. First, she reports using her teacher ‘voice’ and second, she animates the figure of the student using a ‘school-boy-like voice’ (Couper-Kuhlen et al., 1998). Both the both voices are set off prosodically from Jen’s framing talk by features such as changes in tempo (faster speech, for example, in “I said” and “he said” in lines 60 and 62), frequent short pauses, and change in loudness (for, example, “EXCELLENT” in line 60). Couper-Kuhlen et al. (1998) maintain that the choice of prosodic device for cueing the voice of a figure is part of the recipient design of a speaker’s talk. In reported speech sequences, the goal is often to present figures with a particular ‘take’ (p.14). Thus, the delivery features of the reported speech are signs that Jen is not just relating the account, but she is also evaluating these positions, aligning herself with a particular position; that is, nominalisation is an approach to help students improve their thinking and ultimately, their writing.
Vasquez and Urzua (2009) maintain direct representation of speech constitute important resources for the construction of teacher identity. Thus teachers’ direct reports of their own speech, foregrounds their sense of self, their accomplishments and expertise. It can also be inferred the extract reveals the account constructs Jen’s identity as an effective teacher. The use the word “excellent” (line 60) to evaluate the response of the student and quotes the student as saying “but I wouldn’t have thought about it” (line 65) suggests student learning was a positive outcome of her teaching of nominalization; that is, it leads the hearer to infer that that student’s ability to complete the sentence was a direct consequence of the classroom instruction. This serves the purpose of highlighting her effectiveness and expertise as a teacher. Following the example of the dialogic exchange between Jen and the student, she uses teaching rehearsals as ‘practice lessons’ (Horn, 2010) as an interactional resource to enact a teaching scenario.

Whilst Jen facilitates the professional development session in solo for most parts of the meeting, the function of leadership is also performed by Judy, assuming the role of co-facilitator. This suggests that leadership in this team meeting is stretched across multiple leaders as illustrated in the extract below.

Co-facilitation as an interactional resource

Using a question as a prompt, Judy involves herself as co-facilitator, informing teachers of some important aspects of the topic of nominalisation.

Extract 4d: “have you said why is nominalisation important to do”

[EM1: 04/08/09: 09’46“- 10’49”]

135. sentences around so they looked better (.). moving
136. further further up and along
→ 137. Judy: have you said why is nominalisation important to do↑
→ 138. Jen: ahm yeah (.). because (.). because of that (.). that’s
139. what I said (.). moving from spoken up here to
140. ((pointing to poster))to the more written style [of
141. writing]
→ 142. Judy: [and
143. also wi]th nominalisation you can actually fit far
144. more (0.2) ahm information (.). into a sentence↑=
145. Jen: Yeah
146. Judy: =ahm without having to keep swapping↑(.) into different
147. parts of a sentence↑ (.). you can actually ha-
148. Jen: =I haven’t done any of that (.). building (.). yet (.).
149. up in the classes (.). I haven’t done any of that
→ 150. Judy: that’s the main purpose of nominalisation (.). being
151. more factual and to be able to write (.). a lot more
152. information clearly and succinctly in sentences
In this extract, Judy begins her turn with a prompt by asking Jen if she has “said why nominalisation is important to do” (line 137). Jen responds by saying that she has; and goes on to point to a poster on Mode explaining that students need to be “moving from spoken up here to the more written style of writing” (lines 138-141). In the overlap speech by Judy and continued turn, Judy adds that “with nominalisation you can actually fit far more … information into a sentence” (lines 143-145). She adds that the main purpose of nominalisation is “being more factual and to be able to write a lot more information clearly and succinctly in sentences” (line 150-151). This extract reveals that Judy co-facilitates the PD session; however Jen assumes the role of primary facilitator. This co-facilitation illustrates that leadership is a distributed phenomenon in the team. The facilitatory participation framework continues as Jen uses an artefact to demonstrate the teaching and student learning as discussed below.

Artefacts as an interactional resource
As facilitator, Jen builds on the earlier discussion using various artefacts. In the extract that follows, Jen uses a sample of student work to illustrate her approach to teaching nominalisation. First, the sample of work is presented in Figure 23.

Figure 23
Sample of Student Work
The extract below reveals the conversation among interactants on the sample of work; and also illustrates the use of artefacts as an interactional resource.

*Extract 4e: “it’s not a great piece of writing … it’s a bit mature you know”*

[EM1: 04/08/09: 11'35"-14'00"]

190. (.ahm where they write a recount (.).) so yes she did
191. start writing a recount (..) exactly that (..) the
192. highlighted words are suggestions that could be
193. nominalised† (..) the circles were just you know (.)
194. boring words (..) see what you can do (..) okay so just
195. have a look at the first the first one (..)there’s
196. still work that could be done on it (..) [and then the
197. second one]
198. Judy: [did you
199. highlight and] circle or did the child highlight and
200. Circle
201. Jen: no no I did (..) yeah
202. Judy: Okay
203. Jen: I don’t know if they’re up to finding their own yet
204. Judy: yep yep
205. (.4)
206. Jen: once you start changing something (..) then you have to
207. think of how (..) oh okay >what do I really want to try
208. and say< (..) have to think of something to end it (.)
209. ahm (..) so the process of doing it (..) ahm
210. (.8)
211. Jen: yeah so I mean it’s still not (..) it’s still not a
212. great piece of writing (..) however (0.2) you know (.)
213. it’s getting [a bit more]
214. Eva: [getting them] started
215. Jen: yeah it’s a bit more mature you know (..) a bit more
216. moving up here from >we went to the beach we
217. packed the car we had an ice cream and blab la bla<
218. (..) it’s moving up (..) along here {{pointing to
219. poster}) (..) she’s only in grade seven
220. Judy: yeah
221. Jen: and that’s about all I want to say about it except I
222. just I think it’s going to be a useful tool (..)

In this extract, using the student sample, Jen explains to teachers that the student has written a “recount” (line 191). She points out that the highlighted words are suggestions of words that can be nominalised, “and the circles were just you know boring words” (line 193). This could be inferred as strategies suggested by Jen that teachers could use in their teaching. There are longer pauses of 0.4 seconds (line 205) and 0.8 seconds (line 210) between conversations illustrating that teachers’ use the time to view the sample of work and asks questions on the work (e.g. Judy - line 198). Jen takes up her turn again in line 211 to explain that whilst “it’s not a great piece of writing however it’s getting a bit more”. This personal assessment of the student work by Jen is followed by the overlapping talk in line 214 where Eva completes Jen’s sentence with “getting them
started”. Jen agrees with Eva (“yeah” in line 211) and adds it’s a “bit more mature” (line 215); justifying that it is good enough since it is written by a grade seven student. Judy’s “yeah” (line 221) indicates agreement that it is acceptable work from a grade seven student.

Ormrod (2005) maintains that students and teacher’s artefacts provide viable connections to real-world classroom contexts. Such artefacts have the benefit of connecting theory and practice. Artefacts can also provide windows into instructional strategies; and give teachers valuable practice in assessing student’s work. Teachers that look at student work have a much better understanding of how students are thinking, and therefore more likely to change the approach they take in the classroom (Seago, 2009). Thus, the artifact of student work presented by Jen to teachers has the benefit of teachers seeing the outcome of teaching and possibly learning how to teach students the topic of nominalisation so that students can produce more mature writing.

In the talk that follows, Jen also elaborates on other aspects discussed at the PD where functional grammar could be used, e.g. Genre Mapping, and concludes the meeting.

In sum, meeting talk revealed that a LT assumed role of chairperson and facilitated a PD session for teachers in the team. Identifying a problem in the ‘babyish’ writing of students, the LT volunteered advice and information on the teaching of functional grammar, introducing the teachers to the topic of nominalisation, providing teachers with resources and a sample of student writing task she had done with her class. In advising teachers of strategies through which nominalisation can be taught, the LT employed teaching replays and rehearsals; reported speech; prosody, and the use of artefacts to accomplish the task of leading teaching and learning in the team. Whilst the chairperson was the main facilitator and advice giver for most parts of the session, she did not lead alone. The meeting was co-facilitated by another LT who uses prompts to remind Jen to discuss some relevant aspects of teaching nominalisation, and informed teachers of the importance of nominalisation; resources available, and the storage thereof. Thus, leadership in this team is stretched across multiple formal leaders. This configuration of formal leadership was also evident but was expanded to include HOC in the next meeting of the English team that was observed.
6.2.2. English Team Meeting Two

**Context**
There are twelve people present at this meeting held in the school library after students have been dismissed for home. The attendance comprised Liz, the HOC; nine teachers; and two preservice teachers. The meeting is chaired by Liz. The main topic discussed was the Queensland Comparable Assessment Task (QCAT).

**Topic: Planning for QCAT**
This episode of meeting talk was selected to demonstrate the leadership practice of the formal leaders; that is, the HOC and a LT. It was also selected to demonstrate the dissemination of relevant and vital information and advice is volunteered during a team meeting and the use of interactional resource of extraction and formulations. A third reason for the selection of this episode was to demonstrate that whilst the HOC leads the meeting in large parts in solo, other teachers also lead teaching and learning in this team.

As chairperson, Liz begins by checking the meeting attendance of teachers. She points out there are two teachers on playground duty, and the other HOC, Iris, will not be present (she is at the meeting of the Mathematics team – FN 08-09-2009). Liz then introduces the topic, QCAT, providing teachers of grade nine classes with a *QCAT English Teacher Guidelines* booklet and proceeds to provide teachers with relevant information on the QCAT.

**Introducing relevant information**
It will be recalled, in the Mathematics meetings, there were several instances in which the HOC provided or disseminated vital and relevant information on teaching and learning. Similarly, in the English team meetings, the HOC provided information on the QCAT as illustrated in the extract below.
In this extract, Liz informs teachers about the relevant aspect of the task. She describes the nature of the task as “appreciate an ad” (line 91). Jen latches onto Liz’s turn in line 93 and makes the suggestion that “we should run down to the common room” and informs teachers that the newspaper has photographs. Eva also informs the participants that she has seen these resources. Liz attempts to close their discussion with “okay” (line 101 and 104). However, Jen continues her turn. Liz orients to the role of chairperson, takes up the turn, redirecting their attention with “anyway let’s just quickly look at the task (.) they then get the next section where they then get the next section where they have to prepare their own advertisement (.) and then they have to reflect on the advertisement so there are three stages in the two hour test (.) so if you go back to where we started off it was page number (0.2)

In the talk that follows, Liz presents Iris’s (who is at the Maths team meeting) idea of linking activities in preparation of students for the QCAT to the Film Study Unit, proposing film advertising as the main activity. This proposal is accepted by the team.
Whilst Liz successfully advances the idea using authoritative and the influential non-present other (Richards, 2006); in the subsequent talk she employs the interactonal resource of the self-reference “we” in respect of the approach to be decided for the moderation of student work. This suggests that Liz adopts a consultative and collective approach to decision making in this team. However, presenting information on the various approaches, Liz, states that she does not want to take any more time on the topic, thus deferring decision making, and suggesting that teachers read through the QCAT booklet and digest the information. Thus, no decision is made on the approach to be adopted for moderation, and the topic then shifts to the due date for completing the marking of student responses. The closure of the topic on approaches to moderation without a decision enables Ross to later return to the topic, illustrating the notion of multiple leaders in this team. Ross proposes that teachers work in pairs to moderate student work.

We join the conversation where Liz presents an alternate proposal:

**Alternate Proposals: Extraction as an interactional resource**

**Extract 5c: “well I think”**

[EM2: 08/09/09: 25'39"- 26'35"]

558. Beth:  [isn’t it]
559. Liz:  [well I think]
560. Ross:  [well no] I’m just (...) I’ve done it that way before in moderation
561. Liz:  w- I’m actually thinking that we would (...) in (.) Jacaranda mark together
562. Ross:  ‘yeah’
563. Liz:  we’d actually take (...) whatever group we get↑
564. Ross:  ‘yeah’
565. Liz:  ahm even though I’ve only got seven kids but I think (...) probably my (...) our two classes (...) I think (...) my feeling is that (...) if you got nines in it (...) like we’re all in pairs (...) then probably (0.2) it’s just too hard (0.2) to separate (...) you know if Ross had a class of I don’t know how many (...) if you had all the nines then it’ll probably be impossible (...) that my eight nine (...) my group of eight nine would actually just do the task with them (...) [the preparation]
567. Jen:  [(cough)]
568. Beth:  [yeah]
569. (0.2)
570. Liz:  [but] when it comes to marking it (...) we’d share it (...) and we’d probably talk to (...) sit together and do the first few (...) together
to that’ll be best<
571. Ross:  yeah (...) yeah† (...) and then we would actually have a (.) common (.) [understanding] about [(what it’s like)]
572. Jen:  [consensus]  >[I like the idea] of working in pairs like that< (.) yeah
In this extract, Liz then takes up the turn, and begins her turn with “well” (line 559) overlapping with Beth’s talk. The use of the word *well* suggests that she disaligns herself from Ross’s idea; and a dispreferred response is forthcoming (Clift, 2001). She uses “*I think*” (line 559) which functions as a hedge which speakers use to avoid disagreement. In an overlap with Liz’s turn, Ross’s use of *well* counters the claim (Clift, 2001) by Beth that somebody would have to scan it and he justifies his proposal using his previous experience by stating he had done this before. Liz “reworks” (Schegloff, 2007) the proposal to present an alternate proposal. She states that she’s “actually thinking” (line 562) that they would mark together in Jacaranda, taking up Ross’s idea of working in pairs. Her use of “actually” displays that the idea she is about to propose is potentially informative and contrasts with the one that preceded it (Clift, 2001).

An interesting observation in this extract is Liz’s shift from “*we*” need to decide, as indicated in previous extracts and discussion, to “*I think*” (line 576) and “I’m actually thinking” (line 579). Lerner and Kitzinger (2007) point out that in talk-in-interaction speakers move from individual self-reference form to collective self reference form and vice-versa; deploying interactional resources referred to as extraction and aggregation. In the case of extraction, speakers extract themselves from previously voiced collectivity, for example from “*we*” to “*I*”. This can be seen in the extract above. Lerner and Kitzinger (2007) maintain that extraction is employed to narrow authority – the interactant extracts individual (epistemic) authority, moving from “*we*”, the organisational voice, to “*I*”, the own voice, whilst at the same time serving as a representative of the organisation. In this instance, Liz uses her authority to gain support and commitment from Ross (and the overhearing audience).

However, Liz reformulates Ross’s proposal, presenting one where teachers work in pairs to mark the student responses (as opposed to Ross’s suggestion of moderating in pairs). Ross acknowledges Liz’s proposal with the softly spoken token “yeah” (lines 564 and 566), which is an indication for the speaker to continue. Liz continues her turn and explains how it will work; proposing that since teachers are already working in pairs; the pairs sit together and mark the first few together. Ross responds that he agrees with the idea indicating “that’ll be best” (line 583). Liz goes on to explain such an approach has the benefit of developing a common understanding. Eva and Jen indicate that they like the idea, pointing out it has the benefit of reaching consensus at the initial
stage of ‘doing moderation’. Liz then presents the proposal using formulations as an interactional resource as illustrated in the extract that follows.

**Gaining Commitment: Formulation as an interactional resource**

*Extract 5d: “so how do people like the idea of working in pairs”*

[EM2: 08/09/09: 26’35”- 26’45”]

587. Eva: >[I like the idea] of working in pairs like that< (. ) yeah
→ 589. Liz: so how do people like the idea of working in pairs to mark↑
590. Jen: that’s fine
→ 592. Ross: yeah (. ) so maybe you are (thinking of it as) marking buddies (laughter))
→ 594. Liz: marking buddies (. ) so you can check in with each other (. ) [and] then we got our=
595. Beth: [yeah]
597. Liz: =then [we can]
598. Ross: [and so you got your
→ 599. Beth: I think I’ll be more confident

In this extract, Liz then presents the reformulated proposal to participants with the question “so how do people like the idea of working in pairs to mark” (lines 589-590). Ross also agrees with the idea, describing this approach as “marking buddies” (lines 592-593). Liz repeats Ross’s utterance of “marking buddies” adding a further rationale for the method being “so you can check in with each other” (line 594-595). Beth indicates that she “will be more confident” (line 599). Thus, Liz gains collective support for the reformulated proposal; using the ideas and opinions of teachers as “decision-making fodder” (Barnes, 2007, p. 292) to accomplish the task of ‘doing leadership’ in assessment, and bringing the meeting to a close.

Whilst this episode indicated advice and information exchanges occurred in respect of decision making related to approaches to moderation, an analysis of the enactment of the moderation process following this meeting revealed two more powerful interactional resources related to professional learning used by the HOC. This moderation occurred in a sub-group; a grade level team moderation meeting. Whilst this is not a full KLA team meeting, I provide a justification for its inclusion below.
English Grade Level Team Meeting (EGLTM)

Context
There are seven people present at this moderation meeting chaired by Liz. Teachers have brought along the student responses that they have graded.

Topic: QCAT Moderation
This episode was selected to illustrate advice giving is a reciprocal process in this team; the HOC leads moderation of assessment; however she discloses a problem, asks for advice and becomes a recipient of advice. In this episode, the HOC uses two other interactional devices in disclosing the problem, “I don’t know” in conjunction with questions. This episode was selected to illustrate that the role of advisor and advisee are interchangeable, depending on the situation. It also illustrates how participants’ opinions and information are collaboratively crafted in solving the problem disclosed by the HOC but also experienced by team members. We first examine and analyse questions as one of the powerful devices employed in leadership of teaching and learning.

*Question-Answer adjacency pairs as an interactional resource*
It will be recalled questions and the use of “we” were one of the most frequently used resources in the interactions of participants. In this episode, the HOC uses questions extensively to gather information, seek clarity, and teacher opinion to arrive at a common understanding of a concept that is problematic. We join the conversation where Liz discloses a problem and asks for advice.

*Extract 6a: “I had real trouble … is that what you consider to be generic”*
*[EGLTM: 19/10/09: 10'58"- 12'07"]*

128. Judy: [I haven’t got any at the bottom yet  
129. but I] haven’t done=
→ 130. Liz: =I had real trouble with question five (.) you know (.)
131. so they got a D for a text and visuals have a generic
132. environmental (.) message
133. Judy: yeah because I found that I had to (.) do a (.) half way
134. like this
((… lines 135 to 143 talk omitted…))
→ 144. Liz: see this was an example ((looks at sample of student
145. work))(. ) like for instance this one here (.) you know
146. (.) that’s the kind of generic thing (.) I’ve got a
147. rubbish bin (.) I’ve got trees
148. Eva: yeah (.) I’m seeing a lot of that
→ 149. Liz: is that what you consider to be (0.4) [generic]
In this extract, Liz informs teachers that she “had real trouble with question five” (line 130), a question which was related to the poster giving a message that is generic. In her advice giving typology, Goldsmith (2000) describes this sequence as recipient discloses a problem; and is consequently followed by advice giving. Jefferson and Lee (1981) describe such talk as ‘troubles talk’. Liz then produces a sample of student work, points out what the student has produced (lines 144-147); and asks teachers “is that what you consider to be generic” (line 149). Ange responds with “well its generic” (line 150). Well indicates hesitance; and suggests that she is not totally convinced it is generic. Judy responds with a continuer “mhm” (line 151); however, there is a four tenth of a second pause (line 152); and Judy then produces a sample of work. Liz repeats the difficulty she had deciding and seeks clarification of the concept, ‘generic’. The teachers offer their interpretations and Liz persists with questioning to make sense of the concept as illustrated in the following extract.

**Extract 6b: “so what does generic mean”**

[EGTM: 19/10/09: 17’15”- 18’17”]

293. Eva: so you=
→ 294. Liz: so what does generic mean
→ 295. (0.4)
→ 296. Judy: have no connection with the school
→ 297. (0.4)
→ 298. Ange: Mmm
→ 299. Ange: [generic means]
→ 300. Judy: [that don’t don’t] talk to school students in particular
→ 301. Liz: so generic environmental message (.) cos litter is
→ 302. Eva: that’s generic
→ 303. Judy: yes it is (.) but if they specifically targeted the
→ 304. school students that makes it not generic anymore (.) I don’t know
→ 305. Liz: no that’s right (.) I don’t know either (.) what’s the
difference between (.) relevant (.) relevant to the
→ 308. school or generic (.) what’s the difference
→ 309. Judy: I think generic is to do with not not specific[ally for
→ 310. th]e school not [specifically CCC]
→ 311. Ange: [a specific] audience
→ 312. Beth: [as in clean up your] world
→ 313. Ange: I think it’s just a non specific audience
→ 314. Judy: Yeah
→ 315. Ange: it doesn’t mean it’s not specific to school (.) it just
→ 316. means a non specific audience

In this extract, Liz returns to the problem she disclosed but this time with a question, seeking clarity by specifically asking, “so what does generic mean” (line 294). This is
followed by a pause that is 0.4 of a second (line 295). Judy then answers the question with “have no connection with the school” (line 296). This is followed by another pause that is 4 tenth of a second (line 297) and then a continuer “mmm” by Ange in line 298. Ange’s starts to talk in line 299 to explain what generic means. In the overlapping talk, Judy expands her explanation of generic with “that don’t don’t talk to school students in particular” (line 300). In the next turn, Liz begins with “so” (line 301), and asks if litter is a generic environmental message. Eva responds with “that’s generic”. Judy indicates agreement with Eva and goes on to explain that if it specifically targets the school students then it does not make it generic. However, she downgrades her advice with “I don’t know” (line 304-305). Liz takes the next turn and says “no that’s right” referring to Judy’s interpretation that if it specifically targets the school students then it does not make it generic. However, she also says “I don’t know either” (line 306) and questions the difference between “relevant to the school” and “generic”. Judy takes the next turn explaining “I think generic is to do with not not specifically for the school” (line 309-310). In an overlapping talk with Judy, Ange explains that generic means not targeting “a specific audience” (line 311) and goes on to explain further that “it doesn’t mean it’s not specific to school, it just means a non specific audience” (line 315-316). In the talk that follows, there is collective agreement among participants that the sample is generic; indicating an understanding of the concept of generic which they then are able to apply to make judgment as illustrated in the extract below.

**Extract 6c: “I will give that a B”**

[EGLTM: 19/10/09: 19’08”– 19’17”]

341. Ange: oh we got A ((looking at sample of work))
342. Liz: oh you got an A
343. Eva: imagine if this school was a pig sty (.). that’s a B
344. Liz: this one is= ((looking at sample of work))
345. Eva: can we practice environmental week (.). so that’s=
346. Ange: =that’s a C
347. Eva: that’s a C and it’s not anything to do with that school environment
348. Ange: but it’s relevant to the school
349. Eva: it’s relevant to the school but it’s generic (.). that’s
350. Eva: a general environmental message
→ 352. Beth: I will give that a B (.). so like (.). I’m going down [as well]

In this extract, participants look at samples of students work. The teachers start to bring down the grades, for example, Eva disagrees with the grading of the sample graded A, indicating it is a B (line 343). However, she agrees with Ange that the sample that Liz
refers to is a C (line 347). Beth, on the contrary, Grades the sample as a B (line 352); and in the talk that follows there is agreement with Beth.

This episode illustrates the HOC facilitating moderation of student work; however, she is not the sole leader. Instead, multiple teacher leaders provide advice to the HOC and each other. To accomplish the task of ‘doing leadership’, in addition to using artefacts of student work, the HOC extensively uses questions as an interactional resource. She uses information seeking questions to get feedback from teachers on their marking; and on a concept the she did not understand. Related to this problematic concept, she uses opinion seeking questions. In reporting on her marking, she discloses a problem that she had; and asks teachers for their opinion of the grade she gave the sample of work. Teachers respond giving their opinions. However, still not happy with the responses, Liz seeks clarity on the concepts of “generic”. Teachers provide answers which conflict with each other; until one teacher clarifies the concept. There is collective agreement and teachers proceed with to moderate the samples of student work with more confidence and accuracy in judgment.

“I don’t know” as an interactional resource

In this episode, in addition to using questions, one other interactional resource used by the HOC, is “I don’t know”. It will be recalled that this device was also used by the HOC, Iris, in the Mathematics team meeting; however each HOC used this device differently. In the above extracts Liz states that she does not know what ‘generic’ means. As discussed earlier, she also uses questions to ask teachers for information and their opinion on the word ‘generic’. In these instances, the use of “I don’t know” has the function of indicating declaration of insufficient knowledge, which could be attributed to the lack of expertise in the subject led by the Liz. This is similar to the situation presented in the Mathematics meeting where Iris used “I don’t know”; an indication of insufficient knowledge. However, each HOC used “I don’t know” differently. Whilst Iris uses “I don’t know” was preceded and followed by rhetorical questions, as well as volunteering her advice; Liz uses “I don’t know” in conjunction with asking teachers for information and opinion also using questions as an interactional resource. In so doing, Liz extracts information and the opinions of teachers in the interactions; an action which did not occur in the Mathematics meeting.
In sum, meeting talk revealed that the team leader plays a prominent role, leading in solo for most parts, providing vital and relevant information without it being solicited by team members. The episode on Planning for QCAT illustrated that decision making interactions are characterized by the exchanges of advice and information. Speakers employ “we” as an interactional resource to decision making, thereby indicating that decision making is a collective action and a shared phenomenon in this team. The team leader attempts to adopt a consultative approach; involving team members in the decision making process in respect of the approach to be adopted in the process of moderation. She asks for teachers’ opinions, and three LTs (formal leaders) express their opinions on the moderation model and influence decision making. One ST proposes a mixture of two models. After much deliberation, the HOC brings the topic to a closure without a decision being made. Instead, she advises teachers to read and understand the guidelines. A LT reopens the discussion on the approach to moderation, proposing working in pairs. This proposal is ‘reworked’ in the form of marking in pairs and the formulation is presented by the HOC and accepted by teachers. The episode on moderation also illustrated that leadership in this team is exercised by multiple leaders. Upon disclosing a problem with a concept, declaring “I don’t know”, the HOCs seeks information, opinion and clarity from teachers; illustrating the powerful use of questions as a resource for professional learning and that the role of leader and follower is interchangeable, depending on the situation. These two episodes show, in this team, whilst the team leader is most central, leadership is enacted by multiple leaders; however, only formal leaders. This configuration of multiple, formal leadership was also evident also in the next meeting; however Liz and Ross were the two most prominent leaders in the third meeting.

In the English Team KLA Meeting Three, meeting talk revealed that the HOC was one of the prominent leaders; ‘doing leadership’ in curriculum, pedagogy, and assessment as she volunteered advice, and responded as teachers asked questions related to the quality and types of tasks for the Film Study Unit. Whilst she led the meeting for most of the time, she did not lead in solo. Instead, leadership was also enacted by Ross who was very prominent in advising peers on aspects of assessment; particularly when a peer (Gwen) identified the problem of limited time for students to complete the assessment tasks. In this instance, Ross proffers advice and information to the peer (and overhearing audience) using three-part lists as an interactional resource to accomplish the task of ‘doing leadership’. He advises Gwen that there needs to be just three pieces
of work, listing the first item as “plot summary”, the second item as “one character” description, and the third item as “one theme” (see Appendices, lines 378-380 of Meeting Three transcript). Later, he uses a three-part list structure again to describe the time period in which tasks can be done, listing the first item being “one week for plot”, the second item being “one week for character”, and the third item being “one week for theme”. This three-part list is formulated as a class of items related to time periods for the completion of assessment tasks; serving the purpose of minimising the extent of the task and thereby making the assessment task appear doable.

Summary of Part One
The results of the study of the English team revealed the team networks were highly centralised among a few key actors in the formal interactions; and there were generally low densities of communication among participants. The study found leadership was provided by formal leaders; however, still pointing to a hybrid pattern of leadership. A *multiple, formal leadership* configuration was found in two meetings with leadership provided by a group of formal leaders (the HOC and three LTs in the second meeting) and a pair of formal leaders (HOC and a LT) in the third team meeting. In the absence of the HOC an *alternate, formal leadership* configurations emerged where leadership was provided by a pair of prominent formal Ts. In these meetings, the chairpersons led the meetings for long periods in solo; however, they did not lead alone. Instead, leadership was provided by multiple leaders, in groups of two to four leaders. In team meetings, leaders’ actions focused mainly on curriculum planning, introducing functional grammar into the English curriculum, assessment planning, alignment of curriculum and assessment, and moderation of marking of student work. In ‘doing leadership’, leaders proffered advice when recipients asked for information or opinion; disclosed or identified a problem; and where recipients announced as plan. Advice was also proffered when unsolicited; where the advisor volunteers advice or volunteered information; where the advisor identified a problem and proffered advice. The corpus of meeting talk data also revealed that the most common resource used was the self-reference “we”; the epistemic markers “I think” and “I don’t know”; and question-answer adjacency pairs were identified in 20 instances across the four meetings. Other discursive tools used included formulations, teaching replay and teaching rehearsals, reported speech, prosody, and three-part lists. Participants also employed facilitation/co-facilitation and artefacts to lead teaching and learning. Table 13 below is a summary of
the ONA and CA results. The table summarises the leadership configuration that emerged, most prominent actors in each meeting and the interactional devices used by the most prominent leaders who assumed the role of chairpersons in the meetings.

**Table 13**  
Summary of ONA and CA Results of English Team Meetings

<table>
<thead>
<tr>
<th>Network</th>
<th>Leadership Configuration</th>
<th>Most Prominent Actors</th>
<th>CA TYPES OF INTERACTIONAL DEVICES USED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting One</td>
<td>Alternate, formal leadership</td>
<td>Jen</td>
<td>Teaching replays</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Teaching rehearsals</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Direct reported speech</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Artefacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prosody</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Facilitation/Co-facilitation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Judy</td>
<td>Co-facilitation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Questions</td>
</tr>
<tr>
<td>Meeting Two</td>
<td>Multiple, formal leadership</td>
<td>Liz</td>
<td>Self-reference (&quot;we&quot;)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&quot;I don't know&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Questions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Artefacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ross</td>
<td>Questions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eva</td>
<td>Questions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Artefacts</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jen</td>
<td>Questions</td>
</tr>
<tr>
<td>Meeting Three</td>
<td>Multiple, formal leadership</td>
<td>Liz</td>
<td>Invoking the non-present other</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Self reference (&quot;we&quot;, extraction; aggregation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Three-part list</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Prosody</td>
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<tr>
<td></td>
<td></td>
<td>Ross</td>
<td>Questions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Three-part list</td>
</tr>
</tbody>
</table>

In the next part, Part Two, the informal interactions of the English KLA Team are analysed from an organisational network perspective.
Chapter Six: Part Two

6.3 The Informal Advice and Information Interactions and Leadership

This section presents an analysis and results of the English KLA team network survey data, examining advice and information seeking relations across the English team. Each of the advice seeking relationships examined constitutes a separate network; and each network is referred to by the relationship they tap. First, the Teaching English advice and information network is examined. This network can be described as an ‘overall’ network that concerns advice related to any aspect of Teaching English. Next, the dimensions of teaching and learning network is examined focusing first on all Five Dimensions and then each dimension of curriculum planning; content knowledge; teaching approaches; assisting low performing students; and assessment. Finally, an analysis of relational data on the reported perceptions of the influence of colleagues’ advice on the work of teachers is presented. For each network of relationships, the structure of the network is examined using the network measures of centralisation and density of ties. Then, the network is examined at the actor level using the in-degree centrality measure to identify key advice givers and the most prominent actors. The network is also analysed to determine the extent to which the formal leaders provide advice and information. The results of the survey data were corroborated with interview data and selected excerpts are taken from interviews with participants to support the results.

6.2.1 Teaching English Advice and Information Informal Network

In investigating the question of who (which colleague) provided advice, Figure 24 assists in identifying this in the English Team. Further, it is possible to identify how often advice and information related to teaching English was provided. This is illustrated in the sociogram below.
Figure 24
Sociogram of Frequent Advice Givers in Teaching English Informal Network

LEGEND

<table>
<thead>
<tr>
<th>Color</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow</td>
<td>HOC English</td>
</tr>
<tr>
<td>Red</td>
<td>Leading Teacher</td>
</tr>
<tr>
<td>Green</td>
<td>Supporting Teacher</td>
</tr>
<tr>
<td>Blue</td>
<td>Integrated Support Staff Teacher</td>
</tr>
</tbody>
</table>
Structure of network

The in-degree scores were used to measure the structure of the network. The structure of the network provided an indication of the pattern of team leadership and the degree of communication in the network. The most frequent advice giving interactions were determined using a tie strength ≥ 3 which indicates that actors sought advice and information once or twice per month or more. Table 14 tabulates network measures for the general advice and information relation and then for the dimensions of teaching and learning and perceived advice relation. We can compare the density and centralisation of each network.

Table 14
Descriptive and other Statistics of Informal Networks in English Team

<table>
<thead>
<tr>
<th>Network</th>
<th>Network Structure</th>
<th>In-degree</th>
<th>Key Advice Givers</th>
<th>Most Prominent Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Centralisation</td>
<td>Density</td>
<td>Mean</td>
<td>Std Dev</td>
</tr>
<tr>
<td>Frequency</td>
<td>%</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Five Dimensions of Teaching and Learning</td>
<td>32.28</td>
<td>31.41</td>
<td>3.76</td>
<td>1.57</td>
</tr>
<tr>
<td>Curriculum Planning</td>
<td>25</td>
<td>21.15</td>
<td>2.53</td>
<td>1.33</td>
</tr>
<tr>
<td>Content Knowledge</td>
<td>28.12</td>
<td>16.19</td>
<td>2.15</td>
<td>1.16</td>
</tr>
<tr>
<td>Teaching Approaches</td>
<td>15.62</td>
<td>17.62</td>
<td>2.46</td>
<td>0.92</td>
</tr>
<tr>
<td>Assisting Low Performing Students</td>
<td>21.09</td>
<td>8.57</td>
<td>0.92</td>
<td>0.82</td>
</tr>
<tr>
<td>Assessment</td>
<td>26.56</td>
<td>9.52</td>
<td>1.38</td>
<td>1.21</td>
</tr>
<tr>
<td>Influence</td>
<td>49.21</td>
<td>26.28</td>
<td>3.15</td>
<td>2.06</td>
</tr>
</tbody>
</table>

Network Centralisation

The frequency relation of the Teaching English network has a centralisation score of 38.28%. This suggests that there is a low degree of concentration or centralisation in this whole network. In terms of leadership, the team network centralisation measure implies that leadership is decentralized; that is, leadership is distributed among many actors in this network. This decentralised pattern is different from the formal meeting
networks which were very centralised; however, this network is also more centralised when compared to the Mathematics network.

*Network Density*

Whilst the team network centralisation score suggests that leadership is distributed among most actors; the team network density suggests that the frequency of leadership through advice and information communication is sparse in this network. In terms of the frequency of ties, the density is 31.41%. This suggests that less than a third of all possible communication occurs once or twice per month. This implies that there is limited communication in respect of sharing advice and information among members. The density score was quite similar to the density scores in the formal meeting networks.

*Key Advice Givers*

In the interactions in the English team, the use of the sociogram enabled the identification of roles and advice givers. The in-degree scores of $\geq 2$ (arrows coming in towards actor) were used to identify the key (frequent) advice givers.

*In-degree centrality*

In this network, all thirteen actors were identified as frequent advice givers. Liz had the highest in-degree, providing advice once or twice per month or more to seven actors in the network (Figure 23). This is followed by Jen who provides advice to six actors; and Gwen who provides advice frequently to five actors. Ange, Eva, Iris, Judy, and Nell provide advice frequently to four actors; while Beth and Pam provide advice frequently to three actors; and Jill and Tom who each provide frequently to two actors in the network. Ross was not identified as a frequent advice giver since he provides advice to one actor.

*Frequent Key advice givers according to role:* In terms of role positions, six (85.71%) formal leaders (HOC and 5 LTs); and all six (100%) STs/IFs frequently provided advice (Table 14); with the latter emerging as informal leaders. This suggests that despite the organisational hierarchical positions of actors, advice and information was frequently provided by actors regardless of their position in the team or organisation. These interactions also indicate that there is a degree of reciprocity in the frequency of advice
and information exchanges among actors within specific role positions and across role positions.

Central and Peripheral Actors: In addition to the identification of the key advice givers in the English team, the use of the sociogram enabled the identification of central to peripheral actors; providing a picture of the extent to which the formal leaders provided advice as well as their centrality in relation to informal leaders. Whilst two formal leaders (HOC, Liz and LT, Jen) are most central, HOC (Iris) and two LTs (Eva and Judy) occupy a less central position; and two LTs (Tom and Ross) are most peripheral. The less central and particularly peripheral position means that these formal leaders provide advice to fewer members in the team. This low level of advice giving communication was also reflected in the low network density score (31.41%) in this network. The low level of participation implies that their expertise is underutilised. Tom is a senior teacher and the low frequency of advice giving by Tom suggests that his expertise is also underutilised; especially when one looks at his involvement in a subgroup meeting where he led a group of four teachers moderating student work, and the selection of students for academic awards (FN 19-10-2009). Also, his peripheral position here contrasts with his prominence in some of the dimensions of teaching and learning networks to be discussed later. The other most peripheral actor, Ross, has only recently joined the team. His network position suggests that his expertise has been untapped by members in the network but has much leadership and expertise to offer in respect of teaching and learning in English, as evidenced by his central position in two team meetings. Whilst some of the formal leaders are peripheral, some informal leaders occupy a more central position, particularly two STs (Gwen and Ange), providing advice to more team members than some of the formal leaders do. The network position of these STs suggest that they are viewed a source of expertise in the dimensions of teaching and learning by more team members when compared with some formal leaders.

Most Prominent Actor(s): Whilst there are thirteen actors who frequently provide advice, some actors are more prominent than others. The mean in-degree score was 3.76 with a standard deviation of 1.57 (Table 14). When using the decision rule of identifying the most prominent leaders as those who have a greater than one standard deviation above the mean (i.e. a score ≥ 5.33), Liz and Jen were identified as the most prominent leaders in this relation. This suggests that they are considered particularly
prominent actors who provide advice to team members most frequently in this network. The prominence of these two actors points to a hybrid leadership pattern with a *multiple, formal leadership* configuration. That is, the formal leader (HOC) is regarded as a prominent actor; but the role is shared with another formal leader (LT).

The prominence of actors is in the network is supported by participants nominations of people they turn to for advice and the reasons why they do so, as illustrated in the following extracts taken from interviews with participants. The prominence of the HOC is captured by a LT in the excerpt below:

Liz Gallen is the HOC and leader of that team is off course very involved. She is the figurehead the leader of the team ... and we often discuss different aspects of the curriculum and our pedagogy, how we’re teaching it …

[INT 8: 18-11-2009]

In addition to the HOC, the same LT accounts for the prominence of LT, Jen in the team:

... Jen’s got a wealth of knowledge. She’s really got a memory bank that you wouldn’t believe. She’s really handy … I love Jen because just about everything I ask she’s got a witty story about so it’s really entertaining as well as educational …

[INT 8: 18-11-2009]

In sum, the team network centralisation score of 38.2% indicates a decentralised pattern of team leadership. That is, frequent advice and information giving, is not centralised; instead it is distributed among many actors in this network. However, whilst the network centralisation score suggests that advice and information giving is a distributed phenomenon, the network density of 31.41% suggests that only one third of all possible communication occurs frequently. The centrality scores indicate that the most prominent actors are the HOC and a LT, and points to a *multiple, formal leadership* configuration. The network position reveals that, on the one hand, two formal leaders are most central and two formal leaders are most peripheral. On the other hand, two informal leaders are more central compared with some of the formal leaders
6.2.2 Dimensions of Teaching and Learning

The next area of interest was the advice and information received in the dimensions of teaching and learning: content knowledge, curriculum planning; teaching approaches; assisting low performing students; and assessment.

Five Dimensions of Teaching and Learning Network

In investigating the question of who (which colleague) provided advice and information in the five dimensions, Figure 25 assists in identifying this in the English Team. Further, it is possible to identify the number dimensions advice and information related to teaching English was provided. Leadership involvement was determined using a tie strength ≥ 2, indicating the actor provided advice and information in two or more dimensions. This is illustrated in the sociogram below.
Figure 25
Sociogram of Five Dimensions of Teaching and Learning in English Team Informal Network

LEGEND

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow</td>
<td>HOC English</td>
</tr>
<tr>
<td>Red</td>
<td>Leading Teacher</td>
</tr>
<tr>
<td>Green</td>
<td>Supporting Teacher</td>
</tr>
<tr>
<td>Blue</td>
<td>Integrated Support Staff Teacher</td>
</tr>
</tbody>
</table>
Structure of network

Network Centralisation

The Dimensions of Teaching and Learning relation of the Teaching English network has a centralisation score of 25% (Table 14), which was much lower than the frequency network. This suggests that there is a low degree of concentration or centralisation in this whole network. In terms of leadership, the team network centralisation measure implies that leadership is distributed among a few actors in this network relation.

Network Density

Whilst leadership is decentralised, the network density suggests that the advice and information communication is sparse in this network. The density in this network was 21.15% (Table 14); much lower than the frequency network. This means that approximately one fifth of all possible communication occurs in respect of Five Dimensions of teaching and learning.

Key Advice Givers

In-degree centrality

In this network, ten actors (five formal leaders and five informal leaders) were identified as key advice givers. Liz and Jen had the highest in-degree score, each providing advice in more than two dimensions to five actors in the network (Figure 24). This was followed by Gwen who provided advice to four actors. Each of Nell and Pam provided advice to three actors. Five actors, Jill, Beth, Iris, Tom, and Eva provided advice to two actors each. Judy, Ross and Ange had an in-degree of 1 and were therefore not considered as key advice givers.

Key advice givers according to role: In terms of role positions, four (71%) formal leaders (HOC and three LTs); and five (83%) STs/IFs were identified as key advice givers (Table 14) with the STs/IFs emerging as informal leaders. The dimensions of teaching advice and information relation amongst positional and informal leaders revealed that the four formal leaders provided advice to STs/IFs as well as to fellow formal leaders. The frequency of advice interaction also revealed that the five STs/IFs emerged as informal leaders. This suggests that despite the organisational hierarchical positions of actors, advice and information was provided by actors regardless of their
position in the team or organisation. These interactions also indicate that there is a degree of reciprocity in the frequency of advice and information exchanges among actors within specific role positions and across role positions.

Central and Peripheral Actors: Most formal leaders occupy a peripheral position in this network, providing advice and information in all dimensions of teaching and learning to few members in the team. Whilst two of the formal leaders (Liz and Jen) are most central, a HOC (Iris) and LTs (Tom and Eva) occupy a peripheral position, and LTs (Judy and Ross) occupy a very peripheral role. The less central to peripheral positions of these leaders suggests that they participate to a lesser extent in the advice giving interactions. This low level of advice giving communication was also reflected in the low network density score (21.15%) in this network. The low level of participation implies that their expertise is underutilised. The peripheral position of Ross and Iris was discussed earlier. However, since Judy is a senior teacher (like Tom) and she was most central in one of the meetings, it could be inferred that her expertise is underutilised. Eva, also, was very central in one of the meetings. As she is a beginning teacher, (she has been on the team for nine months), her network position suggests that teachers have only started to tap her as a resource. Whilst some of the formal leaders are peripheral, some informal leaders occupy a more central position, particularly two STs (Gwen and Nell) and ISST (Pam), providing advice to more team members than some of the formal leaders do. The network position of these STs/ISST suggest that they are viewed a source of expertise in the dimensions of teaching and learning by more team members when compared with some formal leaders.

Most Prominent Actor(s): Whilst the in-degree scores indicate all ten of the thirteen actors were key advice givers, some actors were more prominent than others. The average in-degree centrality score was 2.53 with a standard deviation of 1.33 (Table 14). When using the decision rule of identifying leaders as those who have a greater than 1 standard deviation above the mean (i.e. a score ≥ 3.86), Liz, Jen and Gwen were identified as the most prominent leaders, providing advice to more colleagues two or more dimensions of teaching and learning. Thus, the dimensions of teaching and learning relation indicate a multiple, formal and informal leadership configuration. That is, the formal leader (HOC) is regarded as a prominent actor; but the role is shared with another formal leader (LT) as well as an informal leader (ST). The following extract taken from an interview with the HOC illustrates the prominence of the LT and ST.
I talk to Jen all the time. I basically use her as my barometer about, you know, are we on the right track? Does this look right to you and why? Am I being ridiculous? I find Jen really helpful because she’s got expert knowledge. Interestingly, I also talk to Iris about English and Gwen. I actually teach health and core PE which is incredibly scary. Gwen has really been the leader there. Actually in my own teaching I think now that I had a go at it since it’s the first time I’m doing some of the things I actually talk to both of the girls and probably because I haven’t been as well prepared. The second time round I wouldn’t do it the same way … [INT 7: 17-11-2009]

In sum, the team network centralisation score of 25% suggests a decentralised pattern of team leadership. Whilst the network centralisation score suggests that advice and information giving is a distributed phenomenon, the network density of 21.15% suggests that only one fifth of all possible communication occurs frequently. The centrality scores revealed that the most prominent actors in this network were the HOC (Liz), a formal leader (Jen), and another teacher (Gwen) who emerged as an informal leader. This points to a multiple, formal and informal leadership configuration. The network position reveals that, on the one hand, two formal leaders are most central and three formal leaders are most peripheral. On the other hand, two informal leaders are more central compared with some of the formal leaders.

6.2.2.1 Specific Dimensions of Teaching and Learning

The practice of leading teaching and learning in which colleagues interacted with one another was also examined as specific dimensions of teaching and learning; each regarded as a specific network relation to identify the most prominent actor(s), the configurations of leadership, and to analyse the network position of actors. In investigating the question of who (which colleague) provided advice and information is each dimension, Figures 26 to 30 assists in identifying this in the English Team.
Figure 26: Sociogram of Curriculum Planning Network in English Team

Figure 27: Sociogram of Content Knowledge Network in English Team

Figure 28: Sociogram of Teaching Approaches Network in English Team
Figure 29: Sociogram of Assisting Low Performing Students Network in English Team

Figure 30: Sociogram of Assessment Network in English Team

<table>
<thead>
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<th>LEGEND</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="HOC English" /></td>
</tr>
<tr>
<td><img src="image" alt="Leading Teacher" /></td>
</tr>
<tr>
<td><img src="image" alt="Supporting Teacher" /></td>
</tr>
<tr>
<td><img src="image" alt="Integrated Support Staff Teacher" /></td>
</tr>
</tbody>
</table>

233
**Most Prominent Actor(s)**

The sociogram and statistical data helped to identify the most prominent leaders and the leadership configurations for each dimension of teaching and learning.

In the *curriculum planning* network, Liz, Eva and Jen were identified as the leaders who provide curriculum planning advice and information to team members. Thus, the most prominent curriculum planning advice givers are formal leaders, the HOC and two LTs. This indicates a *multiple, formal leadership* configuration, that is, the formal leader (HOC) is regarded as a prominent actor; but the role is shared with other formal leaders (LTs). The prominence of Liz and Jen were supported with extracts from interviews with participants. In the extract that follows, the importance of LT, Eva, is explained by a LT (who was on maternity leave at the time of the study):

> I think Eva is brilliant. She’s a new teacher but she’s focused and she has a clear understanding of the subject and is interested in students doing the best they can in that subject. So I see her as a leader. Absolutely.  
> [INT 19: 07-12-2009]

In the *content knowledge* network, Jen and Tom were identified as the most prominent leaders that provide content knowledge advice and information to team members. Thus, the content knowledge relation indicates an *alternate, formal leadership* configuration, that is, formal leaders (LTs) are regarded as most prominent actors.

One observation here is, on the one hand, the centrality of Jen in another relation. This could be attributed to her training and years of experience as a teacher of English. On the other hand, it is observed, that the HOC plays a less central role in this relation. This could be attributed to the fact that teaching English is not her area of expertise and experience in the subject, as acknowledged by her in the following extract taken from an interview with the HOC:

> … so part of it is expert knowledge. It’s an interesting thing I’m a literate person but in the teaching of English I’m just a babe. I don’t get it. I, for instance, do not get spelling. I don’t understand. I mean I can’t spell …  
> [INT 7: 17-11-2009]
A further interesting observation is the centrality of Tom, who occupied a less central to peripheral position in some networks. The prominence of Tom is illustrated in the following extract taken from an interview with his ST partner:

Researcher: What advice do you go to Tom for?
Nell: Oh knowledge, content, planning. Everything.
Researcher: Can you give me an example of a time that you went to Tom for advice?
Nell: Yesterday afternoon to plan the English shuffle up lesson for today. To make it a bit more interesting. We sat together and planned a lesson. Shared ideas.
[INT 17: 04-12-2009]

In the teaching approaches network, Liz and Jen were identified as the most prominent leaders that also provide advice and information to team members related to teaching approaches. Thus, the teaching approaches relation indicates a multiple, formal leadership configuration, that is, the formal leader (HOC) is regarded as a prominent actor; but the role is shared with another formal leader (LT).

In the assisting low performing students’ network, Pam, and Jill were identified as the most prominent leaders that provide advice and information to team members related to assisting low performing students. Thus, the assisting low performing student relation indicates an alternate, informal leadership configuration; that is, the ISSTs are the most prominent leaders in this relation. The following extract of an interview with a teacher, captures the importance of Pam in this network:

Well we are lucky to have almost a full time ISS teacher who sits with those children when she can and provides their overall support and links to the HOC and things like that. She also advises and supports teachers for example in modifying tasks and deciding and developing tasks that students are capable of doing what they could do and change tasks and some classroom activities. Previously well we had a different ISS teacher virtually every term and previously the task was changed by someone in a different POD …
[INT 17: 04-12-2009]

The following extract taken from an email interview with a LT captures the prominence of Jill:

Jill has planned with me for these students from the curriculum objectives, determining the focus outcomes and the strategies the students would use. She has advised and helped with assessment modifications if any were needed. She contacted parents and provided feedback to teachers on student learning needs, medical information. She helped students with organisation skills, set ground rules with students regarding homework being their responsibility, liaised with parents and advised team members of arrangements …
[EMI1: 20-09-2009]
In the *assessment* network, Liz and Jen were identified as the most prominent leaders that also provide advice and information to team members related to assessment. Thus, the assessment relation indicates a *multiple, formal leadership* configuration, that is, the formal leader (HOC) is regarded as a prominent actor; but the role is shared with another formal leader (LT).

In sum, upon closer examination of each dimension, in terms of the prominence of actors and configurations of leadership, the curriculum planning, teaching approaches and assessment relations point to a *multiple, formal leadership* configuration with the HOC and LTs (particularly Jen) appearing most prominent. However, the content knowledge relation indicates an *alternate, formal leadership* configuration with LTs more prominent and the HOC less central. Interestingly, the assisting low performing relation indicate an *alternate, informal leadership* with ISSTs occupying the most central role and all other actors occupying a less central role. The sociogram also provided an indication of the extent to which formal leaders provided. Except for the assisting low performing students’ network, in the specific dimensions of teaching and learning, the network positions revealed that two to three formal leaders are most central and one to two formal leaders were most peripheral. On the other hand, two to three informal leaders are more centrally positioned in the network compared with some of the formal leaders; suggesting they were seen as a source of expertise in the specific dimension of teaching and learning by more colleagues than some when compared with some formal leaders.

### 6.2.3 Influence of Advice Network

The last relation of interest in this study of informal interactions is the influence (as reported by participants) of advice and information on the work of colleagues. In investigating the question of who the influential advice givers are, the sociogram assists in identifying this in the English Team. Further, it is possible to identify how influential these actors are in terms of advice and information provided related to teaching English. The more influential advice giving interactions were determined using a tie strength ≥ 3; indicating actors providing advice and information related to teaching English had a strong to very strong influence on the work of colleagues. This is illustrated in the sociogram below (Figure 31).
Figure 31
Sociogram of Influence Network in English KLA Team
Structure of network

*Network Centralisation*

The influence relation of the Teaching English network has a centralisation score of 49.21% (Table 14). This was the highest centralisation score when compared with the other informal networks in the English team. The influence network centralisation score suggests that there is a moderate degree of concentration or centralisation of leadership in this network.

*Network Density*

The network density is 26.28% (Table 14), a score that lies between the density scores of the frequency network and Dimensions of teaching and learning. The density score of the influence network suggests that approximately just over one quarter of all possible relations are characterised by a strong perceived impact of advice on the work of colleagues.

**Influential Advice Givers**

In the interactions in the English team, the use of the sociogram enabled the identification of roles and advice givers. The in-degree scores of ≥ 2 (arrows coming in towards actor) were used to identify the frequent advice givers.

*In-degree centrality*

In the influence relation, actors with an in-degree of ≥2 (more than two arrows pointing towards actor) are considered as influential advice givers. In this network, ten team members had a strong influence on the work of colleagues. Liz has the highest in-degree, having a strong to very strong influence on the work of eight actors in the network (Figure 30); followed by Jen who has a strong influence on seven actors; and Eva who has a strong influence on four actors. Each of Ange, Beth, Judy, Nell and Tom has a strong influence on three actors. Iris and Terri have a strong influence on two actors. Gwen, Pam and Ross were not identified as influential actors since they each have a strong influence on just one actor.
**Influential Advice Givers According to Role:** In terms of role positions, six (85.71%) formal leaders (HOC and five LTs); and four (66.66%) STs/ISSTs were perceived to have a strong to very strong influence on the work of colleagues, with the STs/IFs emerging as informal leaders (Table 14). The influence network revealed that all six formal leaders influenced STs/ISSTs as well as fellow formal leaders. It revealed that the five STs/ISSTs emerged as informal leaders. This suggests that despite the organisational hierarchical positions of actors, colleagues have an influence on the work of colleagues occurs in the network. These interactions also indicate that some actors have a reciprocal influence on the work of each other.

**Central and Peripheral Actors:** Whilst all formal leaders are influential advice givers, the network position of actors in the sociogram provides a picture of the extent to which the formal leaders influence their colleagues. The network position reveals that two formal leaders (Liz and Jen) are most central, three LTs (Eva, Judy and Tom) occupy a less central position; and Iris and Tom occupy a peripheral position. The less central to peripheral position suggests that these LTs have a lesser degree of influence on the team members which could be attributed to them being an underutilised source of expertise. This could be inferred from the number of missing ties, as reflected by the low density score discussed earlier. On the other hand, the central position of some informal leaders, STs (Ange, Beth and Nell) suggests that they are viewed as being strongly influential to more team members when compared with some formal leaders.

**Most Prominent Actor(s):** Whilst the in-degree scores indicate ten actors are perceived to have a strong to very strong influence on the work of colleagues, some actors are perceived to be more influential than others. The average in-degree of the influence network was 3.15 (Table 14); a slightly higher mean than that of influence of colleagues on the work of teachers in the Mathematics team. When using the decision rule of identifying leaders as those who have a greater than 1 standard deviation above the mean (i.e. a score ≥ 5.21), Liz and Jen were identified as the most influential leaders in the English KLA team. Thus, the influence relation points to a multiple, formal leadership configuration. That is, the formal leader (HOC) is regarded as a most influential actor; but the role is shared with another formal leader (LT).

Whilst network data revealed the HOC had a strong influence on most teachers, interview data revealed that the LT had a stronger influence on most teachers. The LT
was particularly influential in curriculum planning, providing creative ideas to cater for a diverse group of students; sharing her wealth of content knowledge, expertise and resources in aspects such as oral work and expression. Her influence is illustrated in the following excerpt taken from an interview with an experienced LT:

Jen and I have a great deal of respect for the opinions of each other and would frequently suggest activities or approaches that worked well in the past. She has strengths in oral work and expression. My strengths are more in genre, grammar and written work… Liz came from a music background and is willing to listen and respond positively to suggestions and plans of others, especially experienced teachers who had skills in different areas from her. [EMI3: 14-08-2010]

Despite being less influential than the LT, the HOC was particularly influential in matters related to curriculum planning, advocating teaching approaches such as clinics and rotations, providing advice on student English writing, and facilitating the collaboration of teachers in curriculum and assessment planning. The influence of the HOC is illustrated in the following extract taken from an interview with the LT:

Liz was working in a different part of the school for most of the time that we worked in the English team, so she has had less of an influence than Jen. Proximity does seem to count. During meetings she was influential, however during the everyday working week, she only moderately influenced my pedagogy and curriculum delivery. She did have more of an influence on the writing of assessment pieces, but little influence on the way that assessment piece was delivered to the students. [EMI3: 14-08-2010]

In sum, the influence of advice and information relation centralisation score of 49.21% indicates a decentralised pattern of team leadership. However, influence is concentrated among a few actors in the network, that is, a few actors in the team have an influence on the work of their colleagues. Whilst the network centralisation score suggests that influence is distributed, the network density of 26.28% indicates that only quarter of all possible communication is influential. The centrality scores revealed that the most influential actors in this network were two formal leaders, pointing towards a multiple, formal leadership configuration. The network position reveals that, on the one hand, three formal leaders are most central and two formal leaders are most peripheral. On the other hand, three informal leaders are more central compared with some of the formal leaders.
Summary of Part Two

The results of the study of the English team revealed the team networks were highly decentralised in the informal interactions; however there were generally low densities of communication among participants. In the informal interactions, a *multiple, formal leadership* configuration was predominant in most networks; however, an *alternate, formal leadership* was found in content knowledge and an *alternate, informal leadership* was found in assisting low performing students networks. In most networks, leadership was provided pairs of actors, particularly the HOC and a LT. In terms of the extent to which formal leaders provided advice, the study found more formal leaders provided advice to colleagues in the informal interactions than they did in the formal interactions. In some team networks, some formal leaders occupied central positions, whilst others tended to occupy peripheral positions. As a result, some informal leaders tended to be more central in team networks; suggesting some informal leaders were seen by more colleagues as a source of expertise than some of the formal leaders. Most participants perceived that the advice and information received from the HOC and a LT had the strongest influence on their teaching. This pointed to a *multiple, formal leadership* configuration. Table 15 provides a summary of the most prominent actors and leadership configurations in the English team networks.

**Table 15**

<table>
<thead>
<tr>
<th>Network</th>
<th>Most Prominent Actors</th>
<th>Leadership Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>English KLA Team (Frequency of advice)</td>
<td>Liz, Jen</td>
<td>Multiple, formal leadership</td>
</tr>
<tr>
<td>Five Dimensions of Teaching and Learning</td>
<td>Liz, Jen, Gwen</td>
<td>Multiple, formal and informal leadership</td>
</tr>
<tr>
<td>• Curriculum Planning</td>
<td>Liz, Jen, Eva</td>
<td>Multiple, formal leadership</td>
</tr>
<tr>
<td>• Content Knowledge</td>
<td>Jen, Tom</td>
<td>Alternate, formal leadership</td>
</tr>
<tr>
<td>• Teaching Approaches</td>
<td>Liz, Jen</td>
<td>Multiple, formal leadership</td>
</tr>
<tr>
<td>• Assisting Low Performing Students</td>
<td>Pam, Jill</td>
<td>Alternate, informal leadership</td>
</tr>
<tr>
<td>• Assessment</td>
<td>Liz, Jen</td>
<td>Multiple, formal leadership</td>
</tr>
<tr>
<td>Influence</td>
<td>Liz, Jen</td>
<td>Multiple, formal leadership</td>
</tr>
</tbody>
</table>
6.5 Summary of Chapter

This chapter began, in Part One, with an analysis of the formal interactions of the English KLA team. First, ONA was employed to analyse the formal interactions in team meetings. The network measures of centralisation and density were used to determine the structure of the network. Network measures of in-degree were used to identify key advice givers, the most prominent actors in the team, and the extent to which formal leaders provide advice and information. Then, a CA approach was used to analyse the meeting talk data. In Part Two, an organisational network approach was used to analyse the informal advice and information interactions. The network measures used for the formal interactions were used to analyse the informal interactions. The chapter concluded with a presentation of a summary of the findings that emerged from the organisational network and meeting talk data. The study found that networks in the formal interactions were highly centralised among formal leaders; however they were decentralised among both formal and informal leaders in the informal interactions. However, network densities indicated low levels of leadership communication in both formal and informal interactions. Despite the low densities, leadership pointed to a hybrid pattern with various configurations. Whilst the formal interactions generally pointed to a multiple, formal leadership configuration, the dominant leadership configuration was multiple, formal and informal leadership in the informal interactions. In team meetings, leaders’ actions focused mainly on curriculum planning, introducing functional grammar into the English curriculum, assessment planning, alignment of curriculum and assessment, and moderation of marking of student work. In ‘doing leadership’, leaders proffered advice when recipients asked for information or opinion; disclosed or identified a problem; and where recipients announced a plan. Advice was also proffered when unsolicited; where the advisor volunteers advice or volunteered information; where the advisor identified a problem and proffered advice. The corpus of meeting talk data also revealed that the most common interactional resources employed were the self-reference “we”; the epistemic markers “I think” and “I don’t know”; and question-answer adjacency pairs. Other discursive tools used by participants included formulations, teaching replay and teaching rehearsals, reported speech, prosody, and three-part lists. Furthermore, participants employed facilitation/co-facilitation as well as artefacts to lead teaching and learning.

In the next chapter, a comparison of the results of the two teams is undertaken.
CHAPTER SEVEN: RESULTS
COMPARISON OF MATHEMATICS AND ENGLISH KEY LEARNING AREA TEAMS

7. 0 Introduction

In this section, the results of the analysis of the previous chapters are summarised and used to compare the two teams investigated in this study. First, the results of the formal interactions and informal interactions of the teams are compared using the results of the ONA. Second, the formal interactions of the two teams are compared in terms of the results of the CA of the meeting talk. The findings of the formal and informal interactions are integrated during the interpretation.

7.1 Results: Organisational Network Analysis: Formal and Informal Interactions

In the formal and informal interactions, ONA revealed similarities as well as differences between the two teams.

7.1.1 Network Structure

Network Centralisation

In the formal interactions, the network centralisation scores were very high in both teams (Table 16); suggesting a highly centralised pattern of leadership. However, the network centralisation scores were generally higher in the English Team (the lowest being 71% and the highest being 100%) compared with the Mathematics Team (the lowest being 78% and the highest being 92%). Since this is believed to be the first study measuring centralisation in team meetings, the results cannot be compared with similar data. However, these results are similar when compared with those of a study undertaken by de Laat et al. (2007) of online conversation in a network learning community where the centralisation scores were between 88% and 52% in various periods in time, with one score measuring 109%.
Table 16
Descriptive Statistics of Mathematics KLA Team and English KLA Team Networks

<table>
<thead>
<tr>
<th>Network/Relation</th>
<th>Mathematics Key Learning Area Team</th>
<th></th>
<th></th>
<th></th>
<th>English Key Learning Area Team</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Network Centralisation (%)</td>
<td>Network Density (%)</td>
<td>In-degree</td>
<td>Network Centralisation (%)</td>
<td>Network Density (%)</td>
<td>In-degree</td>
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<tr>
<td></td>
<td>Mean</td>
<td>Standard Dev</td>
<td>Mean</td>
<td>Standard Dev</td>
<td>Mean</td>
<td>Standard Dev</td>
<td>Mean</td>
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<tr>
<td>FORMAL INTERACTIONS</td>
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<td></td>
<td></td>
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<tr>
<td>Meeting One</td>
<td>82.22</td>
<td>25.45</td>
<td>3.27</td>
<td>4.2</td>
<td>100</td>
<td>28.57</td>
<td>1.71</td>
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<tr>
<td>Meeting Two</td>
<td>78.66</td>
<td>41.07</td>
<td>2.88</td>
<td>2.93</td>
<td>71.4</td>
<td>44.44</td>
<td>3.55</td>
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<td>Meeting Three</td>
<td>92.9</td>
<td>23.48</td>
<td>2.5</td>
<td>2.99</td>
<td>98.18</td>
<td>18.18</td>
<td>2</td>
</tr>
<tr>
<td>INFORMAL INTERACTIONS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KLA Team Network</td>
<td>Frequency of Advice-once or twice p/m or more</td>
<td>19</td>
<td>33.97</td>
<td>4.08</td>
<td>1.69</td>
<td>32.28</td>
<td>31.41</td>
</tr>
<tr>
<td>Five Dimensions of Teaching and Learning</td>
<td>Advice provided in two or more dimensions</td>
<td>14.36</td>
<td>21.15</td>
<td>2.53</td>
<td>1.08</td>
<td>25</td>
<td>21.15</td>
</tr>
<tr>
<td>Specific Dimensions:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum Planning</td>
<td>28.78</td>
<td>24.35</td>
<td>4.38</td>
<td>1.98</td>
<td>32.03</td>
<td>21.43</td>
<td>2.92</td>
</tr>
<tr>
<td>Content Knowledge</td>
<td>11.36</td>
<td>17.61</td>
<td>0.84</td>
<td>0.86</td>
<td>28.12</td>
<td>16.19</td>
<td>2.15</td>
</tr>
<tr>
<td>Teaching Approaches</td>
<td>20.45</td>
<td>20.51</td>
<td>2.92</td>
<td>1.07</td>
<td>15.62</td>
<td>17.62</td>
<td>2.46</td>
</tr>
<tr>
<td>Assisting Low Performing Students</td>
<td>15.15</td>
<td>7.69</td>
<td>1.46</td>
<td>1.01</td>
<td>21.09</td>
<td>8.57</td>
<td>0.92</td>
</tr>
<tr>
<td>Assessment</td>
<td>20.45</td>
<td>11.53</td>
<td>1.92</td>
<td>1.07</td>
<td>26.56</td>
<td>9.52</td>
<td>1.38</td>
</tr>
<tr>
<td>Influence relation</td>
<td>Strong to very strong influence</td>
<td>20.36</td>
<td>26.92</td>
<td>3</td>
<td>1.17</td>
<td>49.21</td>
<td>26.28</td>
</tr>
</tbody>
</table>
In the informal interactions, the network centralisation scores were much lower in both teams than they were in the formal interactions, suggesting that leadership in the informal networks was more decentralised. However, the network centralisation scores were much higher in the English Team (the lowest being 15% and the highest being 47%) compared with the Mathematics Team (the lowest being 11% and the highest being 28%), suggesting a more decentralised pattern of leadership in the Mathematics Team. The centralisation scores are similar in some ways to the findings of a study of twelve departments by de Lima (2008) where four departments had centralisation scores that were similar to the Mathematics KLA team and one department had similar scores to the English KLA Team. However, centralisation scores of the Mathematics KLA team were higher than three departments and lower than five departments when compared with the results of de Lima’s (2008) study. Furthermore, the centralisation score of the English team was higher than nine departments in de Lima’s (2008) study, suggesting that the English team in the current study has a comparatively higher degree of centralisation.

**Network Density**

In the formal interactions, the network density scores were generally low in both teams (Table 16); suggesting generally low levels of communication than that which is possible in team meetings. However, the density scores were much higher in the English team (the lowest being 18% and the highest being 44%) compared with the Mathematics Team (the lowest being 23% and the highest being 41%). As mentioned earlier, since this is believed to be the first study measuring interaction in educational meetings, the results cannot be compared with similar data; however, these results are lower when compared with the results of the study by de Laat’s et al. (2007) of online conversation in a networked learning community where the density scores were between 48% and 36% in different periods in time.

In the informal interactions, the network density scores were lower in both teams than they were in the formal interactions, suggesting low levels of communication than that which is possible. However, the density scores were much higher in the English team (the lowest being 7% and the highest being 35%) compared with the Mathematics Team (the lowest being 7% and the highest being 31%). The density scores are much higher than the findings of the study of six professional communities in elementary schools by Hayton and Spillane (2011) where the highest density score in Mathematics
communication was (4.5%) and (19.44%) in the Literacy network. However, in the current study, the low level of leadership communication was evident in all networks in both teams despite the belief of most participants that the provision of advice and information was an act of leadership as illustrated in the Figure 32 below.

**Figure 32**
*Perceptions of Advice as an act of Leadership*

![Figure 32](image)

The low levels of leadership communication are further illustrated in the extent to which formal leaders provided advice and information to colleagues as discussed below.

### 7.1.2 Key Advice Givers According to Role Position

In the formal interactions, there were differences between the two teams in terms of the extent to which formal leaders were providers of advice and information to colleagues. In the Mathematics team, between 50% percent and 66% of the formal leaders provided advice and information to colleagues; while in English, between 40% and 80% of formal leaders provide advice and information to colleagues (Figure 33). A significant difference between the two teams was the distribution of leaders. Whilst the key advice givers in the Mathematics team comprised formal as well as informal leaders, in the English team, the key advice givers came solely from among the ranks of formal leaders. In the Mathematics team, in addition to the formal leaders, half of the STs/IFs emerged as informal leaders.
The network position of actors also provided a picture of the extent to which the formal leaders provided advice as well as the emergence of informal leaders. In the Mathematics team, in the formal interactions, the network position of actors revealed that whilst some formal leaders were very central, two to four LTs generally occupied a peripheral position. In the first meeting, whilst one LT was central, two formal leaders occupied a less central position; and two other LTs (one experienced teacher and one ‘newcomer’ occupied a peripheral position (Refer to Sociograms in Chapter 5). In the second meeting, two formal leaders occupied a central position in the network; whilst the experienced LT and one ‘newcomer’ LT occupied a peripheral position. In the third meeting, whilst the HOC occupies the most central position in the network, one LT occupies a less central position and the rest of the LTs occupy a peripheral position. The less central to peripheral positions of these formal leaders suggests that they participate to a lesser extent in the advice giving interactions; this implies that their expertise is underutilised. Moreover, some of these formal leaders are also less centrally positioned in the network as compared with some STs and an IF. In the first meeting, an IF and ST are as equally central as the most prominent LT. In each of the second and third meetings, two STs are more centrally positioned compared with some of the LTs. The network position of these STs and the IF suggests that they are more active participants in the meeting dialogue and a frequent source of expertise to more team members as compared with some formal leaders.

In the English team, in the formal interactions, the formal leaders occupied a more central position as compared with the Mathematics team, with one to three LTs generally occupying a less peripheral position. In the first meeting, two LTs occupied a central position, and two other LTs (one experienced teachers and one ‘newcomer’) occupied a peripheral position in the network (Refer to Sociograms in Chapter 6). In the second meeting, the HOC, and three LTs occupied the most central position, whilst the experienced LT occupied a peripheral position. In the third meeting, the HOC and one ‘newcomer’ LT occupied the most central positions, and three LTs occupied a peripheral position. Similar to the Mathematics team, the peripheral positions of these formal leaders suggests that they participate to a lesser extent in the advice giving interactions, implying that their expertise is underutilised. However, unlike the Mathematics team, none of the STs/ISSTs were more central in the meeting networks. This suggests the potential expertise of these teachers has not been tapped by team members.
Figure 33
Key Advice Givers According to Role (Formal/Informal Leaders) in Formal Networks and Informal Networks
The extent to which the formal leaders provided advice was much higher in the informal interactions. In the Mathematics team, the formal leaders provided advice to a greater extent to colleagues when compared to the English team. In the Mathematics team, all formal leaders provided advice frequently to colleagues, and 83% provided advice in Five Dimensions of teaching and learning, whilst in the English team, 85% of formal leaders provided advice frequently, and 71% provided advice to colleagues in ALL dimensions of teaching and learning (Figure 33). However, in the English team, the STs/ISSTs provided advice to a greater extent (between 83% and 100% informal leaders) than the formal leaders, thus emerging as informal leaders. In the Mathematics team there was little difference between the percentage of formal and informal leaders as providers of advice. These results are significantly higher than the findings of the study of the role of leaders in elementary schools undertaken by Spillane et.al. (2010) which found, on average, schools had approximately seven key advice givers with roughly half having no formal leadership designations. Notwithstanding the higher percentages of formal leaders providing advice in the current study, the density scores reflected generally low levels of leadership communication between team members. The interactions between LTs and their ST partner also revealed this pattern (Figure 34).

**Figure 34**
**LTs Providing Advice to Partner STs in Mathematics and English Team Networks**

![Graph showing advice provided by LTs in Mathematics and English teams](image-url)
As illustrated in Figure 34, the advice giving interactions between LTs and their ST partner were generally lower in the Mathematics team than in the English team. In the Mathematics team, two out of five pairs of LTs provided advice frequently, whilst in the English team, all LTs provided advice frequently to their ST partner. In the Mathematics team, two out of five LTs provided advice in ALL dimensions, whilst in the English team two out of four LTs provided advice to their ST partner. In the specific dimensions of teaching and learning, four out of five LTs provided advice to their ST partner in curriculum planning, and two LTs provided advice to their ST partner in the other dimension. In English, two LTs provided advice to their partner in all dimensions.

One interesting observation in the English team was an inverse advice giving relationship occurred where two STs provided advice to their LT partner in Five Dimensions network as well as in specific dimensions, including curriculum planning, teaching approaches and assessment. This suggests that is despite the organisational hierarchical positions of actors’, advice and information were frequently provided by actors in the team.

The network position of actors also provides a picture of the extent to which the formal leaders provided advice as well as the emergence of informal leaders in the informal interactions. In the Mathematics team, half of the formal leaders are less central in this network. In terms of the frequency of advice giving, one LT is quite central (in addition to an IF and LT) in the network, and three other formal leaders occupy less central position (Refer to Sociograms in Chapter 5, Part Two). In the Five dimensions of teaching and learning, two formal leaders (HOC and LT) are central (in addition to a ST), and three formal leaders occupy a less central position, with one experienced LT generally occupying a peripheral position. Moreover, the three leaders are less centrally positioned in the network as compared with ST and an IF, each of whom occupies an equally central position with some of the central formal leaders. In the English team, the patterns of centrality were quite similar to that of the Mathematics teams. Whilst the two of the formal leaders (HOC and LT) were most central, three formal leaders occupied a less central position in the frequency of advice giving relation (Refer to Sociograms in Chapter 6, Part Two). Furthermore, the network positions also revealed that two LTs (one experienced teacher and one ‘newcomer’) were most peripheral. Also, the ALL dimensions of teaching and learning revealed that three LTs are most peripheral. Moreover, some of the LTs were less centrally positioned in the network as compared to two STs.
The peripheral position of key members in teams was also found in a study undertaken by Cross and Thomas (2009). These peripheral actors were regarded as very knowledgeable and experienced but not actively engaged in helping to solve problems. The organisation targeted these individuals to become a lot more involved in the community of practice with the community coordinator tapping into their knowledge and expertise to help others. The peripheral position occupied by ‘newcomers’ was found in a study of several organisations, including Johnson & Johnson, undertaken by Cross, Vertucci, Cowen, and Thomas (2009). The authors maintain it takes 12-18 months for new employees to become well integrated and productive; suggesting, appropriate placement in the network, creating initial assignments, mentoring as well as the degree to which these newcomers reached out and offered their expertise, amongst others, integrated people into existing networks. Additionally, developing a knowledge and skill profiling system which is used to make others aware of the ‘newcomer’ significantly improves knowledge transfer (Cross & Thomas, 2009).

7.1.3 Factors affecting leadership of teaching and learning

In this study, the peripheral position of some formal leaders, the low network density scores, and the low in-degree scores demanded an explanation. Hence, interview, team meeting and observation were analysed. The data revealed that there were several factors affecting the extent to which leadership was provided through advice and information interactions in both teams. Table 17 provides a summary of these factors.

Table 17

<table>
<thead>
<tr>
<th>FACTORS FAVOURING</th>
<th>FACTORS HINDERING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team structures, team meeting routines and informal meetings enabled sharing of ideas and experiences</td>
<td>Teacher attitude and resistance to change</td>
</tr>
<tr>
<td>Team composition was a resource for ideas, advice, information and for professional learning</td>
<td>Tension in team meetings</td>
</tr>
<tr>
<td>Management and boundary spanning roles of HOCs provided opportunities for learning</td>
<td>Too many meetings, too little time for reflection and discussion</td>
</tr>
<tr>
<td>Teachers with Senior School teaching experience were a valuable source of advice, information and ideas</td>
<td>Lack of shared understanding of the purpose of the team</td>
</tr>
<tr>
<td></td>
<td>Network architecture</td>
</tr>
</tbody>
</table>
Factors Favouring Leadership of Teaching and Learning

Organisational structures and routines

Whilst there were some differences between teams, in most instances, there were similar factors favouring advice and information interactions in the Mathematics and English Teams. First, organisational structures such as teams, meeting routines and informal meetings enabled colleagues to provide and receive advice and information, thereby fostering professional learning, and leading to improved teaching practice. Interviews with participants revealed they believed team meetings were one context where ideas emerged for the development of units of work, activities and assessment tasks, as illustrated in the following extract taken from an interview with a ST from the Mathematics team:

Many ideas are shared cos you know we do often come up with a lot of ideas after a maths meeting and we can build on it. We can build assignments and units and you know activities of them. So the amount of discussion that does go through is very I think to the benefit of the team. [INT 15: 01-12-2009]

The benefit of team structure and meetings as a forum for ideas and changing teaching practice was also reported by teachers in the English team, as illustrated in the extract below:

My practices have changed as a result of this team because when I am working closely with others I learn some excellent ideas from their way of doing things that I may never have done if it were not for them sharing or for me having to work so close to them. Some of the ways I have changed my practices as a result of being a member of a team are I learnt better ways to plan and assess. [INT 24: 20-09-2009]

Team composition served as a resource for learning

Team composition served as a resource for proffering advice and professional learning. Members in the team brought different strengths to the team which was beneficial to teamwork and learning. Whilst the HOCs led curriculum and managed team planning, teachers brought content knowledge, ideas, and teaching resources to the team. Furthermore, a mixture of young and experienced teachers, served as a valuable resource for leadership. Interviews with participants revealed that a mixture of young and experienced teachers, were perceived to be a valuable resource for teacher learning.
The younger teachers benefit from the knowledge and experiences of the older teachers, as illustrated in the following extract with a teacher in the Mathematics team:

... the mixture of youth and experience. You’ve got Dan and myself who’s first year out and you’ve got people like Brad who’s just got a wealth of knowledge and Bill who’s been teaching for so long and knows so much and that’s a really good you know a really good balance I think cos they actually listen to us and off course we listen to most things that they have to say.

[INT 15: 01-12-2009]

Management and Boundary spanning role of the HOCs

The HOCs played a prominent role in managing their subjects, creating opportunities for collaboration by convening KLA meetings and moderation (of student assessment) meetings. In addition, teachers attributed changes in teaching practice to the HOCs important role in facilitating professional development programmes. The HOCs organised professional development programs for the LTs. Teachers were given time off from classroom teaching for these workshops. Outside consultants were brought in to school to facilitate workshops on various aspects of teaching Mathematics. The LTs interviewed attributed some of the changes in their teaching of Mathematics to these consultants as illustrated in the extract taken from an interview:

Researcher: Could you elaborate on the investigations and rotations you do? How is it going?
Jess: Really great. I enjoy it. The kids love it. My kids actually love coming to maths. They’re there before I am waiting to get in.

Researcher: Who would you attribute your adoption of this approach to teaching of maths?
Jess: I think I’ve mostly gone off on my own. I’ve been given ideas by other staff but I think Iris sending me to PDs with Jiani James that came out. Mostly her. She just gave me lots of ideas and I just went out and tried them.

[INT 18: 07-12-2009]

Senior school teaching experience

Except the two HOCs, all the most influential teachers in the two KLA teams taught in both the middle school and senior school at this site. These teachers were perceived to have good content knowledge, pedagogical practice, and an understanding where middle school students are heading. The value of the senior teachers, not only in terms of years of teaching experience, but also in terms of teaching at senior level is captured in the following extract.
They come up with ideas and resources and if things aren’t going to plan then they can generally come up with other options and different ways of doing things. And because they’ve got the higher knowledge than some of us as high school teachers, they tend to know where they’re heading towards senior more and we don’t know that as primary teachers.

[INT 6: 17-11-2009]

Despite these factors favouring advice and information interactions, two main factors limited the exercise of leadership practice. These were the lack of a shared understanding of the purpose of the team, and the network architecture.

**Factors hindering leadership of teaching and learning**

*Lack of shared understanding of purpose of the team*

Whilst all participants had some understanding of the purpose of the KLA team, there was a lack of a shared understanding. Some participants had a ‘broad view’ whilst others had a ‘narrow view’. The HOCs defined the purpose broadly in terms of leadership for learning of students as well as teachers. In the Mathematics team, the HOC maintained curriculum planning was largely the purpose in the initial (formation) of stage of the team, in addition to identifying programme needs. However, with time, the purpose had evolved and expanded to include the professional learning of team members. One LT shared this understanding of the purpose of the Mathematics team. In the English team, the HOC maintained, in addition to alignment of curriculum programme with policy, professional learning was critical through sharing ideas, expertise, and professional development activities such as moderation of student assessments and development of exemplars. Two LTs shared this understanding of the purpose of the English team. Other LTs and most STs understood purpose to be curriculum planning and organisation (delegation of tasks and record keeping). The extract below taken from an interview with a ST captures this narrow understanding of the purpose of the KLA team:

The main purpose of the team is develop plan and deliver content knowledge in maths ... the maths team we’re starting to do more and more now a lot more sharing which is good. In science we’ve done it probably for longer but for whatever reason maths now Iris and I’m glad she’s doing it and she’s encouraging us to share resources and ideas which is really really good. So I think sharing now is another part of what we’re about.

[INT 15: 01-12-2009]
The finding of a lack of a shared understanding of the purpose of the team was different from the findings in a study of a professional community in an elementary school undertaken by Secada and Adajian (1997). The researchers found that teachers changed their instructional practices, making mathematics more relevant to students’ everyday lives through applications and realistic problem solving and having students explain and justify their solutions. Teachers in the study claimed that their membership in the professional community provided them with a sense of purpose that focused substantively on making Mathematics more relevant to their students’ everyday lives. The community was understood as a place where they could risk sharing new ideas and work to solve problems created by their efforts to reform instructional practices. However, in my study, the lack of a shared understanding of the team’s purpose limited the practice of leadership of teaching and learning, particularly professional learning.

Network Architecture

Whilst team meetings and electronic modes of communication fostered advice and information sharing to some extent (Refer to Appendix A), other aspects of the network architecture related to the facilitation of team interactions were perceived to hinder leadership of teaching and learning: the rooms for meetings, arrangement of furniture and the availability of technology to facilitate meetings, and proximity could have constrained communication between team members. First, most meetings were held in the school library, a venue used for other activities at the same time the team meetings were held. Thus, there was much movement and noise in the room (FN 08-09-2009; 18-08-2009; 27-10-2009). Second, the arrangement of furniture (tables and chairs) did not foster advice and information communication amongst all team members. For example, in one meeting of the English team, the room available remained set up as for a traditional ‘teacher directed’ classroom, with chairs in an almost-straight line. In another meeting, the room was set up for collaborative work in small groups. However, the chairperson sat at one table with four teachers, whilst some teachers sat behind the chairperson and colleagues. In the Mathematics team, tables were generally arranged for collaborative group work. However, in one meeting, teachers separated the tables that were joined together by the HOC. Third, whilst the library was equipped with technology, only one of the meetings observed used a data projector. Also, whilst a few teachers brought along a laptop computer, this was used in only one meeting.
Another factor related to network architecture was physical proximity. One of the
teachers interviewed indicated her teaching practice was influenced to a greater extent
by a fellow teacher, not only because of the latter person’s expertise but also because
these two teachers were located close to each other. However, the HOC was located
further away and less accessible. Similarly, some teachers stated being ‘housed’ in the
POD planning room was problematic because subject teachers were spread across the
school. With each POD having only two subject teachers, the communication amongst
teachers was limited. One participant explained that this limited communication to the
extent that it became stressful at times. The problem of teachers spread out across
school is illustrated in the following extract:

"... they’ve got the people from the different ahm subject areas different KLA areas spread across all
the different staffrooms and their idea for that is they get to know each other well. Okay that’s the
social aspect of it but does it really work? No. Because if you want to have a meeting for say the
Tech people they’ve gotta get everybody else from all the different buildings to one location . Now
the problem there is you then have people from all different KLAs so you’ll making noise about
different sorts of things you end up getting very frustrated. I don’t think it really works splitting it up
like that ... but if you had to look at it if we’re to look at wanting really the KLA structure you gotta
have the KLA teams really together to facilitate rapid effective communication. It should happen
now.
[INT 9: 18-11-2009]"

Another participant stated the physical structure minimises advice and information
interactions; hence the intranet and internet are where this is most often sought.

"Compared to ‘traditional’ schools sharing of information, seeking/receiving advice and just gener
constructive discussions at Daleview Gardens is minimal due to the physical structure (in respect of
KLAs). Electronic communication to some extent ameliorates this. Advice, suggestions, ideas are mor
often to be sought via the internet.
[SNS #14]"

The finding that physical proximity limits the sharing of advice and information was
consistent with the finding of a study of the exploration and production divisions of a
large petroleum organisation undertaken by Cross (2009). Whilst it was imperative for
members of the group to create and share knowledge, the production division had
become separated from the overall network. Several months earlier these people had
been physically moved to a different floor in the building. Upon reviewing the
networks, it was realised that this physical separation had resulted in a loss of
opportunities for meetings amongst members. Thus, Cross and Thomas (2008) maintain
collaborative tools such as e-mail, instant messaging, and video conferencing can bridge
gaps; however proximity still frequently dictates people’s networks.

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Factors hindering leadership of teaching and learning in the Mathematics team

Teacher Attitude and Resistance to Change

Whilst team structure was beneficial to team members, in the Mathematics team, teacher attitude and resistance to change were a challenge facing team leaders. The formal leaders interviewed believed that it was important to change approaches to teaching mathematics as well as in assessment practices. These leaders advocated a more hands approach, back to front thinking as newer ways of teaching problem solving in teaching mathematics. For assessment, the low student achievement data in the NAPLAN tests was one of the indicators of the need to improve teaching and assessment practice; however, these leaders felt some of the senior (experienced) teachers with a preference for traditional teaching methods, such as the text book method, resisted such change. The resistance to change by teachers is also captured in the following extract taken from an interview with a LT who perceived that some of the resistance could be attributed to perceptions that there is a lot of work involved in newer approaches. However, the LT felt that an increased effort in curriculum planning was not really the problem.

... I think that some of the teachers are excellent maths teacher but they are traditional maths teachers, whereas what Iris is trying to get us used to teaching sort of outside the box I suppose where not constructivist not that. It’s more of a hands-on approach to learning content instead of textbook approach. So sometimes the more traditional teachers struggle with the idea of that. They think that there’s gotta be a lot of effort involved in planning or preparation when there’s not really that much more work involved at all. That’s the biggest problem.

[INT 18: 07-12-2009]

Despite these challenges the HOC encouraged teachers to look at their individual and collective team strengths and weaknesses and find ways to improve.

Tension in team meetings

Whilst observation data [FN 18-08-2009; 27-10-2009; 17-11-2009] indicated collegiality in the form of laughter and friendly teasing in team meetings, participants interviewed reported the prevalence of tension in meetings stifled voices of some teachers. Team meetings were the context in which much of the debate related to new approaches to teaching mathematics emerged. Some leaders felt whilst most times teachers were open to ideas, at other times there was a heated clash of opinions. Teachers reported that the clashes often occurred between teachers as well as between teachers and HOC:
...so in maths meetings things can get quite heated between the different levels of teaching and then even amongst the own level. So the five six teachers are quite argumentative as to what they want for their students.

[INT 6: 17-11-2009]

Some team members were perceived to have strong personalities; resulting in some teachers finding it difficult to voice their opinion. This conflict in meetings was also an issue that impacted to a greater extent on younger teachers as illustrated in the following extract.

... I get along with pretty much everyone in both the teams but I think we find it more difficult probably I find it more difficult getting points and suggestions across in a maths meeting. You know when we’re trying to focus on something where there’s a lot of argument and a few opinions being put forward but compared to science I find it more difficult. But it’s certainly not impossible to get my opinion across. There are benefits being in the team even though it might be sometimes a bit of a stumbling block for us is the amount of argument. I find its getting easier with more experience ...

[INT 15: 01-12-2009]

In addition to the view that conflict emerged as a result of mixed opinions regarding teaching approaches, some participants felt that the conflict was due to the lack of subject expertise of the teachers who were primary school trained and did not know how to prepare students for their senior years of schooling. Another participant attributed the conflict to the lack of subject knowledge expertise of the HOC who was not mathematics trained. Other teachers acknowledged the positive role of the HOC, whilst also expressing the importance of subject knowledge.

The team all need to do what is asked of them. We are always asked to change how we do things. Some work, some don’t. But to not even attempt or give something a go is very naïve. It is a good team, with a range of experiences and expertise. The HOC does a good job, even though it isn’t her subject area, on organisation and delegating roles, but I do think that the specific subject knowledge would help.

[SNS #25]

The HOC acknowledged her lack of subject expertise and explained that her role was to lead the team, bring back the integrity of the once watered down subject due to New Basics approach. This, she maintained, could be achieved by aligning the team and teaching to the new curriculum framework, to get consistency through creation of templates, including Curriculum Organisers, Unit Plans, Standardised format for task sheets and Criteria sheets, and marking matrix. She described her role to be to moving the team forward by challenging teachers who in turn will teach mathematics that challenges students. This is illustrated in the following extract.
It can be quite difficult at times because I was appointed to this school. I am not trained in mathematics so I think I was appointed for organisation and leadership qualities plus the work I’ve done in QCAR and looking at the big picture documents. So what I do bring to the team is that routine, the making sure we’re aligning the templates and times it can be difficult cos teachers at this school were used to making their own journey. So they were used to doing the rich tasks and be able to create but what happened was the integrity of the subject area perhaps got watered down a little bit so in terms of bringing back the integrity it challenges teachers to challenge students. So I guess I challenge people a lot ...

[INT 21: 09-12-2009]

Whilst some teachers attributed the conflict to the lack of subject knowledge of the HOC, one teacher felt that the lack of subject knowledge was a positive thing. The teacher explained that he found the HOC challenging teachers and asking questions that required teachers to explain mathematics to her, a non-mathematics teacher, and explaining how they will teach it to their students using engaging and higher order thinking strategies. The lack of expertise of the HOC and the approach of challenging teachers to explain benefited teachers as illustrated in the following extract:

... there are some leaders in the team who tend to lead discussion. It is facilitated well by Iris and I think actually having a HOC outside the area has worked in a way because she doesn’t know exactly what everything is. They have to explain it to her and that’s really good because it means they have to be able to explain the nitty gritty. They have to have justifications. They have to have it make sense to Iris before it goes through and I think that’s a beautiful thing in a lot of ways.

[INT 9: 18-11-2009]

**Factors hindering leadership of teaching and learning in the English team**

Too many meetings, too little time

Many meetings of teams were held across the school during the school day, including POD planning meetings, KLA team meetings and staff meetings. Observations of team meetings revealed teachers spent much time at POD meetings held twice a week; one meeting was of an hour in duration and the other was an hour and a half. Whilst teachers of Mathematics did not report the number and purpose of meetings problematic, it was perceived as an issue in the English team as one teacher reported:

Common planning time is not utilised effectively. Ninety minutes is a long time to plan with the POD alone. This time should be used to plan with KLA groups somehow. If the POD teachers were responsible for organising the curriculum taught for just these group of students then fair enough. This planning time would be vital, but at the moment it is a time waster.

[SNS #11]
Often, teachers left a KLA team meeting to attend the staff meeting (FN 18-09-2009; 27-10-2009; 17-11-2009). Whilst teachers of Mathematics did not find this problematic, this was perceived as an issue in the English team. The ‘busyness’ of the school day was intensified as teachers rushed from one meeting to the next, resulting in the loss of important thinking. This is illustrated in the extract taken from an interview with a LT:

Just that it often seems very rushed. That you don’t necessarily have enough time to do the thinking that we need to do. Going back to that PD it was about event management. That we get so stuck in managing the event as it comes along. That the thinking is what often gets lost and I think that too. Cos KLA meetings you sort of always squished in. Got this this and this to do and then there’s the other meeting to go to and then its over.

[INT 10: 19-11-2009]

Whilst team meetings held approximately every five weeks were perceived to be adequate for planning, in addition to more time for thinking (reflecting), some participants felt more of the meeting time should be used for discussing problems, sharing teaching experiences, and ideas.

Time is probably adequate for planning but what you sometimes need is the more useful things are the discussions that you have with other people and you’re generally talking about how have you done this? What problems have you had with this and how did you overcome this? That sort of discussion sometimes with teachers and that’s what you don’t get except within your own POD groups ...

[INT 16: 03-12-2009]

Curriculum planning process limited voice of some teachers

Curriculum planning process limited voice of some teachers. Despite being time poor, curriculum planning took place with key teachers nominating to plan units of work and assessment tasks related to the program. However, some teachers were unhappy at being left out of the planning process, believing planning was left to one or two key people. These teachers felt that the planning process should be subject to review and should include inputs from other teachers. This view is captured in the following extract taken from an interview with a ST:

... one to two people or maybe three people would end up planning everything. So their single vision has come out. Other people haven’t contributed for whatever reasons and it’s just pure managing of what the school has to do. It has to provide assessment tasks It has to provide a genre for the term and that’s what it does versus leading where in my mind that would be more about looking at what we’ve done how can we do better and going through several versions of assessment and learning and things like that rather than just its done, that’s it.

[INT 17: 04-12-2009]
In sum, various factors affected leadership of teaching and learning in both teams; some common to both teams, and others unique to one team. Some of the common positive factors were the organisational structures of teams and the routine of team meetings, and the team composition of senior and young teachers who bring knowledge, ideas and experiences to the team. Teachers exchange these ideas both formally, in meetings, as well as informally through networks are perceived to lead to professional learning of teachers. The adoption of ideas, experiences and knowledge gained through interactions has changed and improved teacher practice to more effective teaching. In addition, the boundary spanning role of the HOCs supported the professional development of teachers. Whilst some factors were favourable, other factors hindered leadership. The first common factor impeding leadership was the lack of a shared understanding of the purpose of the team. Whilst some teachers understood the purpose was to operate as a PLC, others believed the purpose of the team was to plan curriculum and share resources. The second common factor hindering leadership was the network architecture. Whilst electronic forms of communication have fostered interactions, other aspects such as room arrangements and teacher planning rooms were perceived to limit the possible extent to which advice and information sharing occurs as teachers are spread across the middle school. However, there were some factors unique to each team. In the Mathematics team, teacher attitude and resistance to change posed a challenge for leaders attempting to bring change to practice among those teachers with a preference for traditional methods of teaching. This challenge surfaced strongly in team meetings where heated debate occurred, with some strong personalities voicing their opinions and other introverted personalities remaining quiet on the periphery but sharing their ideas outside of team meetings. Two factors hindering leadership of teaching and learning in the English team included too many meetings (and limited time for English team meetings), and the curriculum planning process involving, one the one hand, the selection of key teachers for curriculum planning, and on the other hand, omitting other teachers from the process.
Most Prominent Actors, Leadership Patterns and Configurations: Frequency of Advice and Dimensions of Teaching and Learning Networks

In the formal interactions, there were multiple sources of leadership and both teams displayed hybrid patterns with a range of configurations. However, there were more prominent actors (six) in the Mathematics team than in the English team (five) (Table 18). The identification of the most prominent leaders revealed hybrid leadership patterns; however, the Mathematics team revealed a greater degree of hybridity. In the Mathematics team there were three different structural configurations: individual, pair, and group. In terms of role sets, the HOC was the single most prominent leader in the third meeting pointing to a focused, formal leadership configuration. The pair comprised an LT and ST in the second meeting; and the group comprised an IF, LT and ST in the first meeting; both networks pointing to an alternate, formal and informal leadership. In the English team, there were two different structural configurations: pairs (two) and a group. There were pairs in the first and third meeting; however the pairs were different in terms of role sets. One of the pairs comprised two LTs, pointing to an alternate, formal leadership configuration, and the other pair comprised the HOC and an LT, pointing to a multiple, formal leadership configuration. The group configuration comprising the HOC and three LTs in the second meeting also pointed to a multiple, formal leadership configuration. One interesting finding was that, in the Mathematics team, the most prominent actors generally came from the ranks of formal as well as informal leaders, whilst in the English team the most prominent leaders emerged from solely the ranks of formal leaders.

In the informal interactions, there were multiple sources of leadership, with both teams displaying hybrid patterns with a range of configurations. In both teams seven actors were identified as the most prominent actors (Table 18). In the informal interactions, the Mathematics team also revealed a greater degree of hybridity. Results indicated three different structural configurations: individual, pair (one) and groups (five). In terms of role sets, the HOC was the single most prominent leader in curriculum planning, pointing to a focused, formal leadership configuration. The pair comprised the HOC and a LT in the frequency of contacts, pointing to a multiple, formal leadership configuration.
Table 18
Most Prominent Actors & Configurations of Leadership in the Mathematics KLA Team and English KLA Team Networks

<table>
<thead>
<tr>
<th>Network/Relation</th>
<th>Mathematics KLA Team</th>
<th>English KLA Team</th>
<th>Leadership Configuration</th>
<th>Leadership Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Formal Leaders</td>
<td>Informal Leaders</td>
<td></td>
<td>Formal Leaders</td>
</tr>
<tr>
<td></td>
<td>HOC</td>
<td>LT</td>
<td>ST/IF</td>
<td></td>
</tr>
<tr>
<td><strong>FORMAL INTERACTIONS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting One</td>
<td>Jess</td>
<td>Ria</td>
<td>Owen</td>
<td>Alternate, formal and informal</td>
</tr>
<tr>
<td>Meeting Two</td>
<td>Kate</td>
<td>Brad</td>
<td></td>
<td>Alternate, formal and informal</td>
</tr>
<tr>
<td>Meeting Three</td>
<td>Iris</td>
<td></td>
<td></td>
<td>Focused, formal</td>
</tr>
<tr>
<td><strong>INFORMAL INTERACTIONS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KLA Team Network (Frequency of advice)</td>
<td>Iris</td>
<td>Dan</td>
<td></td>
<td>Multiple, formal</td>
</tr>
<tr>
<td>Five Dimensions of Teaching and Learning</td>
<td>Iris</td>
<td>Dan</td>
<td>Nat</td>
<td>Multiple, formal and informal</td>
</tr>
<tr>
<td>Specific Dimensions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curriculum Planning</td>
<td>Iris</td>
<td></td>
<td></td>
<td>Focused, formal</td>
</tr>
<tr>
<td>Content Knowledge</td>
<td>Dan</td>
<td>Jess</td>
<td>Hugh</td>
<td>Alternate, formal and informal</td>
</tr>
<tr>
<td>Teaching Approaches</td>
<td>Dan</td>
<td>Nat, Hugh, Ria</td>
<td></td>
<td>Alternate, formal and informal</td>
</tr>
<tr>
<td>Assisting Low Performing Students</td>
<td>Iris</td>
<td>Dan</td>
<td>Ria</td>
<td>Multiple, formal and informal</td>
</tr>
<tr>
<td>Assessment</td>
<td>Iris</td>
<td>Dan</td>
<td>Nat</td>
<td>Multiple, formal and informal</td>
</tr>
<tr>
<td>Influence</td>
<td>Iris</td>
<td>Jess</td>
<td>Ria</td>
<td>Multiple, formal and informal</td>
</tr>
</tbody>
</table>
In the dimensions of teaching and learning networks, groups of actors emerged as most prominent leaders: in the Five dimensions of teaching and learning and assessment the HOC, LTs and a STs were most prominent; and in the assisting low performing students, the HOC, an LT, and a IF were most prominent, both networks pointing to a multiple, formal and informal leadership configuration. In the content knowledge and teaching approaches LTs and STs emerged as most prominent, both networks pointing to an alternate, formal leadership configurations.

In the English team, there were three structural configurations: pairs (five) and groups (two). In terms of role sets, the pairs comprised the HOC and a LT as most prominent leaders in the frequency of contacts, teaching approaches, and assessment, pointing to a multiple, formal leadership configuration. Another pair comprised two LTs emerging as most prominent leaders in content knowledge, pointing to an alternate, formal leadership configuration. The last pair comprised ISSTs emerging as most prominent leaders, pointing to an alternate, informal leadership configuration. The groups comprised two categories. In the Five dimensions of teaching and learning, the HOC, a LT and a ST emerged as most prominent, pointing to a multiple, formal and informal leadership configuration, while the HOC and two LTs emerged as most prominent in curriculum planning, pointing to a multiple, formal leadership configuration. In the Mathematics team, the most prominent actors generally came from the ranks of formal as well as informal leaders, whilst in the English team the most prominent leaders emerged from mainly from the ranks of formal leaders.

7.1.5 Influential Advice Givers

Network Centralisation

The influence network of the Teaching Mathematics team had a centralisation score of 21.1%, whilst the Teaching English network was 49.21%; suggesting a higher degree of centralisation in the English team (Table 16). The results of the Mathematics KLA team were consistent with the findings of de Lima’s (2008) study of school departments where one department had a score of 22.20%; however four of the 12 departments had a centralisation score below 21%. The results of the English KLA team was consistent with the findings of de Lima’s study where two departments which had centralisation scores of 50%; however nine departments had scores below 49.21%.
Network Density
The influence network of the Mathematics KLA team was 24.35%, whilst the English team had a network density of 26.28%; suggesting only a quarter of all possible relations were characterised by a strong perception of the impact of colleagues’ advice upon the work of teachers (Table 16). These results were consistent with the findings of de Lima’s (2008) study of school departments where three departments had a density scores between 22% and 27%; however, the other 8 departments had a score above 27% with the highest being 77%.

Influential Advice Givers According to Role: Extent to which leaders provide advice
In terms of influence, there was some difference between the two teams in terms of the extent to which the formal leaders were influential advice givers as well as the emergence of informal advice givers. In the Mathematics team, all formal leaders as well as informal leaders were perceived as being influential on the work of colleagues, whilst 86% formal leaders and 67% of informal leaders were perceived as being influential on the work of colleagues in the English team (Figure 35).

Figure 35
Influential Actors According to Role in Mathematics Team and English Team

The network position of actors also provides a picture of the extent to which the formal leaders were influential advice givers as well as the emergence of informal leaders. In the Mathematics team, two formal leaders, HOC and LT, (and an IF) were most
centrally positioned in terms of influence on the work of colleagues; two LTs occupied a less central position of influence, whilst two LTs occupied a peripheral position (Refer to Sociogram in Chapter 5, Part Two). Moreover, these peripheral LTs were less central to an IF who was equally centrally influential to the two most prominent leaders. In the English team, whilst two of the formal leaders (HOC and LT) were most centrally positioned in terms of influence on the work of colleagues, three LTs occupied a less central position, one HOC occupies a peripheral position, and one LT occupies the most peripheral position amongst other STs (Refer to Sociogram in Chapter 6, Part Two). The peripherally positioned LTs suggest that their expertise has been either untapped or underutilised by members in the network. Moreover, in this relation, some formal leaders are less centrally positioned in the network as compared with three STs, suggesting that the latter are viewed as a source of influence by more team members than some of the LTs.

**Most Prominent Actors, Leadership Patterns and Configurations**

Whilst there were multiple sources of influence in both teams, the Mathematics team had three most influential leaders and the English team had two (Table 18). In the Mathematics team, a group comprising the HOC, an LT and an IF were most influential, pointing to a multiple, formal and informal leadership configuration. In the English team, a pair comprising the HOC and a LT was most influential, pointing to a multiple, formal leadership configuration. Thus both teams displayed a hybrid leadership pattern; however the Mathematics team showed a greater degree of hybridity.

In sum, the centralisation scores of Mathematics team revealed the team networks were highly centralised among a few key actors in the formal interactions; however, the informal interactions were less centralised. Except for the involvement of the prominent actors, in both the formal and informal interactions, there were generally low densities of communication among participants. In both teams, leadership was provided by formally designated leaders as well as informal leaders, pointing to a hybrid pattern of leadership with various configurations. In the formal interactions, the meeting chaired by the HOC indicated a focused, formal leadership configuration, whilst in the absence of the HOC there were alternate, formal and informal leadership configurations where leadership was provided by a group and pair of prominent formal and informal leaders, in the first and second meetings, respectively. In the informal interactions, the curriculum planning network indicated a focused, formal leadership configuration, with
the HOC being the sole prominent leader; however most networks, including the influence of advice and information indicated a *multiple, formal and informal leadership*, with leadership provided by two to four prominent leaders.

The English team data revealed the networks were generally more centralised than the Mathematics team. However, the informal interactions were less centralised than the formal interactions in the English team. Except for the involvement of the prominent actors, in both the formal and informal interactions, there were generally low densities of communication among participants. The most prominent advice givers in the formal interactions comprised formally designated leaders; however, both formal and informal leaders were prominent in the informal interactions, pointing to a hybrid pattern of leadership with various configurations. In the formal interactions, a *multiple, formal leadership* configuration was found in two meetings with leadership provided by a group of four formal leaders in the second meeting and a pair of formal leaders in the third team meeting. In the absence of the HOC an *alternate, formal leadership* configurations emerged where leadership was provided by a pair of prominent formal leaders. In the informal interactions, a *multiple, formal leadership* configuration was predominant in most networks; however, an *alternate, formal leadership* was found in the content knowledge network and an *alternate, informal leadership* was found in the assisting low performing students networks. In most networks, including the influence network, leadership was provided by pairs of actors, particularly the HOC and a LT.

In both teams, in terms of the extent to which formal leaders provided advice, the indegree scores indicated that formal leaders provided advice to a limited extent. This was also evident in the generally low levels of network densities. Whilst some formal leaders occupied central positions in most networks, others tended to occupy peripheral positions. On the other hand, in some situations, some informal leaders tended to be more central than some formal leaders.
7.2 Results: Conversation Analysis: Formal Interactions

Actions of Prominent Leaders and Interactional Devices employed in meeting talk

Meeting talk revealed some commonalities as well as differences between the teams in respect of the actions of leaders as well the interactional devices employed by leaders.

The HOCs as Leaders
In both teams, the HOCs were prominent leaders, despite both lacking subject matter expertise. The actions of leaders involved a focus on leadership in curriculum, pedagogy, and assessment; and the alignment of these three important dimensions of teaching and learning. However, the Mathematics team meeting talk reflected a stronger focus on changing teacher pedagogy and assessment practice, whilst the English team meeting talk reflected a strong focus on aligning curriculum and assessments, and the moderation of student assessment tasks. A second difference between the HOCs leadership was in respect of the activities performed and the range of interactional resources used. Whilst the Mathematics HOC engaged in many leadership activities, advice and information was mainly volunteered. The English HOC, on the other hand, engaged in fewer leadership activities; however, she proffered as well as solicited advice and information by disclosing problems related to practice. Moreover, the English HOC used a wider range of interactional resources to accomplish the task of ‘doing leadership’ (Refer to Table 19).

In the Mathematics team, meeting talk data revealed several leadership actions performed by the HOC. First, the HOC developed an agenda for each meeting and circulated this via e-mail to team members at least a day before each meeting. The agenda was used to guide discussion in team meetings, even in the absence of the HOC at meetings. Second, the HOC delegated curriculum planning to teachers in the team. In the Mathematics team interactions, the HOC organised teachers into sub-groups for curriculum planning, particularly reviewing Units of work and assessment tasks. In these groups, teachers were afforded the opportunity to volunteer on what assessment tasks they wished to review, and if required, create new tasks. Third, in order to create authentic assessment tasks, the HOC organised an excursion for students to a local business, delegating the responsibility of developing the student assessment to teachers.
Table 19
Summary of ONA results and the Interactional Devices employed

<table>
<thead>
<tr>
<th>ROLE POSITION</th>
<th>MATHEMATICS KLA TEAM</th>
<th>ENGLISH KLA TEAM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ONA RESULTS: MOST PROMINENT ACTORS</td>
<td>CA RESULTS: MAIN INTERACTIONAL DEVICES USED</td>
</tr>
<tr>
<td>FORMAL LEADER/S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOC</td>
<td>Iris</td>
<td>Self-reference “we”, extraction &amp; aggregation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teaching replay; Direct reported speech; “I don’t know”; Invoking the non-present other</td>
</tr>
<tr>
<td></td>
<td>LTs</td>
<td>Self-reference “we” Questions Invoking the non-present other Crafting</td>
</tr>
<tr>
<td></td>
<td>Kate</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>INFORMAL LEADER/S</td>
<td>IF Ria</td>
<td>Self-reference “we”; Questions “I think” Voting Formulations</td>
</tr>
<tr>
<td>ST</td>
<td>Brad</td>
<td>Questions</td>
</tr>
</tbody>
</table>

Fourth, to support her agenda of leading pedagogy and assessment, the HOC disseminated information on curriculum policy and assumed a boundary spanning role by organising PD programmes for teachers, using a consultant to support teachers. Fifth, identifying the use of traditional teaching methods and assessment practice as a problem amongst many teachers in the team, the HOC emphasised the involved the need for change in teacher’s pedagogy and assessment practice; and the alignment of pedagogy with assessment. In her attempt to achieve this, the HOC volunteered advice and information on the need for problem solving, the use of deconstructive teaching
approaches in addition to constructive teaching approaches, and for teachers adopting the role as facilitator in the classroom. The HOC volunteered advice on developing investigation tasks that encouraged higher order thinking in students through problem solving, portfolio work, and student reflection on the learning process. To accomplish the task of ‘doing leadership’ in pedagogy and assessment, the HOC uses the interactional device of teaching replay and direct reported speech; providing examples of possible strategies that could be used in the teaching of Mathematics. Faced with challenge of changing teachers’ pedagogy, she employs the self reference “we” to indicate the team as a collective needs to change; however she extracts herself by employing “you” to advise Mathematics teachers to look at things they are not doing that they should be doing in their teaching of Mathematics. In advising teachers she draws on experiences of teaching English; however, she downgrades her advice, using the interactional device of “I don’t know”, acknowledging that Mathematics is not her area of expertise.

The use of replays as an interactional device was also found in another study. In a study of high school mathematics teachers, Horn (2010) found teaching replays (and rehearsals) was an important resource for representing and learning about teaching practice. However, there are some similarities and differences between my study and the findings of Horn (2010). Whilst my study found the advisor volunteers advice, in Horn’s study, the replay was performed by a teacher soliciting advice. Furthermore, Horn’s study found, teachers modelled lessons to share expertise and training and colleagues would ask questions and probe for elaboration. This resulted in re-visions of the initial account; thus the re-vision routine became a mechanism for collaborative diagnosis of teaching problems, positioning both speaker and listeners as having important information to share in the conversations.

Similar to the Mathematics team, in the English team, meeting talk revealed that the HOC was one of the most prominent leaders in the team. In the English team, the HOC’s leadership activity focused on curriculum planning and assessment; and the alignment of curriculum with assessment. First, the HOC used the State Department guidelines to provide information to teachers on the dates of the student QCAT assessment tasks and the nature of the tasks. Second, she emphasised the need for the preparation of students for the tasks, advising teachers on the potential link between the forthcoming Unit of work on Film Study and the preparation of students for the QCAT.
In her advice giving interaction, the HOC used the interactional device of invoking the non-present other to successfully influence teachers to accept the idea of using the Film Study unit content to prepare students for the QCAT. A third important activity performed by the HOC was the leadership in moderation of student assessment as a way to achieve consistency in grading student work, as well as a form of professional growth of teachers. In terms of achieving consistency in grading student work, the HOC used the State Department guidelines to outline three approaches to moderation of student assessment, asking for teachers’ opinions on their preferred approach to moderation. In this instance, the HOC used the interactional device of “we” to maintain a position of ‘team’ in the decision making process related to the choice of an appropriate model for moderation. However, after much deliberation, the HOC brought the topic to a closure without a decision being made, advising teachers to read and understand the guidelines. When one LT later reopens the discussion on the approach to moderation, proposing working in pairs, the HOC employed the device of extraction, informing teachers how she actually thinks they should collaborate to mark student work. She reformulates the proposal and successfully gains commitment from teachers. A grade level moderation meeting also revealed how the HOC solicited advice and information from teachers, and the collaborative discussion contributed to a common understanding of the concept ‘generic’; enabling colleagues to make an informed judgment on student work.

The use of formulations as an interactional resource was similar to the findings in a study undertaken by Barnes (2007) of a medical school curriculum meetings where formulating utterances were undertaken as “harbingers of agreement” (p. 291), thus relevantly requiring no response. Likes Barnes’s (2007) study, formulations in the current study acted as a “reality check” (Barnes, 2007, p. 291) on where participants were in a course of action; used various tying devices to connect up what might seem like disparate elements in a succession of prior turns or sequences into something coherent and served the purpose of achieving topic transition. Thus, formulations are an example of a discursive resource to do leadership more effectively (Clifton, 2006). They influence the outcomes of meetings; fostering interaction, complicity and engagement of others where knowledge is shared to achieve collaborative decision making.
Teachers as Leaders

Whilst the HOCs were prominent leaders, they did not lead in solo in each of their teams. Instead, teachers were also leaders in both teams, indicating that leadership was also stretched across multiple leaders, depending on the situation (as shown by the ONA and CA talk-in-interaction data). Whilst this distribution of leadership occurred in meetings where the HOC was present in the English team, it was evident particularly in the absence of the HOC in the Mathematics team. However, in the Mathematics team, teacher leaders came from formal ranks (LTs) as well as informal ranks (STs/IF), whereas teacher leaders came solely from the ranks of only formal leaders in the English team.

In the Mathematics team, one of the interesting observations was that the first meeting was chaired by an IF and not by one of the LTs. The chairperson played the most prominent role in the meeting, focusing on the same agenda of the HOC and using a number of interactional resources. In ‘doing leadership’, she announced the plan regarding rotations; facilitated advice giving and decision making through the use of five main interactional tools including “I think”; voting and formulations to lead to discussion and decision making. The range of interactional resources used by the chairperson to accomplish the task of ‘doing leadership’ has been found in other studies, for example, formulations, as discussed earlier. The use of voting was also found in the study by Sawyer et al. (2005) of teacher teams in a secondary school. The study found teachers in an interdisciplinary instructional team engaged in active discourse on instruction. The authors argue that in the conversation interactional routines were collectively negotiated and accomplished, rather than imposed by the team leader. The bid to initiate the voting was enacted by a team member, illustrating the collective distributed nature of interactional routines. Whilst the argument that interactional routines are collectively negotiated holds true for my study as well, my study also illustrates the role of individuals such as the chairperson (an informal teacher leader) in facilitating the process of decision making by using voting. It is the checking of abstentions from the vote that gets a teacher to disclose a problem; and this draws other team members into the advice and information giving interaction.

In the second Mathematics KLA team meeting, a LT was one of the most prominent leaders. Assuming the role of chairperson in the absence of the HOC, she led discussion on a problem disclosed by teachers in respect of the investigation task. Teachers wanted
the investigation ‘shelved’; however, the brief from the HOC was to include a reflection question. The LT facilitated discussion where teachers made sense of what the concept ‘reflection’ meant and then collaboratively developed an idea for the task. In this meeting, the LT employed fewer interactional devices than the HOC and IF. However, the LT employed questions and the invocation of the non-present other to accomplish the task of ‘doing leadership’, effectively avoiding conflict and maintaining group cohesion which resulted in the collaborative development of a question for the reflection task. The chairperson’s invocation of the non-present other and the results thereof are similar to the study by Duff (2011) of the spoken interaction of a group of instructors at a Chinese university’s English language programme. Through the representation of non-present other’s opinion, another member was able to offer and arguably co-author an alternative policy position without explicitly claiming a personal disagreement with her co-members. Thus, Duff (2011) concluded that one way members are able to reconcile the twin imperatives of expressing disagreement and maintaining group cohesion is through the use of interactional resources that signal differences in opinion without directly bringing members into conflict with each other.

In addition, participants in this meeting employed the interactional device of crafting to collaboratively develop the reflection question. The employment of crafting by participants was also found in a study undertaken by Sawyer et al. (2005) of teacher teams in a secondary school. The study found teachers in an interdisciplinary instructional team working on instructional and assessment materials for their classes actively negotiated meaning in their attempt to finalise an instructional product. The analyses revealed how the team’s decisions were collaborative, joint actions, emergent from the collective participation of all members. Whilst there were similarities in the results, there are some differences between the two studies.

The study by Sawyer et al. (2005) found the team leader initiated discussion, suggested a solution, and justified the solution; my study found the LT initiated discussion by identifying a problem. Furthermore, the teachers suggested and justified solutions jointly with the LT; with the outcome being a collective agreement of a question for an assessment tasks. In the Sawyer et al. (2005) study, the interdisciplinary team engagement in active discourse was the result of the autonomy granted to the group, and the clear and explicit group purpose that had been stated by the principal; however, in my study the active discourse was a result of disagreement with the assessment item.
suggested by the HOC and the LT’s avoidance of conflict through invocation of the HOC, thereby maintaining group cohesion. Also, in my study, the participants did not have autonomy, therefore the planned item still needed to be ratified by the HOC. Another difference is, whilst Sawyer et al. (2005) highlighted the use of CA to demonstrate distributed leadership, my study employs CA and ONA to illustrate the importance of individuals such as the LT in facilitating dialogue, as well the importance of the team (multiple leaders) in collaborative participation to foster the sharing of knowledge and improvement in teaching practice. In both team meetings, the chairpersons led the meetings for long periods of time; however, they did not single-handedly lead the team. Instead, multiple leaders emerged from across role positions. Furthermore, the interactions revealed that the role of leader (advisor) and follower (recipient) are interchangeable; depending on the situation. At times the chairperson, LT was the initial recipient of advice; however, they later assumed the role of advisors, and vice-versa.

The phenomenon of multiple leaders was also evident in the English team. However, unlike the Mathematics team, leadership in English team meetings came solely from the ranks of formal leaders. In one meeting where the HOC was absent, a LT facilitated a PD session for teachers in the team. She identified a problem in student writing and volunteered advice and information on the teaching of functional grammar, in particular, nominalisation. ‘Doing pedagogical leadership’, the LT explained and demonstrated to teachers various strategies that could be used for the teaching of nominalisation. In advising the teachers the strategies through which nominalisation can be taught, the chairperson employed at least six interactional resources to accomplish the task of leading teaching and learning in the team. Whilst these were lesser than the number of devices employed by the HOC, the LT used more devices when compared with leaders in the Mathematics team. The interactional resources employed included facilitation (co-facilitation), teaching replays, role play; direct reported speech; prosody, and artefacts. The LTs employment of interactional devices to accomplish the task of ‘doing leadership’ was also found in other studies. Whilst the session was facilitated primarily by one LT, she was not the sole leader. Instead, the meeting was co-facilitated by another LT, indicating leadership in this team is stretched across multiple leaders.

The use of verbal replay in conjunction with direct reported speech and prosody is similar to the findings of a study exploring the functions of direct reported speech
(DRS) and direct reported mental states in teachers’ talk undertaken by Vasquez and Urzua (2009). In the interactions between novice teachers and mentors DRS served a dual function when used to provide a verbal snapshot of their actions. In one case, the teacher reported on the instructions she gave to students in her reading class on how to prepare for a practice standardised test. The teacher’s report using prosodic elements in a ‘list-like’ intonation portrayed her in the role of instruction-giver; the guide providing direction to students. In addition, the teacher says “they did really good” (p.11) leads hearers to infer that the students’ ability to do well on the practice test was a direct consequence of the instructions; thus highlighting her effectiveness as an instructor. Furthermore, her use of listing presents her as methodical, organised, and demonstrated how she establishes expertise in the classroom. These findings are consistent with the results of the current study.

Notwithstanding the important role played by the LTs, the use of interactional resources is potentially more effective when they afford participants the opportunity to participate in discussion, an important consideration in light of the low level of participation of colleagues, as evident from the low network density scores (also evident in all other team meetings). For example, as discussed earlier, in Horn’s (2010) study, participants used replays and teaching rehearsals, allowing colleagues to question practices, leading to re-visioning of practice. Also, in the current study, one device employed by the LTs in the English PD session was the mode of facilitation. After a study examining conversations generated in an elementary teacher group undertaken by Crespo (2006), the author concluded that the facilitator plays an important role in promoting and sustaining group discussion; introducing, sustaining, and encouraging norms of disclosure and participation. Facilitator moves, like teacher moves in classrooms, should further the group’s collective insight. This could be achieved by pushing for elaboration, asking participants to comment on each other’s accounts and asking others to comment on what made or did not make sense about what anyone said. Crespo (2006) suggests open and more specific observations or questions such as “Anybody thought about it differently? Have we found all possible ways? “Is there a solution that we’re still puzzling over?” promote and support discussions on problems and enables participants to volunteer and share ideas. Thus, Crespo (2002; 2006) concluded that facilitators moves opens or closes opportunities for professional learning.
In sum, meeting talk in the Mathematics team, revealed leaders’ actions focused mainly on reviewing and improving the existing curriculum programme and changing pedagogical and assessment practice to include problem solving approach using investigations and student portfolios. In the English KLA team, leaders’ actions focused mainly on curriculum planning, introducing functional grammar into the English curriculum, assessment planning, alignment of curriculum and assessment, and moderation of marking of student work. In ‘doing leadership’ the corpus of meeting talk data revealed formal leaders, proffered advice in various sequences.

The corpus of meeting talk data revealed in the Mathematics team, formal and informal prominent leaders, proffered advice when recipients asked for information or opinion; disclosed or identified a problem and were recipients announced a plan. Advice was also proffered where the advisor volunteers advice; volunteered information; and identified a problem and proffered advice. However, in the English team, it was only formal leaders who were most prominent leaders that proffered advice to colleagues.

The corpus of meeting talk data also revealed participants used a range of interactional resources to accomplish the task of ‘doing leadership’. In both teams, the most common resource used was the self-reference “we”; suggesting a team approach to decision making and planning. The second most common interactional device used was the epistemic marker were where “I think”; the third most frequently used was question-answer adjacency pairs; and the fourth most commonly used was the epistemic marker were “I don’t know”. Other discursive tools employed by both teams included formulations, teaching replay, reported speech, three-part lists, invocation of the non-present other, and crafting. Artefacts such as meeting agendas were used by both teams; however arifacts of student work were only examined in the English team. Discursive resources employed only by the Mathematics team included voting, whilst prosody and co-facilitation were employed only by participants in the English team to accomplish the task of ‘doing leadership’.
7.3 Summary of Chapter

In this chapter, a comparison of the results of the study of the two teams was undertaken. First, the results of the ONA data were compared. Second, the results of the meeting talk using conversational analysis were compared. These comparisons revealed some similarities between the teams such as a centralised leadership pattern in the formal networks; and a decentralised leadership pattern in the informal networks. The results also revealed that leadership follows a hybrid pattern with various leadership configurations, including solo leadership by the HOC and distributed leadership pattern involving multiple leaders, including teacher leaders. The comparison of the results revealed network density and in-degree scores that were generally low; suggesting low levels of communication in both teams. This demanded an explanation for which answers were sought through an examination of interview, observation and social network survey data. The data revealed that whilst there were several factors favouring leadership of teaching and learning such as organisational structures of teams and the routine of team meetings, a lack of a shared understanding of the purpose of the team and the network architecture impeded leadership of teaching and learning. Despite these limitations, the results also indicate the leadership activities with both teams focusing on leadership of curriculum, pedagogy, and assessment; and the alignment of these three dimensions of teaching and learning. Except for the Mathematics HOC who volunteered advice, most leaders proffered as well as solicited advice from colleagues. The study also found that leaders in both teams employed a range of interactional devices in the advice and information interactions. Whilst the study found similarities, this chapter also presented a discussion on the differences between the two teams. One difference was revealed in the ONA data was that only formal leaders were most prominent in the meeting interactions English team, whereas both formal and informal leaders emerged in the Mathematics meetings. A second difference was the degree of focus of the leaders on each of the dimensions of teaching and learning in each team. A third difference was the range of interactional resources differed to some extent between leaders within the teams as well as between teams.

The next chapter, the concluding chapter, presents a summary of the findings and discussion. It also includes a discussion on the conclusions, limitations of the study and recommendations for the leadership of teaching and learning in subject teams as well for future directions of research.
CHAPTER EIGHT
SUMMARY OF FINDINGS AND DISCUSSION

8.0 Introduction

Despite the substantial body of research on school leadership, limited research has been published on leadership of teaching and learning, particularly in subject teams. International studies include, de Lima (2008), Harris (1998), Higgins and Bonne (2011), Moller and Eggen (2005), Sherer (2007), Spillane (2005), and Timperley (2005). In Australia a few studies have been undertaken. The study of English departments undertaken by Sawyer et al. (2007) and Mathematics departments investigated by Pegg et al. (2007), found subject heads were drivers of faculty change, and sources as well as facilitators of professional development. Whilst leadership was held by the subject head, leadership of the faculty was frequently distributed, with an acceptance and understanding of who does what. Ritchie, Mackay, and Rigano’s (2006) study of science departments identified a common set of leadership roles of science coordinators including modelling desired practices consistent with their articulated vision, introducing new ideas, convening staff meetings, and playing a vital role in curriculum planning. Consistent with the findings of Sawyer et al. (2007) and Pegg et al. (2007), this study found coordinators exercised individual leadership roles while accepting influence from the members of their teams.

The current single site case study used observations, social network survey and interviews, to provide an analysis of how leadership of teaching and learning through advice and information interactions is practised in two subject teams in a middle school in Queensland, Australia. A mixed-methods approach was adopted to gain a fuller picture of leadership practices in formal and informal interactions, among formal and informal leaders, within and between teams. This approach contrasted with studies on subject leadership that have focused on solely formal leaders, informal interactions; and adopted either quantitative or qualitative methods.

In this concluding chapter, a summary of the findings is presented and discussed in the light of the research questions guiding this study. The chapter makes recommendations...
for various role-players in the education community and for future research in respect of leadership of teaching and learning.

8.1 Limitations

The study was a descriptive single-case study with the purpose of describing the practice of leadership of teaching and learning through advice and information in subject teams. The purpose of the study included investigating the use of the methods of CA and ONA to understand leadership practice. Employing Conversation Analysis, a method which involves managing large volumes of data in the form of transcripts, limited the sample for this study. Hence, the study employed a small sample of two teams. This sample of a single-site involving two teams placed a limit on generalisations made from the findings. However, the depth of analysis and results of the study are perceived to be useful for the teams in the school involved in this study as well as for other teams in the school and schools with similar characteristics. Another limitation was that the study was undertaken by an ‘insider researcher’, which implies the potential for bias to emerge in the findings. This limitation was addressed by adopting strategies including methodological triangulation, constant researcher reflection, and discussions of interpretations of findings with selected participants and critical friends.

8.2 Summary and Discussion of Findings

This study set out to investigate how leadership of teaching and learning through advice and information interactions is practised in school subject teams. This investigation was guided by four main questions. In investigating these questions, ONA was used in conjunction with CA to investigate the first three questions, whilst CA was used solely to investigate the final research question. In this section, I present a summary of the findings in respect of each of the guiding research questions, each followed with a discussion.
Leadership patterns and configurations

The first question investigated in this study was: What are the patterns and configurations of leadership that emerge in the interactions of participants?

In this study, the identification of patterns and configurations of leadership were achieved using ONA in both the formal and informal interactions. The use of de Lima’s (2008) typology of leadership configurations facilitated the identification of leadership configurations within each team. Whilst in the informal interactions these patterns and configurations were achieved using survey data, in the formal interactions these patterns and configurations were determined through the use of CA. The use of the Goldsmith’s (2000) analytic frame facilitated the identification of sequences through which advice and information was proferred by leaders. This proved invaluable for the use with statistical measures of ONA (e.g. team network centralisation and in-degree centrality) to determine the team leadership pattern, and the identification of the most prominent leaders.

The study found leadership in the two subject teams took on three distinct patterns. First, a centralised pattern of leadership was evident in the formal interactions of actors in the routine of team meetings; that is, leadership was in the hands of a few prominent leaders. Second, whilst leadership in the formal interactions revealed a centralised pattern, in the informal interactions the teams displayed a decentralised pattern of leadership, with leadership distributed among more team members. Despite the decentralised pattern, the network densities revealed low advice and information communication than the maximum possible communication among team members. These low levels of density were also evident in the formal interactions, suggesting limited leadership communication being exercised by team members than the maximum possible leadership communication in the team. This is discussed further in the next section. Third, the study found that both teams displayed a hybrid pattern of leadership with various configurations, depending on the situation. Hybridity was evident in both the formal and informal interactions. This finding of hybrid leadership patterns was consistent with the findings of Gronn (2009a, b; 2011) where mixed leadership including “solo” and distributed patterns were evident in a study of leadership in an Australian school as well as in his re-analysis of several studies of distributed leadership. The findings of my study thus confirms the strongly held view of Gronn
(2009a, b; 2011) that leadership is not only a distributed practice; focused-individual leadership is also a key aspect of leadership. Furthermore, the findings of this study were consistent with those of Portin et al. (2003) who adopted a musical metaphor to describe the mixed leadership patterns where the leader operates like a one-man band, or distributes leadership (like the leader of a jazz solo), or engages in a broader distribution (like an orchestra conductor). In this study, in both teams, significant leadership roles were performed by designated individuals; an individual formal leader, pairs of leaders and groups of leaders, including those without a formally designated position.

In the formal interactions, leadership indicated a mixture of individual-focused leadership and distributed leadership, depending on the situation. The Mathematics team showed a greater degree of hybridity in the formal interactions. The meeting chaired by the HOC indicated a focused, formal leadership configuration (the HOC was most central), whilst in the absence of the HOC there were alternate, formal and informal leadership configurations (LTs and an IF were most central) where leadership was provided by a group of three and pair of prominent formal and informal leaders, in the first and second meetings, respectively. In the English team, a multiple, formal leadership configuration (the HOC and LTs were most central) was found in two meetings with leadership provided by a group of four formal leaders in the second meeting and a pair of formal leaders in the third team meeting. In the absence of the HOC an alternate, formal leadership configuration (LTs were most central) emerged where leadership was provided by a pair of prominent formal leaders.

In the informal interactions, in the Mathematics team, a multiple, formal and informal leadership configuration was common with a combination of HOC, LT, and STs/IF emerging most prominent leaders in the Five Dimensions of teaching and learning, Assisting low performing students, Assessment, and Influence networks. However, in the English team, a multiple formal leadership configuration was most common with the HOC and LTs emerging as most prominent leaders in the frequency of advice, Curriculum planning, Teaching approaches, Assessment, and Influence networks. Furthermore, in the English team, an alternative, informal leadership configuration was evident in the Assisting low performing student network where only ISSTs emerged as most prominent leaders.
In accounting for hybrid patterns of leadership, Gronn (2009b) maintains that a hybrid pattern can be related to the challenges presented to school leaders to accomplish the task of school leadership. In responding to such challenge, school leaders create organisational structures such as teams and arrange or re-arrange team leadership positions using various models. As Rosenfeld et al. (2008) point out, schools respond to changes in department structures and functions over the years. In Queensland, subject departments were the point where teaching and learning were planned, organised and delivered. In later years, there was a downward delegation of function responsibility and workload that characterised school-based management; hence the curriculum-framed departments were replaced by a model that reflected managerialism. As a result, instructional leadership, the core of the HOCs role was displaced by need for generic management skills; and instructional leadership became a function of skilled teachers. In this study, the team model employed by the school is indicative of a merging of the elements of the two models. The team structure and function resembled the curriculum-framed departments, with a focus on curriculum. Whilst HOC has an important role in wider school community, curriculum leadership in the team was a priority. In addition, instructional leadership was also an important component of teachers’ leadership practice.

Whilst one of the reasons for the creation of newer structures is the division of labour, the trigger for new leadership arrangements is the need for knowledge (Gronn, 2009b) and developing adaptive expertise (Timperley, 2011) of professionals. Despite their professional education, teachers and school leaders are faced with the need for professional learning to address the challenge of providing a relevant, exploratory, and engaging curriculum to achieve the best possible outcomes for a diverse group of students in a knowledge-intensive society. As Timperley (2011) points out, the development of adaptive expertise requires schools to have adaptive capacity; this involves developing an organisational community that learns. In schools with a high adaptive capacity, leaders and teachers are deeply knowledgeable about the content of what is taught and how to teach it, and they create organisational structures, situations and routines to develop it further. Hence, subject teams are organisational structures that are integral to the development of adaptive expertise among professionals.

Hybrid leadership patterns involving an assortment of configurations indicates that reform efforts directed at the re-structuring of formal leadership, may actually comprise
a variety of network patterns that do not generally match the organisational chart. This finding was consistent with the finding of de Lima (2007; 2008) where formally designated leaders in subject departments were not always the most central or sole leaders. There were situations, where other team members were most central and the designated leader less or equally central in the team. Similarly, Spillane and colleagues’s (2008) study of leading and managing elementary schools found leadership in the lived organisation differed from the designed organisation; leadership was enacted not only by formally designated leaders, but also by informal teacher leaders. The current study revealed that whilst the subject leader is at the top of the organisational chart and there are designated leaders on the next step in the team hierarchy, there are times where some members of the latter group occupy the leadership position at the top of the team, depending on the situation. These formal teacher leaders may occupy the leadership position at the top jointly with the subject leader or without the subject leader. Furthermore, whilst the formal leaders are at the upper levels of the team hierarchy, there are situations where teachers without a formal designation who are ‘at the top’, leading either in solo or collaboratively (in pairs or groups) with the formal leaders.

Thus, this study revealed that subject teams comprise multiple sources of leadership. Moreover, it revealed that the role of leader and follower is interchangeable, depending on the situation. In some situations, the leader was the provider of advice; however, in other situations the same leader assumed the role as follower by becoming the recipient of advice. However, leadership in these instances were centralised among a few prominent actors. As de Lima (2008) maintains, it is only by examining the professional interactions between team members and attributions of influence that we can determine the structural form that leadership takes in subject teams.

In sum, leadership in the two subject teams took on three distinct patterns: a centralised pattern in the formal interactions; a decentralised pattern in the informal interactions; and hybrid patterns of leadership with various configurations in both the formal as well as informal interactions. The study found that leadership in subject teams is enacted by individuals as well as pairs or groups of leaders, depending on the situations; and that leadership is undertaken by both formal as well as informal leaders. The finding of a hybrid leadership pattern was consistent with findings to two recent studies and a re-analysis of studies of distributed leadership. Hybridity arises out of the need for
knowledge sharing and the development of adaptive expertise among professionals particularly in the light of the challenges facing schools to improve outcomes for the diverse range of students. Whilst the individual leader plays an important role, meeting this challenge also requires the knowledge and expertise of many, including informal teacher leaders; indicating that reform efforts directed at the re-structuring of the formal organisation may actually comprise a variety of network patterns that do not generally match the organisational chart.

The extent to which formal leaders provided advice and information

The second question investigated in this study was: To what extent do formal leaders provide advice and information to colleagues; and do teachers without formal leadership positions emerge as informal leaders?

In this study, the extent to which formal leaders provided advice and information to colleagues; and the emergence of teachers without formal leadership as informal leaders were determined using ONA in both the formal and informal interactions. Network diagrams were critical to measuring centrality scores, identifying key advice givers, central actors and peripheral actors. Whilst in the informal interactions these were determined using survey data, in the formal interactions these extent to which formal leaders provided advice was determined through the use of CA. The identification of sequences through which advice and information was proffered by leaders enabled the creation of network diagrams and the computation of statistical measures of ONA to determine the extent to which leaders provided advice and information to colleagues.

The study found that whilst there was a hybrid pattern of leadership with various configurations, there was limited extent to which leadership was exercised by formal leaders in important areas of teacher’s work. This finding of limited leadership in subject teams was consistent with the findings of de Lima (2008) where Heads of Department exercised limited leadership, whilst in some departments there was a no leadership. Unlike the findings of de Lima (2008), in this study, there was no evidence of leadership void in the two teams. However, consistent with the findings of de Lima (2008), this study found situations where, on the one hand, formal leaders exercised limited leadership; and on the other hand, teachers without formal leadership positions emerged as informal leaders.
In the current study, there were some similarities in the extent to which formal leaders provided advice and information to colleagues in the formal and informal interactions in both teams; however, there were also some significant differences. In the formal interactions, a lower percentage of formal leaders provided advice and information to colleagues in both teams, whilst in the informal interactions a higher percentage of formal leaders provided advice and information to colleagues in both teams.

Whilst the formal leaders provided advice to colleagues, there were differences in the extent to which HOCs and LTs provided advice to colleagues. In the formal interactions, the HOCs were the most prominent advice givers, occupying the most central position in the networks. Thus, in the meetings they led, they provided advice to a greater extent to colleagues than did the LTs. However, in the absence of the HOCs, two LTs were the most prominent advice givers, providing advice to most colleagues in each of the teams. In the informal interactions, too, there were differences in the extent to which formal leaders provided advice to colleagues. Both HOCs played a central role in some networks and a less central to peripheral role in some networks. The two HOCs provided advice most frequently to colleagues, and were the most prominent advice givers in the particularly in leadership of curriculum and assessment. However, the English HOC also provided advice to a greater extent to colleagues in teaching approaches than the Mathematics HOC (who was one of the peripheral actors in this network). On the other hand, the Mathematics HOC provided advice to a greater extent to colleagues in assisting low performing students than the English HOC (who was one of the peripheral actors in this network). The study found that where the HOC was not the most prominent leader; LTs provided advice to a greater extent, particularly in the Mathematics team. In both teams, the LTs provided advice to a greater extent in content knowledge than did the HOCs, whilst in the Mathematics team the LTs also provided advice to colleagues to a greater extent in teaching approaches than did the HOC. However, in most networks, there were formal leaders who occupied a peripheral position.

This study found there was limited leadership exercised in important areas of teacher’s work, particularly networks related to Content Knowledge, Teaching Approaches, Assisting low performing students, and Assessment. In these networks, the densities were generally low, indicating that, regardless of the leadership pattern and configurations, the leadership arrangements were not effective in creating a culture
where team members collaborated frequently with colleagues on key aspects of teaching and learning. These findings were consistent with the study of school department undertaken by de Lima (2008). In the current study, the school’s values include learning and teamwork, and the policy climate and organisational structures provides the professional staff with the opportunity to contribute to the professional growth of colleagues. However, the results indicate that leadership communication is sparse; only a few leaders show up as being particularly prominent, and one network had no formal leaders. The low level of communication, in addition to the frequent peripheral position and generally low in-degree scores of formal leaders in networks, indicates that leadership was not exercised to the optimum level.

In investigating the factors affecting the leadership of teaching and learning, the mixed-methods approach comprising the use of observation, social network survey and interview data presented insightful findings. This study found that there were several factors affecting leadership of teaching and learning through advice and information. Most of the factors that favoured leadership were common to both teams. These included: (a) organisational teaming structure, team meeting routines, and informal meetings enabled the provision of advice and information thereby fostering professional learning and improved teaching practice; (b) team composition of experienced and beginning teachers were a resource for professional learning; (c) the management and boundary spanning role of the HOC led to change in teaching practice; and (d) teachers with senior school teaching experience were valued for their good content and pedagogical knowledge, and knowledge of the direction in which to take middle school students.

However, there were also some factors impeding leadership of teaching and learning. Each team had a set of problems unique to the team. In the Mathematics team, participants perceived the following factors as impediments to leadership of teaching and learning: (a) teacher attitude presented a resistance to change in practice; (b) tension in team meetings stifled voices of some teachers. In the English team, participants perceived that too many meetings held in the school, other than subject team meetings, and too little discussion time spent on reflection and sharing experiences of teaching practice (e.g. problems) in subject team meetings, hindered the leadership of teaching and learning. However, the study found that there were two common factors impeding leadership of teaching and learning through advice and information interactions in both
teams: a lack of a shared understanding of the purpose of the team, and network architecture.

Whilst some leaders had a shared understanding of the purpose of the team, most teachers, including LTs, did not. Some leaders saw the team as a professional learning community with the purpose of fostering professional learning of colleagues in addition to planning and sharing of teaching resources; however most teachers saw the team as a structure for curriculum planning. The lack of a shared understanding is a serious limitation as Coleman and Bush (1994) point out that one of the features of effective teams is having explicit and shared purposes, objectives and values. Similarly, Hord (1997) cites a widely shared vision or sense of purpose as one of the important conditions for maintaining growth and development of a community of professional learners. Louis et al. (1996) maintain that a shared sense of purpose conveys the notion that a consensus exists among the school staff regarding the school mission and the principles underlying the day-to-day operation. Thus, sessions where teams discuss and agree on the purposes, objectives and direction for the team are important for team-building and sharing ownership. Furthermore, constant reference to the purposes is important to reinforce and sustain strategic and operational aspects of the team’s work.

Similarly, Grossman et al. (2000) maintain that the importance of a shared understanding of the purpose of the team is critical for intellectual collaboration and professional growth of teachers; otherwise, the team will function merely as a “pseudocommunity” a community where there is a natural tendency by individuals to play community, to act as if members share values and common beliefs (p. 17). The maintenance of pseudocommunity pivots on the suppression of conflict and face-to-face interactions are characterised by a tacit understanding that it is ‘against the rules’ to challenge others or press them too hard for clarification. This understanding paves the way for illusion of consensus. The teams in this study are not “pseudocommunities” as there is evidence of instances of disagreement on understandings of concepts, approaches to teaching, grading of students assessment tasks. However, these discussions occurred to a limited extent and there was a limited disclosure of problems related to teaching practice; hence limited support for colleagues’ professional learning.

The study found that a second main factor limiting leadership communication was network architecture. There were many aspects to this limitation including the
facilitation of interaction in team meetings, for example, the room for team meetings, arrangement of furniture, and the availability of technology constrained communication between team members. Another factor impeding leadership communication was the organisational structures and processes in the school, for example, the scheduled team meeting time clashed between teams and other activities. As a result the Mathematics HOC who was also a teacher of English, was unable to attend English KLA team meetings, and teachers involved in playground duty after school were unable to be present for a large part of meetings, missing out on discussion. The third problem was physical proximity. Whilst the POD planning room benefited collaboration of some pairs of teachers, others perceived the POD structure as limiting advice and information interactions, for example the HOC was located further away and less accessible. Similarly, some teachers felt being ‘housed’ in the POD planning room was problematic because subject teachers were spread across the school, thus limiting communication.

The importance of proximity of colleagues in networks is critical for collaboration of members. Hord (1997) cites proximity of teachers as one of the important structural conditions that support communities of professional learners. Cross and Thomas (2008) maintain collaborative tools such as e-mail, instant messaging, and video conferencing can bridge gaps; however proximity still frequently dictates people’s networks. These authors argue the likelihood of collaborating with someone decreases substantially the farther one is from the person. The limited degree of collaboration is likely to impact professional learning as Meijs and de Laat’s (2012) study of a School for Higher General Secondary Education and Pre-University Education in Netherlands found fewer contacts led to isolated information exchanges within teams, resulting in a low synergistic learning mode.

Eastwood and Louis (1992) observe that creating supportive structures, including a collaborative environment, has been described as “the single most important factor” for school improvement and “the first order of business” for those seeking to enhance the effectiveness of their school (p. 215). Thus, it is important to ensure teachers are in close proximity to each other as well as to Heads of Curriculum. However, in the site under investigation, housing all teachers of the subject area is not a simple solution. The POD structure and the accompanying planning room were purposely-built in consideration of the philosophy of middle schooling; community groupings of 80-100 students with approximately four core teachers giving much attention not only to the
academic needs but also the pastoral care of students. What is evident here is the school’s emphasis on smaller groupings of teachers (and students) results in teachers collaborating in silos, thus fragmenting networks and thereby limiting leadership communication across the school amongst common subject teachers. There is no simple solution here. Perhaps there needs to be consideration of organisational re-arrangements of teachers and students; space, however does not allow such a discussion in this manuscript. However, I provide some options to improve leadership communication and professional learning opportunities within the existing teams in a later section.

Another factor that limited communication, specifically in the formal interactions, was the nature of ‘meeting talk’, particularly the interactional resources by participants. Whilst participants employed potentially powerful devices such as teaching replays, rehearsals and facilitation, these resources were not used to their optimum value to draw teachers into participating in discussions as was evident when questions seeking elaboration, clarity and opinion were employed. The limited use of some interactional devices and the ineffective use of others such as rhetorical questions resulted in missed opportunities for professional learning. These factors will be discussed in greater detail in a later section.

The emergence of informal leaders
Whilst leadership was exercised to a limited extent, the study also found that teachers without formal positions emerged as informal leaders. This finding was consistent with a few recent studies, for example, the study of instructional leadership undertaken by Spillane et al. (2003). In the current study, the emergence of informal leaders was different in the formal and informal interactions between the two teams. In the formal interactions, informal leaders emerged from only within the Mathematics team, with half the STs/IFs emerging as informal leaders. None of the STs/ISSTs emerged as informal leaders in the formal interactions of the English team. However, in the informal interactions, informal leaders emerged from within both teams, with a higher percentage of informal leaders emerging in the English team. Moreover, in the informal interactions of members of the English team, the STs/ISSTs provided advice to a greater extent than the formal leaders. The extent of advice giving from the informal leaders was further illustrated in the finding that, whereas LTs generally provided advice to STs, in the English team, two STs provided advice to their LT partner in curriculum
planning, teaching approaches and assessment. Moreover, none of the formal leaders were found to be prominent advice givers to colleagues in the assisting low performing students. Instead, two ISSTs were found to be most prominent. Once again, the emergence of informal leaders emphasise the point that reform efforts directed at the re-designing the formal organisation, may actually be different upon examination of the lived organisation.

In sum, limited leadership was exercised by formal leaders in important areas of teachers’ work in both teams. This was reflected in network density scores which indicated low levels of leadership communication in both the formal and informal interactions. In the formal interactions, a lower percentage of formal leaders provided advice and information to colleagues in both teams, whilst in the informal interactions a higher percentage of formal leaders provided advice and information to colleagues in both teams. The limited leadership communication in the formal interactions could be attributed to the interactional resources by participants. The limited use of some interactional devices and the ineffective use of others such as rhetorical questions resulted in missed opportunities for professional learning. The limited exercise of leadership could also be attributed to two other factors the study found impeding leadership of teaching and learning; network architecture and lack of a shared understanding of the purpose of the team. Whilst the study found some formal leaders exercised limited leadership, teachers without formal positions emerged as informal leaders, sometimes occupying more central position in networks when compared to some of the formal leaders; suggesting the some informal leaders were seen by more colleagues as a valuable source of expertise.

**Perceptions of Influence of advice and information**

The third question this study investigated was: *How do participants perceive the influence that colleagues have on their work?*

In this study, the participants’ perception of the influence that colleagues’ have on their work was determined using ONA. The survey data proved invaluable to create network diagrams and calculate measures such as team network centralisation, density, and in-degree centrality with to the influence network. ONA was also vital to determining the prominence of influential actors, and thereby determining the configuration of
influential leaders, illustrating that a few team members were influential leaders. These not only included formal leaders but also teachers without a formally designated leadership position, as was the case in the Mathematics KLA team. Interview data corroborated the ONA results and provided a fuller understanding of reasons why prominent leaders were most influential, and the aspects of teaching and learning in which leaders exercised their influence.

The study found that participants in both teams perceived the advice and information received was an act of leadership that influenced their work. However, the perceived influence of leaders on the work of colleagues differed between the two teams. Two measures were used to determine influential advice givers. First, using the in-degree score of two or more to indentify influential advice givers, all formal leaders as well as informal leaders were perceived as being influential on the work of colleagues in the Mathematics team, whilst 86% formal leaders and 67% of informal leaders were perceived as being influential on the work of colleagues in the English team.

Whilst these percentages suggest that team members were influential, upon closer examination of networks, the study found that there was limited influence exercised on the work of colleagues, particularly by the formal leaders. This finding was consistent with the study of subject departments undertaken by de Lima (2008). First, the network densities in the current study indicate that only a quarter of all possible relations were characterised by a strong perception of the impact of colleagues’ advice upon the work of teachers. Second, the peripheral network position of actors also provided a picture of the limited extent to which the formal leaders were influential advice givers.

Despite the limited extent to which influence was exercised, the measure of one standard deviation above the mean used to identify the most influential leaders revealed a hybrid leadership pattern. The Mathematics team displayed a multiple, formal and informal leadership configuration; the HOC, a LT and an IF were the most influential advice givers. This suggested that despite the organisational hierarchical positions, actors had a strong influence on the work of colleagues. The HOC and IF were perceived to have an equally strong influence on most members in the team. The HOC was particularly influential in curriculum planning initiatives including the introduction and use of effective templates for planning; reviewing and providing feedback to improve assessment criteria sheets; introducing rotations as a method of teaching, and
student portfolios as assessment for learning. The IF was influential in matters related to content knowledge, sharing resources and advocating rotations as a method of teaching. The LT was influential, but to a lesser degree as compared to the HOC and IF. She was strongly influential in advice and information related to content knowledge, preparation of students for their senior years of schooling, sharing ideas and resources to cater for the diverse need of students.

The English team, however appeared more hierarchical displaying a *multiple, formal leadership* configuration; the HOC was most central but this position of influence on colleagues’ work was shared with a LT. Whilst network data revealed the HOC had a strong influence on most teachers, interview data revealed that the LT had a stronger influence on most teachers. The LT was particularly influential in curriculum planning, providing creative ideas to cater for a diverse group of students; sharing her wealth of content knowledge, expertise and resources in aspects such as oral work and expression. Despite being less influential than the LT, the influence of the HOC was particularly influential in matters related to curriculum planning, advocating teaching approaches such as clinics and rotations, providing advice on student English writing, and facilitating the collaboration of teachers in curriculum and assessment planning.

Despite the limited extent to which influence was exercised, the few influential leaders were critical to leadership of teaching and learning. Whilst the HOCs influence some aspects of teaching and learning, they predominantly influence curriculum planning and assessment. Leading curriculum planning is an important part of their role. This involves outlining and implementing curriculum and assessment policy and aligning the school curriculum and assessment with the relevant school and state policy documents. In this instance, it is not surprising that the HOCs are not influential in areas of content knowledge (and teaching approaches in the case of one subject leader) considering that they have no specialised training in the subject. However, the most influential teacher leaders appear particularly prominent in content knowledge and teaching approaches dimensions. These most influential teacher leaders have a secondary teacher education qualification, specialising in the subject as well as experience in the teaching of the subject at the senior school level. Whilst this indicates that the team structure and leadership arrangements have the benefit of providing opportunity for the professional growth and change in practice of teachers, only a limited number of colleagues are most influential. Considering that there are other teacher leaders who have a secondary
teacher education qualification, specialising in the subject as well as experience in the teaching of the subject at the senior level, the question to be asked is why are they not so influential? Perhaps the answer lies in the fact that the one difference between the most influential teacher leaders and other teachers leaders is that the former brings with them the knowledge, experience, and expertise gained from teaching at the senior school level at the site under study. Hence, the most influential leaders are perceived to possess, amongst other things, expert curricular knowledge, subject matter content knowledge, and pedagogical content knowledge (Shulman, 1986). In addition, these teacher leaders are perceived to have the knowledge of the requisites for the preparation of middle school students for their senior years of education, as reported by teachers, particularly in Mathematics; thus they are perceived by most colleagues as the most influential leaders. On the other hand, the other teachers have not taught the subject at the senior level at the site under study, hence, the small number of most influential leaders. Moreover, as with the advice and information in the dimensions of teaching and learning, this limited exercise of influence can be attributed to the two factors impeding leadership discussed earlier; a lack of a shared understanding of the purpose of the team and the network architecture.

In sum, participants perceived the advice received impacted on their work; however, the perceived influence of leaders on the work of colleagues differed between the two teams. In the Mathematics team, all formal leaders as well as informal leaders were perceived as being influential on the work of colleagues, whilst some teachers were not perceived as influential on the work of colleagues in the English team. In the Mathematics team, two formal leaders, HOC and LT, (and an IF) were most centrally positioned in terms of influence on the work of colleagues, whilst two LTs occupied a peripheral position. In the English team, whilst two of the formal leaders (HOC and LT) were most centrally positioned in terms of influence on the work of colleagues, one HOC and one LT occupied a peripheral position. The interactions between LTs and their ST partner also revealed the extent to which formal leaders influenced colleagues. In the Mathematics team, two out of the four LTs had a strong influence on their ST partner, whilst in the English team all LTs had a strong influence on their teaching ST partner. Similar to the frequency of advice and dimensions of teaching and learning networks discussed earlier; and consistent with the findings of Gronn (2009b, 2011), the influence network confirmed a hybrid leadership pattern. These results were to some extent also consistent with the findings of de Lima (2008). In this study, the
Mathematics team displayed a *multiple, formal and informal leadership* configuration; the HOC, a LT and an IF were the most influential advice givers. The English team, however appeared more hierarchical displaying *multiple, formal leadership* configuration; the HOC was most central but this position was shared with a LT in the influence of colleagues’ work. Whilst network data revealed the HOC had a strong influence on most teachers, interview data revealed that the LT had a stronger influence on most teachers’ work. Moreover, a common attribute in the influential LTs was their previous experience of teaching in the senior school. Despite the perceived influence of advice these leaders had on colleagues, the influence of leadership in both teams was exercised to a limited extent. This could be attributed to the lack of a shared understanding of the purpose of the team and the network architecture.

**Leadership actions and interactional resources employed by leaders**

The final question investigated in this study was: *What are the leadership actions performed by leaders in formal interactions; and what are the interactional resources used by leaders?*

Through the use of CA, the study found that subject team meetings constitute a critical site for enacting leadership roles and tasks. The study found that subject team leadership was provided with a focus on the core business of schools; teaching and learning. This finding was consistent with the findings of a growing number of researchers (e.g. Spillane, 2005; Timperley, 2005). However, unlike these studies, where subject leaders possessed subject matter expertise, the Heads of Curriculum in the current study were not experts in the subject they led. Despite this limitation, in both teams, the actions of leaders involved a focus on leadership in curriculum, pedagogy, and assessment; and the alignment of these three important dimensions of teaching and learning. Notwithstanding the generally common focus of leaders, meeting talk revealed some differences between the teams in respect of the actions of leaders as well the interactional devices employed by leaders.

The actions of the Mathematics HOC, amongst others, included the dissemination of relevant and the identification of a problem in teacher’s pedagogy and assessment practice. In addressing the problem, the HOCs actions include volunteering advice and
information; and encouraging teachers to adopt a problem solving approach using investigations and reflective tasks to encourage higher order thinking in students. The actions of the English HOC also included the dissemination of relevant information. Another important act of the HOCs leadership was the alignment of the curriculum programme to the QCAT with the purpose of preparation of students for the QCAT. In leading team discussion, the HOC presented relevant information, identified problems (e.g. in assessment planning), announced curriculum and assessment plans, allowing discussion and debate, clarifying misconceptions, and collaborating with teachers in decision making. In the absence of the HOCs, the prominent teacher leaders focused on the agenda espoused by their respective HOCs, leading curriculum, pedagogy and assessment. The actions of the teacher leaders also included identifying problems, announcing plans, and volunteering advice and information.

In ‘doing leadership’, the corpus of meeting talk data revealed that formal leaders, proffered advice in various sequences, with a higher percentage of advice interactions in the Mathematics team. In ‘doing leadership’ prominent leaders proffered advice most frequently when recipients asked for information/opinion or disclosed/identified a problem. A smaller percentage of advice was also proffered when recipients announced as plan. Advice was also proffered voluntarily with the highest percentage proffered where the advisor volunteered information and volunteers’ advice. A smaller percentage of advice was proffered where the advisor identified a problem and followed this with advice. Whilst advice was proffered by both formal and informal leaders in the Mathematics team, only formal leaders were most prominent advice givers in the English team. There were similarities between the two teams in the percentages of sequences where advice was proffered, for example, where recipients asked for information or opinion. However, there was significant difference between the teams in respect of participants talking about problems, with a significantly higher percentage of participants disclosing or identifying problems in the Mathematics team than in the English team.

The corpus of meeting talk data also revealed participants used a range of interactional resources to accomplish the task of ‘doing leadership’; however, the LTs and the IF assuming the role of chairpersons employed a wider range of resources when compared with their respective HOCs. In both teams, the most common resource used was the self-reference “we”; suggesting a team approach to decision making and planning. The
second most common interactional device used was the epistemic marker “I think”; the third most frequently used was question-answer adjacency pairs; and the fourth most commonly used was the epistemic marker were “I don’t know”. Other discursive tools employed by both team included formulations, teaching replay, reported speech, three-part lists, crafting, and invocation of the non-present other. Artefacts such as meeting agendas were also used by both teams; however artefacts of student work were examined only by the English team. Discursive resources employed only by the Mathematics team included voting, whilst role play and prosody were employed only by participants in the English team to accomplish the task of ‘doing leadership’.

Whilst the leaders were active in their leadership and employed a range of interactional resources, network densities and low in-degree scores revealed that leadership was exercised to a limited extent in team meetings. This could be attributed to the type of talk-in-interaction. Stoll and Louis (2007) emphasise the need for better understanding of the collaborative processes in schools that lead to desirable outcomes for schools and those they serve; this includes going deeper and looking at concepts such as dialogue. This study attempts to provide an understanding of one form of dialogue; meeting discourse. Consistent with the findings of a study of teacher teams undertaken by Scribner et al. (2007), this study found the patterns of discourse play an important role in the exercise of leadership. The type of talk-in-interaction in groups is important because they open or close opportunities for intellectual and collaborative conversations and professional learning around the teaching subject and analysis of students’ work (Crespo, 2002, 2006; Farrell, 1999).

According to Crespo (2002, 2006), teachers talk about their teaching and students work can be categorised as expository or exploratory. In expository discourse, talk is characterised by use of monologues and non-analytical or unproblematic narration of events. In exploratory discourse, talk is characterised by speakers seeking and showing intellectual involvement; explicit disagreements, uncertainties and confusion; and talk that is generative, interactive, collaborative. When the conversation is focused on problem solving and structure of talk is exploratory, participants have opportunities to explore and analyse ideas and expand their repertoire of solutions and approaches to problems. Expository talk, on the other hand, tends to keep participants away from becoming involved and from asking questions or challenging the speakers’ interpretations.
In this study, there were instances of exploratory talk about problems related to practice, for example, there was confusion and uncertainty of the concept of ‘generic’ in the talk of teachers in the English team and what ‘reflection’ is in the Mathematics team; and there was disagreement about what a knowledge or process question is, and explicit objection to the investigation task in the talk of teachers in the Mathematics team. However, these instances of exploratory talk were few. On the other hand, there was expository talk that was potentially powerful to open opportunities for learning, but underutilised. The narration of classroom experiences by leaders assuming the role as chairpersons, for example, strategies outlined by the Mathematics HOC about how she teaches English, and the narrated experiences of the English LT introducing her students to nominalisation, lacked opportunities for the teacher reporter to hear colleagues’ perspectives, challenges, and questions about their narrations and interpretations of their teaching practice and work of students. Crespo (2006) points out that the group facilitator plays a critical role in determining the nature of talk in groups as being either expository or exploratory and thereby impacting professional learning of teachers. In order to generate more revealing and collaborative discussion, it is important for leaders to engage teachers in discussions about their own ideas and model the kinds of questions that would further the groups collective insight. This could be achieved by asking participants to comment on each others’ accounts, and asking participants to comments on analytical questions such as what sense or insights they gain from listening to each other or what they found hard or problematic.

Thus, the dialogue in subject team meetings position team members in two distinct ways. On the one hand, the dialogue (and activities) position subject leaders and some experienced teacher leaders as having important knowledge (advice and information) to contribute to decision making and problem solving to improve teaching practice. Not only do these leaders provide expertise; they also seek advice and information from their colleagues, an indication of their orientation towards professional learning. On the other hand, other experienced teachers play a less active and peripheral role in sharing their expertise as well as in seeking advice and information from colleagues. It will be recalled that these patterns were also evident in the informal interactions. These two positions suggest some members support a stance of routine expertise whilst others support a stance of adaptive expertise (Crawford, 2007; Crawford et al., 2005; Timperley, 2011).
The notion of routine expertise is based on the assumption that novice teachers and leaders become expert through supported practice (Dall’Alba & Sandberg, as cited in Timperley, 2011) involving progressively developing a set of knowledge and skills relevant to that profession. Adaptive experts, on the other hand, are deeply knowledgeable about both the content of what is taught and how to teach it; however, part of being an adaptive expert is to know when and from where to seek help (Timperley, 2011). For adaptive experts, engagement in ongoing inquiry and knowledge-building cycles is at the core of their professionalism. Similarly, Crawford et al. (2005) maintain teachers with adaptive expertise display a number of specific dispositions, skills and processes including maintaining an epistemic distance between prior knowledge, modelling a case or problem at hand; showing comfort or willingness to reveal and work at the limits of one’s knowledge and skill; an inclination towards learning rather than merely applying knowledge; data-oriented reasoning; seeking and analysing feedback; monitoring results and performance; monitoring own learning; and assessing adequacy of current knowledge for solving the case at hand. Thus, Timperley (2011) asserts that “adaptive expertise has professional learning at its core” (p. 8).

Mapping the leaders’ dialogue and activities in team meetings onto the above list, we see some leaders’ as orienting towards a stance of adaptive expertise in the following ways. First, some teachers are deeply knowledgeable about both the content of what is taught and how to teach it. For example, Jen in the English team used teaching replays, role plays, and artefacts of student work to facilitate a professional development session on teaching nominalisation; and Ria and Jess in the Mathematics team shared their strategies on teaching using rotations advising colleagues how they incorporated it into their existing programme. Second, leaders not only provide advice but also seek out advice from one another to improve their practice. Although advice seeking is done by newer teachers, some of the more experienced teachers also willingly seek and consider advice when they recognise their limits (e.g. Liz in the English team and Brad and Kate in the Mathematics team). Third, teachers are comfortable or willing to reveal the limits of their knowledge and skill (e.g. Liz, Brad, and novice teacher Gwen). Fourth, leaders demonstrate an inclination toward learning rather than merely applying knowledge (e.g. Liz, Brad, and Leah in the Mathematics team).

Despite the stance towards adaptive expertise adopted by some teachers, there are other aspects that appear underutilised for the development of adaptive expertise in these
subject teams, particularly seeking and analysing feedback and data-oriented reasoning. First, seeking and analysing feedback is integral to building expertise. In this study, teaching replays and role play were relevant interactional devices for the professional development of colleagues. Whilst it was used to model teaching to colleagues, it could have been used by the expert teachers to seek feedback on practice. As Horn (2010) points out, when teachers model lessons to share expertise and training, colleagues ask questions and probe for elaboration, resulting in re-visions of initial accounts. The revision routine becomes a mechanism for collaborative diagnosis of teaching problems, positioning both speaker and listeners as having important information to share in the conversations. Furthermore, Timperley (2011) maintains, trying out new teaching or leadership practice, analysing what happened and problem solving the issues that arise, are integral to developing an understanding of new practice. Thus, the underutilisation of opportunities for feedback on practice is lost opportunities for professional learning.

Second, the importance of examining student work and achievement data is integral to developing adaptive expertise. The study found leaders used a range of interactional resources to accomplish the task of ‘doing leadership’; however there was limited use of artefacts of student work in one team. Whilst it is known this team used and discussed samples of student work during moderation on a Student Free Day, in the three meetings observed, there was no evidence of the use of such artefacts. In the other team, samples of student writing tasks formed a major part of the discussion in two meetings. The use of artefacts of teacher and student work provides a window into many aspects of instruction (Omrod, 2005), for example, they are used to show teachers how to prepare and assess student work. However, what appeared to be lacking in both teams is the examination and analysis of student achievement data. In recent years, there has been an emphasis on the use of artefacts of student achievement data with the purpose of improving teaching and learning. As Timperley (2011) asserts, engaging in ongoing inquiry and knowledge-building cycles is at the core of their of teacher professionalism, the examination and analysis of student achievement data using disciplined dialogue (Dempster & MacBeath, 2009) in team meetings is one way in which professionals can reflect and improve their practice and student results (Visscher & Witziers, 2004).

Thus, activities and dialogue undertaken did not characterise a strong PLCs. This finding was consistent with the findings of a study of PLCs undertaken by Visscher and Witziers (2004). However, unlike Visscher and Witziers’s (2004) study that found a
Mathematics team showing characteristics of weak PLCs, in the current study both teams did not reflect attributes of a strong PLC. In particular, there was limited discussion and reflective dialogue (Louis et al., 1996) on common teaching problems. Moreover, in the meetings observed, there was no evidence of the examination and analysis of student achievement data; a factor deemed critical for improving teaching practice and student outcomes. As Visscher and Witziers (2004) concluded, shared goals, joint decision making, shared responsibility and advice, and reflective dialogue are important but not sufficient to improve student achievement; the focus needs to be on revolving professional activities around student achievement data – this serves as feedback mechanism for improving teaching and learning.

In sum, the study found that subject team meetings are an important routine for enacting leadership roles and tasks. Leaders focused their leadership on the core business of schools, teaching and learning. In leading curriculum, pedagogy and assessment they proffered advice when recipients solicited information or opinion, disclosed or identified problems or announced a plan. Advice and information was also volunteered. To accomplish the task of ‘doing leadership’, leaders employed a range of interactional devices. The ‘talk’ and interactional resources used in meetings were predominantly expository. Facilitating the talk towards exploratory discussion has the potential to draw participants into revealing and collaborative discussion; thereby opening the doors to professional learning. The dialogue in subject team meetings also positioned team members as supporting a stance of either routine expertise or adaptive expertise. The subject leaders, in most instances, and some experienced teacher leaders, not only provide expertise; they also seek advice and information from their colleagues, an indication of their orientation towards professional learning. However, to develop into stronger professional communities, both subject teams would need to focus to a greater extent on dialogue and reflection on problems around teaching practice and the examination and analysis of student achievement data.
8.3 Conclusions from Findings

One of the conclusions emanating from the findings of this study is that, to accomplish the task of leadership of teaching and learning in subject teams (and schools) requires both individual-focused leadership and distributed leadership arrangements. Individual-focused leadership is required to drive leadership for teaching and learning. The results of this study show that individual leaders play an important role in leading the various dimensions of teaching and learning – individual leaders are curriculum leaders. In a period of curriculum change, these leaders played a prominent role re-aligning the school curriculum with State curriculum policy, leading the development of programmes in line with the new curriculum policy. In addition, these individual leaders were active in aligning the three dimensions of teaching and learning, Curriculum, Pedagogy and Assessment; in particular the Mathematics HOC driving pedagogical change (e.g. emphasising problem solving through investigations), and both HOCs driving change in assessment practice (e.g. authentic assessment tasks and assessment for learning involving student portfolios and reflections). This finding highlights the assertion of Leithwood et al. (2007) that “… some hierarchy in unavoidable and necessary in a large organisation…. for greatest impact some leadership functions need to be performed by those in particular positions or with special expertise, not just anyone in the organisation”.

However, the role of designated subject leaders is complex and challenging in providing leadership for a diverse group of students in a knowledge-intensive society. This challenge is compounded in a situation where subject leaders lead ‘out of field’; that is, those subjects which they are not trained to lead, and therefore lack subject matter expertise such as content knowledge and teaching approaches as evidenced in the current study. Such a situation limits their exercise of leadership; necessitating the second form of leadership; distributed leadership within the team, with teachers stepping up or nominated to play an active role alongside the formally designated subject leader. Despite, the low levels of leadership communication, the results of this study indicate these teacher leaders leading formally, in the absence of the subject leader as well as in situations where the subject leader was present in team meetings, as well as informally. This finding is consistent with the view several scholars (e.g. Crowther, 2002, Day & Harris, 2002, Lambert, 2002) that schools require the leadership
not only of one, but also the leadership of the many talented educators. These findings of the study also confirm the strongly held view by Gronn (2008, 2009a, 2011) that in organisations both individual-focused and distributed leadership co-exist. This has implications for school leadership. In the past, school policy and leadership arrangements focused on individual leaders, particularly, the school principal as sole leader. In recent years, leadership arrangements are generally hybrid in nature to include individual-focused leadership as well as distribution of leadership among other formal leaders as well as informal teacher leaders. The results of this study indicate that schools need a mixed pattern of leadership, depending on the situation. In this study, leadership roles were enacted by individual leaders in the team hierarchy as well as by collectives (groups of teachers in the teams), including leadership roles enacted by teachers without a formal designation. These findings thus indicate that schools needs and practice mixed patterns of leadership (Portin et al., 2003) that include (a) the co-existence of both individual-focused and distributed patterns of leadership, consistent with the findings of the reanalysis of several studies by Gronn (2011); and (b) the fusion of hierarchical and heterarchical enactments of leadership functions, consistent with the findings of Higgins and Bonne’s (2011) study of lead teachers and schools leaders reform efforts in teaching Mathematics.

A second conclusion emanating from this study is that to develop the knowledge-base and improve practice of educators, structural change such as subject teams and new leadership arrangements are insufficient; there needs to be a shared understanding of the purpose of the team. The results of this study indicate this was lacking. Whilst the subject leaders and some LTs understood the purpose as including an emphasis on the professional learning of colleagues, majority of teachers, including LTs had a much narrower view understanding the purpose to be developing curriculum and exchanging teaching resources. A shared understanding is critical for teachers to embed leadership in their professional practice as Coleman and Bush (1994) assert, in effective teams, agreeing and sharing the purposes, objectives and values of the team are of vital importance.

Robertson (2011) emphasises the importance of alignment to the purpose as essential to exercise a sphere of influence to make a difference to global society. This importance of alignment to the purpose has been emphasised in not only school teams but other organisational teams. After a comprehensive study of health teams, Mitchell et al.,
(2012) point out that the foundation of successful and effective health care teams is the adoption of a clearly articulated set of shared goals. Another case in point is the study of students in university teams undertaken by Tarricone and Luca (2002) found that successful teams displayed a compelling relationship between shared goals and productivity, whereas in unsuccessful teams, there was a mismatch of expectations which resulted in minimal effort put in by some members, leading to frustrations in the team. Hence, team discussion and agreement on the purposes, objectives and direction for the team are an important part of team-building and sharing ownership. Also, constant reference to the purposes and objectives is equally important to reinforce and sustain strategic change as well as operational aspects of the team’s work.

The findings of this study are consistent with the view of de Lima (2008) that to make leadership an organisational quality, it is not sufficient to distribute it formally; it needs to become embedded in teachers’ professional practice and work habits. As de Lima (2008) argues, strong examples of a distributed pattern would include high network density and the department head occupying a central position as several other prominent department colleagues. However, the results of this study indicate low densities and at times low centrality of formal leaders, and this has important consequences for leadership of teaching and learning. Without a shared understanding of the purpose it is unlikely for formal leaders and teachers (in formal meetings as well as informally) to frequently collaborate and benefit from the advantages of working collaboratively on activities that characterise a strong PLCs, including, discussing teaching problems, sharing professional expertise, strategies, and resources, and critically and reflectively examining student work, and analysing student achievement data. As Visscher and Witziers (2004) concluded, the focus needs to be on revolving professional activities around student achievement data; this serves as feedback mechanism for improving teaching and learning. Notwithstanding the many activities of teaching and learning discussed in the teams in this study, the results indicate some of these were merely touched upon, whilst others were not discussed at all. This can limit teachers’ professional learning which can impact on classroom practice and ultimately affect student learning outcomes (de Lima, 2008).

A third conclusion emanating from this study is that collaboration to improve practice is less effective or ineffective unless members engage in talk that draws in greater involvement of teachers, and fosters reflection and professional learning. The results of
this study show the types of talk facilitated by leaders in subject teams open or close opportunities for professional learning of teachers. In this study, leaders identified problems, volunteered advice, and announced plans; however, these actions were not always sufficient in drawing teachers into participation and discussion, for example, when employed with rhetorical questions, they limit the involvement of other participants. On the other hand, when employed with interactional devices such as information, opinion, and clarity seeking questions, they appeared to be powerful in drawing participants into conversations (e.g. questions and answers led to a shared understanding of what the concept ‘generic’ meant). Thus, if subject teams are perceived as learning communities where educators come together then it is important to recognise the talk-in-interaction that provide opportunities and foster teacher reflection and learning (Farrell, 1999). As Duff (2011) maintains, while collaboration may create enhanced collegiality and offers teachers valuable social and emotional support, it does not necessarily result in pedagogical development, greater student achievement or the attainment of larger policy objectives. The findings of this study resonate with the assertion of Senge (1990) that the “discipline of dialogue also involves learning how to recognise the patterns of interaction in teams that undermine learning ... If recognised and surfaced creatively, they can actually accelerate learning” (p.10).

Also, as Crespo (2006) maintains, these talks are important, because they open or close opportunities for intellectual and collaborative conversations around teaching subject and analysis of students’ work.

A fourth conclusion emanating from this study is that an integrated framework of network approach, the concept of hybrid leadership and distributed leadership practice, and CA, is a powerful lens to examine, analyse and build understanding of leadership of teaching and learning in subject teams. Moreover, when combined with the methods of CA and ONA, the framework for analysis of leadership of teaching and learning is a powerful one generating robust empirical findings. In this study, the integrated analytical framework and method of ONA captured leadership patterns and enactments across formal contexts of the routine of team meetings as well as informally; involving formal leaders as well as informal leaders. The use of the method of CA provided an empirically grounded research method that demonstrated leadership as a practical accomplishment. The results of the study highlight the importance that the type of talk-in-interaction required in subject meetings involves those that open doors to
professional learning and improvement in teaching practice; not merely talk that supports teacher collaboration.

8.4 Recommendations following this study

Considering the limitations of the study in respect of the small sample, a single-case study involving two subject teams, the researcher is cautious about making generalisations from the findings of this study. However, this study involved a comprehensive review of the literature on school leadership, subject team leadership, and networks, and an in-depth empirical investigation of the leadership of teaching and learning in two subject teams. Consequently, it has provided useful insights into the factors affecting sources of leadership, the extent to which leadership is exercised, activities, interactions, the nature of leadership ‘talk’, and the influence of leadership. This has resulted in a more informed understanding of practice and implications for leadership, from which recommendations can be made for the two subject teams in support of leadership of teaching and learning in the school under study. The recommendations could also be relevant to other teams within the school as well as to schools and teams with similar characteristics; however, it is up to the reader/user of the research to determine whether the findings are relevant to a particular setting.

Recommendations for the School Senior Management Team

*Match the appointment of subject heads to the curriculum needs of the school*

In the State of Queensland selected members of the senior management team in schools play a key role in choosing incumbents in professional leadership roles, including Heads of Curriculum. Whatever, the rationale was for the appointments of HOCs in the school in the current study; it was obvious that there was a mismatch between HOCs and subject expertise. A possible solution here is the one advocated by MacBeath’s (2005) who asserts that heads of school play a key role in the promotion of leadership capacity in their schools. Hence, “... they must identify the leadership needs of the school, look for people who have the necessary potential or capacities to satisfy those needs...” (MacBeath, 2005, p. 364).
Provide leadership training and subject related training for Heads of Curriculum

It is vital to provide leadership and subject related training for Heads of Curriculum (HOCs). Whilst, the formal leaders were experienced teachers, each role-set occupant did not receive relevant training. The HOCs were leading subjects outside their areas of expertise. There is currently very little training specifically designed for HOCs (Rosenfeld et al., 2008) and the ‘ad hoc’ (Turner, 2000, p. 300) learning of leadership is inadequate. One possible solution is to target HOC training in aspects such as chairing meetings, facilitating professional development, and facilitating talk that draws in greater participation of team members, thereby opening doors for professional learning.

For HOCs leading subjects outside their area of expertise, the approach advocated by Stein and Nelson (2003) could be adopted in their training. This implies that subject leaders should have solid mastery of at least one subject, and later, develop expertise in other subjects by ‘postholing’, which means conducting in-depth explorations of an important but bounded slice of the subject, how it is learned, and how it is taught. In this way, they will be able to “know strong instruction when they see it, to encourage it when they don’t; and [set] the conditions for continuous academic learning among professional staff (Stein & Nelson, 2003, p. 424).

Recommendation for the Middle School Management Team

Review of selection process and criteria for the appointment of Leading Teachers

The middle school management team played a key role in the development of the roles and responsibilities of LTs. However, there were different approaches in which the two subject departments appointed LTs. In one case, LTs were nominated, based on their perceived expertise. In another cases, LTs were asked to nominate one subject – their preferred choice. As a result, a person with experience and expertise in two subjects, for example, English and SOSE, had to choose one, an approach to ensure the equitable distribution of labour. This resulted in some novice teachers assuming the role of LTs. Without undermining the important role of the novice teachers, it is obvious that the available pool of expertise is not being utilised to the optimum. Thus, it is necessary that the selection process and criteria for the appointment of LTs be reviewed. Since the equitable distribution of labour is an important factor, it would be wise to appoint LTs with experience and expertise. Should a LT end up with two subjects, the school management team could consider reducing other responsibilities of the LT or making
time available in the school day for the LT to undertake the work of leadership of teaching and learning in the subject.

**Recommendations for the Heads of Curriculum**

*Build a stronger professional learning community*

The building of a stronger professional learning community could be achieved with conceptualising the subject team as both a PLC and an organisational network where advice and information are perceived as the building blocks of knowledge. This metaphorical duality (Melville & Wallace, 2007) is likely to strengthen the effectiveness of the subject team in promoting professional learning. Some of the strategies recommended to build a stronger PLC are:

- Focus on activities that characterise a strong PLC, including reflective dialogue, classroom observation, and providing feedback on each other’s work.
- Vary the nature of team meetings. Whilst it is important to disseminate relevant information and decide on important issues, dedicating more of the meeting time to problems teachers face in the classroom, professional development sessions (including those facilitated by teachers), and moderating teacher marking of student work will place a greater focus on professional learning.
- Examine and analyse student work and student achievement data. In this study, whilst it is known through reports from participants that the teams have examined student achievement data and developed intervention curriculum programmes, there was no evidence of the examination and analysis of student achievement data in team meetings observed. The literature on school leadership (e.g. Dempster & MacBeath, 2009; Fullan, 2001) and subject leadership (e.g. Visscher & Witziers, 2004) strongly emphasise the importance of examining student achievement data as a form of professional learning and the consequent improvement in teaching practice and student outcomes.

*Adopt a network-centric approach for leadership of teaching and learning in a PLC*

A network-centric approach is useful to gain a sense of the leadership, learning, and information flow (Cross & Thomas, 2009; Cross, Hargadon, & Parise, 2010b). Ideally, networks enable organisations to “surge”- sensing problems or opportunities in one pocket of a network and rapidly tapping into the expertise of others in the network for
effective response. The following are considerations to developing and maintaining an effective network:

- Build awareness or meta-knowledge of who knows what in a network so that the right expertise can be accessed at the right time (Cross et al., 2010b; Cross, Parise, & Weiss, 2011). This could enable team members to solve problems and improve learning outcomes rather than not respond to issues because no one knew that expertise existed. One approach to creating awareness is for the school to have a network knowledge and skill profiling system highlighting areas of expertise of staff on the school website; as such a system significantly improves knowledge transfer (Cross, Laseter, Parker, & Velasquez, 2010c).

- Be aware of knowledge loss, and introduce and sustain knowledge retention efforts. In most organisations, staff turnover can be a costly resource drain, particularly with the departure of central actors. Their departure often implies the loss of, amongst other things, deep subject matter expertise. This knowledge loss can be minimised by effective knowledge retention strategies (Parise, Cross, & Davenport, 2006). These include identifying potential central actors, develop the knowledge and skills, and increase their involvement in the PLC by assigning roles, responsibilities, and relevant tasks; making judicious use of the expertise of newcomers or beginning teachers; and making optimum use of the peripheral players whose knowledge tends to be marginalised or underutilised as they are often found to possess useful knowledge; novel insights, and a substantial source of innovation (Parise et al., 2006).

*Use effective Frameworks for Participation and Deploy Powerful Interactional Devices in Team Meetings*

Leaders assuming the role of chairpersons of meetings could be more aware of and use effective ‘talk’ and frameworks for participation; those that support collaboration and engagement of teachers to the optimum level and thereby open doors for professional learning. This study revealed some effective ‘talk’ included the use of interactional device of information, clarification, and opinion seeking questions. These were powerful in generating advice and participation, allowing participants to ‘craft’ effective solutions; they were more effective than rhetorical questions. The use of formulations and self-reference “we” to illustrate collective responsibility, extraction from “we” to “I” to exercise authority, and aggregate from “I” to “we” to indicate inclusivity were
powerful speech acts for chairpersons when used at the right junctures in team meetings. Furthermore, participants employed some potentially effective interactional resources, such as, teaching replays and facilitation. These interactional devices could be deployed by more educators assuming the role of chairpersons, and to a greater extent in team meetings to effectively engage teachers in team meetings.

**Recommendation for the Leading Teachers**

*Provide leadership training for Leading Teachers*

LTs, whilst experienced in teaching their subjects, did not have the relevant training for their leadership role. One possible solution is the arrangement of professional development programmes specifically targeting LTs where aspects such as training in leadership theory, groups dynamics, chairing meetings. Another solution could be for LTs to attend relevant professional development programmes with their respective HOCs. Furthermore, LTs could affiliate with professional organisations such as the State subject societies/committees.

**8.5 Recommendations for future research**

This study, through an extensive review of literature has attempted to address the gap in terms of the limited empirical base of research related to leadership of teaching and learning through advice and information interactions. However, there is need for further research as much as there is potential for more research to be undertaken. The following considerations could guide future research:

- This study was limited in its scope. It investigated subject leadership in two subject teams in a single site. The study could be replicated to investigate the practice of leadership of teaching and learning across multiple sites. Furthermore, the investigation could be expanded to include other subject areas. For example, in Queensland Australia, Science is one of the important priorities areas outlined in the Roadmap of Queensland Government, Department of Training and Arts. Research in this area examining advice and information interactions across multiple sites could offer valuable insights into the leadership
of teaching and learning in Science. Additionally, future research could investigate the relationship between advice and information interactions in subject teams and student achievement.

- A second direction future research could take is to investigate leadership through advice and information interactions comparing subject teams with other types of school teams such as interdisciplinary teams and school management teams. For example, studies could investigate the impact of advice and information interactions school management teams have on student achievement as compared with subject teams. Studies analysing and comparing advice giving interactions in subject teams with other types of teams could offer valuable insights into factors that affect advice and information interactions and could lead to the development of a model for effective advice and information interactions.

- A third direction future research could take is investigating advice and information interactions involving subject team leaders and teachers. For example, in Queensland Australia, the Developmental Performance Plan (DPP) is a fairly new concept in schools. Studies exploring the interactions between subject leaders and teachers would provide valuable insights and could lead to the development of principles for effective advice and information to support DPP sessions.

- A fourth direction future research could take is in terms of methodology. Since there are a limited number of studies that employed some of the analytical and methodological tools used in this study, future research could benefit from more studies using these tools. For example, future research could use the hybrid leadership perspective and ONA as analytic tools. Furthermore, future research could employ the methods of ONA to investigate advice and information interactions across multiple sites. Such research could include interviews with participants to draw insights from network diagrams followed with recommendations for intervention. Future research could also include more studies using a combination of ONA and CA.

- A fifth direction future studies could take is more research using network concepts such as centralisation, centrality, and density. Such research could contribute to the development of a knowledge base from which comparisons can be drawn and developed to the benefit of scholars and school leaders.
8.6 Conclusion

This research study explored the practice of leadership of teaching and learning through advice and information interactions in school subject teams. The study found leadership in the two subject teams took on a hybrid leadership pattern. Hybridity was evident in a range of configurations – in the main, individual-focused and distributed forms of leadership involving subject team leaders, Leading Teachers (LTs) and teachers emerging as informal leaders in the team. Despite their lack of subject matter expertise, Heads of Curriculum enacted leadership by focusing on curriculum, pedagogy, and assessment; and the alignment of these three important dimensions of teaching and learning. On some occasions, these leaders were found to be working in solo, whilst on other occasions, there were found to be working alongside teacher leaders. Furthermore, teacher leaders were found to be stepping up and leading their peers in the absence of the HOCs. The study also demonstrated that subject team meetings constitute a critical site for enacting leadership roles and tasks, including identifying problems, announcing plans, and volunteering advice and information. Furthermore, in team meetings leaders employed a range of interactional devices to accomplish the task of ‘doing leadership’. The study also found that, in terms of prominence, only a few colleagues were perceived to be most influential on the work of teachers in the team and overall, there was limited extent to which leadership was exercised in important areas of teacher’s work. Whilst the study found several factors favouring leadership of teaching and learning in both teams; two common factors impeding leadership were the lack of a shared understanding of the purpose of the team, and network architecture; both contributing to the low levels of communication evident in the low network densities.

Three main conclusions were drawn from the study. First, to accomplish the task of leadership of teaching and learning in subject teams requires hybrid leadership arrangements, including individual-focused leadership and distributed leadership. Second, to meet the challenge of developing the knowledge-base of educators in terms of professional learning, structural change such as subject teams and new leadership arrangements are insufficient; there needs to be a shared understanding of the purpose of the team for teachers to embed leadership in their professional practice. A third conclusion emanating from this study is that collaboration to improve practice is less effective or ineffective unless members engage in talk that draws in greater involvement of teachers, and fosters reflection and professional learning.
This study is significant for several reasons. It contributes to expanding the limited empirical base on subject leadership, and in particular to the paucity of empirical research on school leadership in Australia. The findings of this study are of potentially considerable significance to understanding of subject team leadership, an integral component leadership of teaching and learning in schools. The findings provide valuable insights for teachers and administrators of the school in the case study as well as other schools in terms of considerations for future professional and leadership and management development programmes; future leadership arrangements and distribution, and teacher teaming initiatives. Additionally, the study provides valuable data for education policy makers on how policy (e.g. the Professional Standards for Teachers) is translated into practice, and thereby impact on future policy initiatives.

The strength of this study is its mixed methods approach to the examination of the practice of leadership of teaching and learning in subject teams. Adopting a mixed methods research design, data for this study was gathered using multiple methods; the three main methods being, observations, surveys and interviews with participants. This multi-method approach allowed for triangulation of data, revealing significant differences between the formal and informal interactions of both teams, considerable similarities between the teams, and a few significant between-team differences in various dimensions of teaching and learning.

Finally, this study is also significant to researchers in terms of its analytic approach. This study has drawn on conceptual tools from network analysis and school leadership theory, particularly hybrid leadership and distributed leadership perspectives; and methodological tools from ONA and CA to capture and understand the practice of leadership of teaching and learning in formal and informal contexts, and involving formal leaders as well as informal leaders. Moreover, this study illustrated that when combined with methods of CA and ONA, the framework for analysis of leadership of teaching and learning is a powerful one generating robust empirical findings. This study illustrates how CA and ONA can be combined to take account of both formal and informal interactions to provide a fuller picture of the sources of leadership. Using ONA provides a potentially powerful way of measuring the extent to which this leadership is exercised and to gain insight on the overall ‘health’ of leadership networks. ONA aids organisations in the identification and visualisation of how advice and information is shared between actors. ONA can be used to investigate the position of actors, who the
key actors or leaders and who are the peripheral actors in networks. The resulting insights can help leaders understand how advice and information diffuses among individuals (Merrill et al. 2007); and help strengthen networks, increase productive interactions and reduce unproductive ones (Cross & Thomas, 2009). Furthermore, the use of CA complements ONA by providing a fuller picture of the sources of leadership, thick descriptions of the actions of leaders, and the interactional resources they employ in the leadership of teaching and learning.
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APPENDICE

APPENDIX A: STATISTICS RELATED TO ADVICE AND INFORMATION INTERACTIONS OF PARTICIPANTS

FORMAL INTERACTIONS

KLA Team Meetings
Sequences where advice and information were introduced

- Recipient asks for advice (RAA)
- Recipient asks for opinion or information (RAO/RAI)
- Recipient discloses/identifies a problem (RDP)
- Recipient announces a plan (RAP) of action
- Advisor identifies a problem (AIP)
- Advisor volunteers advice (AVA)

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Maths Team Meetings
Sequences where advice and information are introduced

English Team Meetings
Sequences where advice and information are introduced

<table>
<thead>
<tr>
<th>Advice &amp; Information Sequences</th>
<th>Meeting 1</th>
<th>Meeting 2</th>
<th>Meeting 3</th>
<th>TOTAL</th>
<th>%</th>
<th>Meeting 1</th>
<th>Meeting 2</th>
<th>Meeting 3</th>
<th>Meeting 4</th>
<th>TOTAL</th>
<th>%</th>
<th>TOTAL MATH &amp; ENG</th>
<th>% MATH &amp; ENG</th>
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<td>RAA</td>
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<td>0</td>
<td>0</td>
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<td>0</td>
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<td>1</td>
<td>1.41</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>RAO/RAI</td>
<td>12</td>
<td>17</td>
<td>7</td>
<td>36</td>
<td>38.29</td>
<td>6</td>
<td>5</td>
<td>10</td>
<td>7</td>
<td>28</td>
<td>39.44</td>
<td>64</td>
<td>39</td>
</tr>
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<td>RDPRIP</td>
<td>11</td>
<td>6</td>
<td>3</td>
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<td>6</td>
<td>8.45</td>
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<td>RAP</td>
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<td>1.41</td>
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<td>7</td>
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<td>19</td>
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<td>2</td>
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<td>AVI</td>
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<td>4</td>
<td>18</td>
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<td>31</td>
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<tr>
<td>TOTAL</td>
<td>38</td>
<td>35</td>
<td>21</td>
<td>94</td>
<td>100</td>
<td>21</td>
<td>13</td>
<td>22</td>
<td>15</td>
<td>71</td>
<td>100</td>
<td>165</td>
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366
## INTERACTIONAL RESOURCES EMPLOYED BY PARTICIPANTS

<table>
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<tr>
<th>INTERACTIONAL RESOURCES EMPLOYED</th>
<th>MATHEMATICS KLA TEAM (Instances used)</th>
<th>ENGLISH KLA TEAM (Instances used)</th>
<th>TOTAL</th>
<th>TOTAL MATH &amp; ENG</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Meeting 1</td>
<td>Meeting 2</td>
<td>Meeting 3</td>
<td>TOTAL</td>
</tr>
<tr>
<td>Question-Answer Adjacency Pairs</td>
<td>15</td>
<td>12</td>
<td>8</td>
<td>35</td>
</tr>
<tr>
<td>Questions (Survey)</td>
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<td>1</td>
<td>0</td>
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<tr>
<td>Rhetorical Questions</td>
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<td>0</td>
<td>8</td>
<td>8</td>
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<td>Voting</td>
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<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Marginalisation of dissent</td>
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<td>0</td>
<td>0</td>
<td>1</td>
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<td>Formulations</td>
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<td>0</td>
<td>2</td>
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<tr>
<td>‘I think’</td>
<td>33</td>
<td>10</td>
<td>9</td>
<td>52</td>
</tr>
<tr>
<td>‘We need to’</td>
<td>3</td>
<td>2</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>‘You need to’</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Three-part list</td>
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<td>3</td>
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<td>Invoking the non-present other</td>
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<td>5</td>
<td>1</td>
<td>7</td>
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<tr>
<td>Crafting</td>
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<td>1</td>
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<td>2</td>
</tr>
<tr>
<td>Teaching Replay</td>
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</tr>
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<td>Teaching Rehearsal</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>‘I don’t know’</td>
<td>6</td>
<td>8</td>
<td>8</td>
<td>22</td>
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<tr>
<td>Direct reported speech</td>
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<td>Prosody</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Facilitation/co-facilitation</td>
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<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>Artefacts</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>4</td>
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</tbody>
</table>

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INFORMAL INTERACTIONS

Place where Advice is Received

- **POD planning room**: 52 responses
- **HOCs office**: 39 responses
- **Staff Common room**: 65 responses
- **Principal's office**: 15 responses
- **PODs (advice giver)**: 26 responses
- **PODs (advice seeker)**: 6 responses
- **School grounds/walkways**: 21 responses
- **Colleague's home**: 21 responses
- **Staff functions**: 1 response
- **Local pub**: 4 responses
- **Cafe**: 1 response

**Note:** The chart shows the number of responses (blue bars) and the percentage of respondents (red bars) who received advice in different places.
Before the start of school
Lunch breaks
Non-contact/spare
On the run
After school
Weekends
School holidays

Time when Advice is Received

Medium through which Advice is Received

Percentage
No.

Face-to-face 52%
E-mail 27%
Telephone 21%
APPENDIX B: SOCIOGRAMS OF SPECIFIC DIMENSIONS OF ADVICE AND INFORMATION NETWORKS (MATHEMATICS TEAM)

Curriculum Planning
Assisting Low Performing Students

LEGEND

- **HOC Maths**
- **Leading Teacher**
- **Supporting Teacher**
- **Integrated Facilitator**
Assessment

Legend:
- HOC Maths
- Leading Teacher
- Supporting Teacher
- Integrated Facilitator

Characters:
- Brad
- Jess
- Ria
- Nat
- Kate
- Sean
- Iris
- Owen
- Josh
- Dan
- Bill
- Leah
SOCIOPRAMS OF SPECIFIC DIMENSIONS OF ADVICE AND INFORMATION NETWORKS (ENGLISH TEAM)

Curriculum Planning

LEGEND

- **HOC English**
- **Leading Teacher**
- **Supporting Teacher**
- **Integrated Support Staff Teacher**

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Teaching Approaches

LEGEND

<table>
<thead>
<tr>
<th>Color</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow</td>
<td>HOC English</td>
</tr>
<tr>
<td>Red</td>
<td>Leading Teacher</td>
</tr>
<tr>
<td>Green</td>
<td>Supporting Teacher</td>
</tr>
<tr>
<td>Blue</td>
<td>Integrated Support Staff Teacher</td>
</tr>
</tbody>
</table>

377
Assisting Low Performing Students

LEGEND
- HOC English
- Leading Teacher
- Supporting Teacher
- Integrated Support Staff Teacher

378
Assessment

LEGEND

- HOC English
- Leading Teacher
- Supporting Teacher
- Integrated Support Staff Teacher

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### APPENDIX C: In-degree centrality scores of Mathematics Team Meetings Networks

<table>
<thead>
<tr>
<th>Mathematics Meeting One</th>
<th>Mathematics Meeting Two</th>
<th>Mathematics Meeting Three</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency of Advice-two or more times in meeting</strong></td>
<td><strong>Frequency of Advice-two or more times in meeting</strong></td>
<td><strong>Frequency of Advice-two or more times in meeting</strong></td>
</tr>
<tr>
<td>Participant</td>
<td>In-deg</td>
<td>Nrmln-deg</td>
</tr>
<tr>
<td>Ria</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Jess</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Owen</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Bill</td>
<td>2</td>
<td>0.2</td>
</tr>
<tr>
<td>Brad</td>
<td>2</td>
<td>0.2</td>
</tr>
<tr>
<td>Kate</td>
<td>2</td>
<td>0.2</td>
</tr>
<tr>
<td>Leah</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Dan</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hugh</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Josh</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sean</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>3.27</strong></td>
<td><strong>0.33</strong></td>
</tr>
<tr>
<td><strong>Std Dev</strong></td>
<td><strong>4.2</strong></td>
<td><strong>0.42</strong></td>
</tr>
<tr>
<td><strong>Sum</strong></td>
<td><strong>36</strong></td>
<td><strong>1.9419</strong></td>
</tr>
<tr>
<td><strong>Variance</strong></td>
<td><strong>17.69</strong></td>
<td><strong>0.1765</strong></td>
</tr>
</tbody>
</table>

The table indicates the in-degree scores of the actors who provided advice to colleagues two or more times per meeting. The in-degree scores were ranked from highest to lowest. The descriptive statistics of the network are indicated in bold. In order to compare networks of different sizes, the in-degree centrality scores were normalised.
In-degree centrality scores in Mathematics KLA Team Informal Networks

<table>
<thead>
<tr>
<th>Teaching Mathematics</th>
<th>Five Dimensions of Teaching &amp; Learning</th>
<th>Curriculum Planning</th>
<th>Content Knowledge</th>
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</thead>
<tbody>
<tr>
<td><strong>Actors</strong></td>
<td><strong>In-degree</strong></td>
<td><strong>Nrmln-deg</strong></td>
<td><strong>Actors</strong></td>
</tr>
<tr>
<td>Iris</td>
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<td>0.5</td>
<td>Iris</td>
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<tr>
<td>Dan</td>
<td>6</td>
<td>0.5</td>
<td>Dan</td>
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<td>Jess</td>
<td>5</td>
<td>0.42</td>
<td>Nat</td>
</tr>
<tr>
<td>Nat</td>
<td>5</td>
<td>0.42</td>
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</tr>
<tr>
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### Influence of Advice

*Strong to very strong influence*

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### In-degree centrality scores of English Team Meetings Networks

#### Meeting One Network
*Frequency of Advice-two or more times in meeting*

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| Mean        | 1.71   | 0.29     |
| Std Dev     | 2.49   | 0.22     |
| Sum         | 12     | 0.368    |
| Variance    | 6.23   | 0.05     |

#### Meeting Two Network
*Frequency of Advice-two or more times in meeting*

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<tr>
<td>Zoe</td>
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| Mean        | 3.55   | 0.44     |
| Std Dev     | 3.97   | 0.16     |
| Sum         | 32     | 0.22     |
| Variance    | 15.8   | 0.02     |

#### Meeting Three Network
*Frequency of Advice-two or more times in meeting*

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| Mean        | 2      | 0.18     |
| Std Dev     | 4.04   | 0.42     |
| Sum         | 24     | 2.2      |
| Variance    | 16.33  | 0.18     |
## In-degree centrality scores of English KLA Team Informal Networks

### Teaching English
*Frequency of Advice—once or twice p/m or more*

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### Five Dimensions of Teaching & Learning
*Advice provided in two or more dimensions*

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### Influence of Advice

*Strong to very strong influence*

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APPENDIX D

Crafting as an Interactional Resource

534. Kate: I just feel that with chance and data especially with
535. box and whisker and stem and leaf and frequency tables
536. they are process types of questions (.) [how are we
537. gonna assess them!]
538. Bill: [ya they
539. are lot of process] questions but they have to use a
540. little of that [for reflection on it why [would they
541. choose a particular (player )]
542. Kate: [or if we want knowledge based
543. question its just straightforward you read from the box
544. and (surplot) and tell us what the median of the
545. quartile of (.) that’s like that’s straight forward (.)
546. that’s knowledge
547. Bill: (0.2)
548. Bill: I don’t think so (.) that’s process because if you’re
549. asking for the quartile range then you’re asking them
550. to work it out in terms of the lower quartile the
551. upper quartile
552. Kate: yeah [yeah]
553. Bill: [that’s] a process >you know what I mean< (0.2)
554. ahm they can use graphs and do communication from that
555. Bill: there (. ) that’s reflection (0.2)so we can give them
556. some few graphs ask them to do some reflection on that
557. (0.4)
558. Brad: is [is there can we go left wing] or left field and=
559. Kate: [or another thing we can do is]
560. Brad: =perhaps look at what they’ve done in SOSE or something
561. and say okay how has statistics and probability (. ) the
562. approved knowledge and awareness of (. ) or gathering of
563. or dis- dispersal of information (. ) how has that
564. changed our lives or their lives
565. (0.5)
566. Kate mhm
567. Bill: mhm
568. Hugh: cos that’s definitely real [world]
569. Kate: [that’s ] yeah and that’s
570. reflection
571. Hugh: and reflection
572. (0.2)
573. Bill: so what they’ll have to write a paragraph or something
574. like that
575. (0.2)
so the ABS (.) Australian Bureau of Statistics how does that affect (0.2) farmers (.) you know what am I gonna plant this now because they don’t get enough of rain or what about alcoholism because people spend too much monies at pokies (0.2) or health problems with pokies (. ) or gambling (0.3) ‘I don’t know’ (0.2) but it just seems to me that’s what statis--

so how does statistics raise awareness of issue

how has statistics helped us (.) maybe we give them a choice (.) what’s your knowledge of health or sport or

you don’t want to give them a very broad choice too

yeah (.) and then they link (. ) the statistics of that choice with its effect on society that they’re aware of (0.2)

that’ll be a more wo- (. ) that’ll be a worthwhile task (. )cos I think (. ) I don’t teach the level five six but I looked at it (. ) that assignment and I (gees ) I didn’t get it (. ) that that one (. ) I didn’t see the you know=

=and we’ll try and avoid them having to do more

research by using something they already know

yeah

[yeah]

[yeah]
APPENDIX E

Griffith University
School of Education and Professional Studies

SCHOOL STAFF SOCIAL NETWORK QUESTIONNAIRE

Principal Investigator: Researcher Gokul
Project Supervisors: Dr Cheryl Sim
Dr Paula Jervis-Tracey

Participation in this survey is voluntary. Your participation will contribute to a fuller understanding of instructional leadership at your school.

Instruction
Please answer the questions below by filling in the spaces or placing a cross (X) inside the box provided.

Part 1: Biographical Details

The first section of the survey asks for your initials and biographical information. As with all data collected in this study, your responses will be kept confidential. Only the study investigator and project supervisors will have the authority to review your data.

Please write your initials here e.g. Andrew Murphy is AMu

Gender:  Male
Female

What is your current position?
How many years have you held your current position?
How many years have you been employed at your current school?
How many years of teaching experience do you have?
How many years of school management/ administration experience do you have? (if applicable).

What education qualifications do you hold? Select all that apply.

- Bachelors Degree
- Masters Degree
- Doctorate Degree
- Diploma
- Other
What subject/s or area/s have you specialised in your training as a teacher?
...........................................................................................................................................
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**Part 2: Team Advice and Information Social Network**

List all the teams or committees you belong to at your school:
...........................................................................................................................................
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In the next sequence of questions you will be asked about Key Learning Area (KLA) Teams and POD Teams. For each Team, you will be asked to name people to whom you have turned for advice of information. These people might be colleagues in your team, sub-school, or school as a whole, as well as people outside your school. You will then be asked questions about your interactions with the individuals that you name.

Data from this question will be used to study the networks of professional communication between educators. Please be assured that no individual names or identifying information will be revealed in reports produced from these data.

**Instruction**
Complete a separate section for each team you are a member of.

**MATHEMATICS KEY LEARNING AREA TEAM**

How many years/ months have you been in this team? ..............................

Describe your roles and responsibilities in this team.
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389
1. During this school year, to who have you turned for advice or information about teaching this Mathematics? (You do not need to fill in all the spaces)

2. How often have you received advice or information from her/him about teaching Mathematics?

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3. Please describe the type of advice or information received from each person about teaching Mathematics?

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4. Please describe the Other advice or information you received from each person.

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5. For each person listed, please describe how influential his or her advice or information has been on your work.

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<tr>
<td>OTHER/S</td>
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</tbody>
</table>

Part 3: Additional Thoughts or Information
You have almost reached the end of our survey. Thank you very much for participating! The remaining questions are an opportunity for you to include additional thoughts or information you would like to share. We would truly appreciate any feedback you may have.
Please enter any additional comments regarding instructional leadership and management, or feedback regarding this survey below.

Thank you for completing this survey.

Adapted from: School Staff Social Network Questionnaire (Pitts & Spillane, 2009)
APPENDIX F

SEMI-STRUCTURED INTERVIEW PROTOCOL

A. Some information about you

Position at the school: ____________________________    No. of years: _____
Previous role/s:
________________________________________________________________
________________________________________________________________
________________________________________________________________
Total no. of years involved in the teaching profession: _____

B. Leadership and Management

1. What is your understanding of what leading and managing teaching and learning consists of?

2. Which individual/s, group/s, team/s or committee/s you would associate with leadership and management of teaching and learning in your school?

   Probe: Can you explain a little more about this?

C. Organisational Structures

3. Teams are a major part of the organisational structure in this school. What is the rationale for this?

4. For each relevant team:

   With reference to the team/s you lead (or are a member of):
   a. What is your understanding of the purpose (goals) of this team?
      Probe: can you elaborate on what you mean.
   b. Describe the kinds of actions/activities performed by this team.
   c. Describe the kinds of actions/activities you perform in this team to meet the goals.
   d. How easy or difficult is it to perform the leadership and management work in this team?
   e. What are the benefits of being in this team in respect of your teaching practice?

D. Social Networks

5. Are there colleagues who you seek advice from regarding teaching and learning?
   a. Who are they?
   b. Please share an example of a time when you sought advice or information regarding teaching and learning from a colleague.
c. How would you describe the impact of advice received from colleagues has on your work?  
Probe: Can you explain a little more about what you mean?

6. Are there colleagues who seek advice from you regarding teaching and learning?  
   a. Who are they?  
   b. Please share an example of a time when a colleague sought advice or information from you regarding teaching and learning.

7. Do you consider the provision of advice is an act of leadership?  
   Probe: Can you explain a little more about what you mean.

E. Teachers as Leaders

8. As professional teachers are expected to take on leadership roles/ tasks.  
   For school leaders:  
   a. Who are the teacher leaders in the school?  
   b. What leadership roles do they hold?  
   c. What leadership activities do they perform?

   For teachers:  
   a. Apart from your involvement in the teams discussed so far, are there any other leadership roles and activities that you perform?  
      Probe: Can you explain a little more about this?

9. How easy or difficult is it to perform these activities.  
   Probe: Can you explain a little more about what you mean?

F. Conclusion

10. In closing, what other insights/ideas/observations would you like to share about leadership and management of teaching and learning in your team/school?

    Thank you for participating in this interview.
## FACESHEET: SHORT FIELD NOTES

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<td>Completion time</td>
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### Participants Present

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### Physical Layout of location and participants

Legend

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APPENDIX H

School of Education and Professional Studies
Griffith University, Mount Gravatt Campus
176 Messines Ridge Road
Mount Gravatt QLD 4122

6 July 2009

Ms ...
Executive Principal
P O Box
QLD

Dear ...

I am a student with the Griffith University, School of Education and Professional Studies. I am planning to conduct a research project concerning instructional leadership practices within collaborative teaching teams in the middle years of schooling as part of the requirements of a PhD degree. As your school includes a purpose-built middle school and is organisationally structured around teaching teams, it is perceived to be an ideal sample for the purpose of my study.

The objectives of this research project are to:

- Explore and identify the leadership practices of teachers within teams (interdisciplinary teams and single-subject teams), and
- Explore and identify the factors fostering/impeding the practice of leadership within teams.

This study is aimed at building the body of knowledge on instructional leadership practices in middle school teaching teams. The study will provide insight on the practice aspect, and the factors favouring/impeding leadership and contribute to identifying principles for effective instructional leadership in middle schools teaching teams.

As part of this study, I plan to conduct an interview with the Principal of the Middle School; attend the planning meetings of selected Key Learning Area teams and Interdisciplinary Teams; conduct Social Network Surveys with all KLA and Interdisciplinary Teams, and conduct focused group interviews with the selected KLA and Interdisciplinary Teams. In addition, I also plan to collect copies of documents (e.g. team meeting agendas, minutes of team meetings and products developed during team meetings). I anticipate that the data collection period will be from the start to the end of Semester 2, 2009.

This letter includes the following:

- Copy of the letter of approval from Queensland Government: Department of Education, Training and the Arts to conduct the research study
- Copy of ethical clearance by the Griffith University’s Human Research Ethics Committee
Copies of the package that the participants in the study will receive – an introductory letter, information sheet, and consent form

Consent Form requesting your approval to conduct the research at your school and consent to approach participants

Please contact me should you have any questions or need any clarification on points raised. You should also feel free to contact my supervisors Dr Cheryl Sim on 3735 5926 or Dr Paula Jervis-Tracey on 3735 5848 should you need further information. If you wish to speak to an officer of the University not involved in the study, you may contact the Manager, Research Ethics, on 373 55585.

Your approval of this research project to be conducted at your school would be greatly appreciated.

I look forward to working with you through this time.

Manuj Gokul
PhD Candidate
School of Education and Professional Studies
Griffith University
Ph: (H) 3423 0085
E-mail: Manuj.Gokul@student.griffith.edu.au
APPENDIX I

Introductory Letter to Participants

School of Education and Professional Studies
Griffith University, Mount Gravatt Campus
176 Messines Ridge Road
Mount Gravatt QLD 4122

Dear ...

I am a student with the Griffith University, School of Education and Professional Studies. I am planning to conduct a research project concerning instructional leadership and management practices within teams as part of the requirements of a PhD degree.

The research project involves research into instructional leadership and management practices within teams in a middle school in Australia. The objectives of this project are to:

- Explore and identify the leadership and management practice within teams (school leadership team, interdisciplinary teams and single-subject teams), and
- Explore and identify the factors fostering/impeding the practice of leadership and management within teams.

This study is aimed at building the body of knowledge on the practice of leading and managing teaching and learning in leadership and teaching teams. The potential value of this research is to identify how leadership and management of teaching and learning are practised among formally designated leaders as well as teachers. The study will provide insight on the practice aspect, and the factors favouring/impeding leadership and management, and contribute to identifying principles for effective instructional leadership and management in middle school teams.

With your permission, I will conduct semi-structured interviews, attend team meetings to observe you and the other participants as you go about your work, conduct surveys and focused group interviews. The data will be collected from the start to the end of Semester 2, 2009. Further details can be found in the enclosed information statement.

This study has been cleared by the Griffith University’s Human Research Ethics Committee as well as by Education Queensland. You are of course, free to discuss your participation in this study with me on the phone numbers listed below, or my PhD supervisors - Dr Cheryl Sim on 3735 5926 or Dr Paula Jervis-Tracey on 3735 5848 should you need further information. If you wish to speak to an officer of the University not involved in the study, you may contact the Manager, Research Ethics, on 373 55585.

All information collected will be treated as confidential. You and your identity or other personal details such as names will not be revealed in my thesis, or in any other publications resulting from this study. Only pseudonyms will appear on the record of data collected. It may be possible however for the data, with all descriptors removed, to remain potentially identifiable with the research group, due to your specific roles with the teams. It must be made clear however, that data collected will relate only to the leadership practice within the teams and not to you as an individual.
At the conclusion of the study, unless otherwise specifically requested for by the participants, I am prepared to report to all participants who have been involved in the study the findings pertinent to their interests.

I look forward to working with you through this time.

Manuj Gokul  
PhD Candidate  
School of Education and Professional Studies  
Griffith University  
Ph: (H) 3423 0085  
E-mail: Manuj.Gokul@student.griffith.edu.au
APPENDIX J

Research Study Information Statement

Instructional Leadership in Middle School Teams

Outline of the Study

Public demands for improved student outcomes have placed growing attention to the crucial role of leadership and management in schools. Across most countries the spotlight on educational leadership is on leading and managing teaching and learning. In a knowledge-intensive enterprise like teaching and learning there is increasing recognition that a single administrator cannot serve as the instructional leader for the entire school without the substantial participation of other educators. Further, the increased acknowledgement of teacher professionalism and expertise has broadened the view of leadership to include teachers. Thus, the notion of distributed leadership, one of the most important components of effective schools, including middle schools is gaining momentum in Australia. Teacher teams are perceived to serve as structures for distributed leadership and a conduit for improved instructional practice. Using a mixed-methods research approach involving observations, surveys, semi-structured and focused group interviews, this study explores the instructional leadership practices within teaching teams in one middle school.

The research project involves research into instructional leadership and management practices within teams in a middle school in Australia. The objectives of this project are to:

- Explore and identify the leadership and management practice within teams (school leadership team, interdisciplinary teams and single-subject teams), and
- Explore and identify the factors fostering/impeding the practice of leadership and management within teams.

This study is aimed at building the body of knowledge on instructional leadership and management practices in leadership and teaching teams. The potential value of this research is to identify how leadership and management of teaching and learning is practised among formally designated leaders as well as teachers. The study will provide insight on the practice aspect, and the factors favouring/impeding leadership and management, and contribute to identifying principles for effective instructional leadership and management in middle school teams.

Method of the Study

Interviews will be conducted with the College Principal, Associate Principal, Middle School Principal, Middle School Deputy Principal, Middle School Heads of Curriculum and selected teacher leaders.

In this study, participants would be involved in:

- Team meetings: KLA Teams; Middle School Leadership Team; POD/Interdisciplinary Teams
- Interviews (face-to-face) of selected participants
- Social Network Surveys (all KLA and Interdisciplinary teams)

Team meetings and semi-structured interviews will be digitally recorded. The digital recordings will only be used by the researcher. Digital recordings will be transcribed verbatim and the recordings will be deleted immediately after transcription.
In addition, I will also collect copies of team meeting agendas, minutes and products developed during team meetings as well as other relevant documents.

Participation in this research is completely voluntary. Participants are able to withdraw their consent at any time during the study without comment on penalty. Only teams where all members have agreed to participate will be included in the study.

**Ethical Considerations**

The conduct of this research involves the collection, access and use of your identified personal information. The information collected is confidential and will not be disclosed to third parties without your consent, except to meet government, legal, or other regulatory authority requirements. A de-identified copy of this data may be used for other research purposes. However, your anonymity will at all times be safeguarded. For further information consult the University’s Privacy Plan at www.gu.edu.au/ua/aa/vc/pp.

All data collected will be kept securely away from the site under study.

The researcher gives an unqualified undertaking that teachers will not be identified in the research findings. All participants will be given pseudonyms to ensure confidentiality. Teacher’s names will not be published in any report for Griffith University, nor will any information that enables the identification of any individual be included in any other report. It may be possible however for the data, with all descriptors removed, to remain potentially identifiable within the research group, due to your specific roles within the teams. It must be made clear however, that data collected will relate only to the leadership practice within the teams and not to you as an individual.

Ethical approval has been gained through Griffith University’s Human Research Ethics Committee. Any complaints concerning the manner in which this research is conducted should be addressed to the Manager, Research Ethics, Office for Research, Bray Centre, Nathan Campus, Griffith University (373 55585) or research-ethics@griffith.edu.au.

You are of course free to discuss your participation in this study with me or my PhD supervisors - Dr Cheryl Sim or Dr Paula Jervis-Tracey should you need further information. This study has also been approved by Queensland Government: Department of Education, Training and the Arts.

At the conclusion of the study, unless otherwise specifically requested for by the participants, I am prepared to report to all participants who have been involved in the study the findings pertinent to their interests.

*Manuj Gokul*

PhD Candidate

Tel. 34230085   E-mail: Manuj.Gokul@student.griffith.edu.au

**Project Supervisors:**

1. Dr Cheryl Sim (Senior Lecturer: School of Education and Professional Studies)  
   Griffith University, Mount Gravatt Campus (Tel. 3735 5926)  
   E-mail: c.sim@griffith.edu.au

2. Dr Paula Jervis-Tracey (Lecturer: School of Education and Professional Studies)  
   Griffith University, Mount Gravatt Campus (Tel. 3735 5848)  
   E-mail: p.jervis-tracey@griffith.edu.au
APPENDIX K

Consent Form: Participation of School

Instructional Leadership in Middle School Teaching Teams

This study seeks to gain a better understanding of instructional leadership within teaching teams in the middle school. As explained in the Research Study Information Sheet, this study is aimed at building the body of knowledge on instructional leadership practices in middle school teaching teams.

Data for this study will be gathered from interview with the Principal of the Middle School, observations of team meetings, social network surveys, focused group interviews, and documents (e.g. team meeting agendas, minutes of team meetings, products developed during team meetings.

All information will be treated as confidential. Neither the name of the school nor the name of the participants will be used in any written report of the project.

I, …………………………………………………………, agree to the participation of my school ………………………………………………………………………….. in the Instructional Leadership in Middle School Teaching Teams research project and give my consent for the researcher to approach the Middle School Principal and teachers to invite their participation in the research project.

I understand that:

- The project will be carried out as described in the information statement, a copy of which I have retained.
- I can withdraw from the project at any time without prejudice.
- Data may remain potentially identifiable within the research group.
- Publications resulting from this study will use pseudonyms of persons and specific settings.
- I may request any publications arising from the research study.

……………………………………………..
School Principal Signature

…………………………………………………..
Date
Participant Consent Form: Research Project

I, ………………………………………………………………… have read the Research Project Information Statement and Participant Consent Form and I am willing to participate in the study conducted on **Instructional Leadership and Management in Middle School Teams**.

*I understand that:*

- The project will be carried out as described in the information statement, a copy of which I have retained
- I can withdraw from the project at any time without prejudice
- Publications resulting from this study will use pseudonyms of persons and specific settings
- Data may remain potentially identifiable within the research group
- I may request any publications arising from the research study

……………………………………………..
Participant Signature

……………………
Date
Participant Consent Form: Observation of Team Meetings

I, ................................................................. have read the Research Project Information Statement and Participant Consent Form and I am willing to participate in the study conducted on Instructional Leadership and Management in Middle School Teams.

Specifically:

- I agree to the observation of this meeting.
- I agree to the digital recording of this team meeting.
- I agree to the collection of written material (e.g. agendas, minutes, assessment tasks)

I understand that:

- The project will be carried out as described in the information statement, a copy of which I have retained
- I can withdraw from the project at any time without prejudice
- Publications resulting from this study will use pseudonyms of persons and specific settings
- Data may remain potentially identifiable within the research group
- I may request any publications arising from the research study

................................................................. ........................................
Participant Signature Date
Participant Consent Form: Interview

I, ……………………………………………………………………………………………. have read the Research Project Information Statement and Participant Consent Form and I am willing to participate in the study conducted on Instructional Leadership and Management in Middle School Teams: A Distributed Perspective.

Specifically:

- I agree to participate in the interview.
- I agree to the digital recording of the interview.

I understand that:

- The project will be carried out as described in the information statement, a copy of which I have retained
- I can withdraw from the project at any time without prejudice
- Publications resulting from this study will use pseudonyms of persons and specific settings
- Data may remain potentially identifiable within the research group
- I may request any publications arising from the research study

................................. ........................................
Participant Signature           Date
## Interview Schedule

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<td>Jody: Middle School Principal</td>
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<td>Nat: ST Mathematics</td>
<td>34 minutes and 27 seconds</td>
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<td>Liz: HOC English</td>
<td>67 minutes</td>
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<td>Eva: LT English</td>
<td>35 minutes and 35 seconds</td>
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<td>Sean: IF/ Mathematics Teacher</td>
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<td>Jen: LT English</td>
<td>20 minutes</td>
</tr>
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<td>Pam: ISST</td>
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<td>Kate: LT Mathematics</td>
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<td>Brad: ST Mathematics</td>
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<td>Bill: LT Mathematics</td>
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<tr>
<td>20-09-2009</td>
<td>Judy: LT English</td>
<td>E-mail interview</td>
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APPENDIX M

GRiffith University Human Research Ethics Committee

27-Jul-2009

Dear Mr Gokul

I write further to the additional information provided in relation to the conditional approval granted to your application for ethical clearance for your project "Instructional Leadership in Middle School Teaching Teams: A Distributed Perspective" (GU Ref No: ERL/14/09/RECE). This is to confirm receipt of the remaining required information, assurances or amendments to this protocol.

Consequently, I reconfirm my earlier advice that you are authorised to immediately commence this research on this basis.

The standard conditions of approval attached to our previous correspondence about this protocol continue to apply.

Regards

Dr Gary Allen
Manager, Research Ethics
Office for Research
Bris Centre, Nathan Campus
Griffith University
ph: 3735 5585
fax: 3735 7964
email: g.allen@griffith.edu.au
web:

Cc:

PRIVILEGED, PRIVATE AND CONFIDENTIAL
This email and any files transmitted with it are intended solely for the use of the addressee(s) and may contain information which is confidential or privileged. If you receive this email and you are not the addressee(s) or responsible for delivery of the email to the addressee(s), please disregard the contents of the email, delete the email and notify the author immediately.
APPENDIX N

1 July 2009

Mr Manoj Gokul
16 Rosewood Place
Runcom QLD 4113

Dear Mr Gokul

Thank you for your application seeking approval to conduct research titled “Instructional Leadership in Middle School Teaching Teams: A Distributed Perspective” in Queensland State schools. I wish to advise that your application has been approved.

This approval means that you can approach principals of the schools nominated in your application and invite them to participate in your research project. As detailed in the department’s research guidelines:

- You need to obtain consent from the relevant principals before your research project can commence.
- Principals have the right to decline participation if they consider that the research will cause undue disruption to educational programs in their schools.
- Principals have the right to monitor any research activities conducted in their facilities and can withdraw their support at any time.

This approval is granted conditionally on your compliance with the following:

- As part of these terms and conditions, at the conclusion of your study you are required to provide this Office (and any participating schools, principals or managers of other departmental sites) with a summary of your research results and any associated published papers or materials in hard copy. You are also requested to submit documents in electronic format, or provide a link to an online location if possible, to research.stratpol@ceta.qld.gov.au. Failure to provide a report on your research will preclude you from undertaking any future research in Queensland State schools.

Please note that this letter constitutes approval to invite principals to participate in the research project as outlined in your research application. This approval does not constitute ethics approval or support for the general and commercial use of an intervention or curriculum program, software program or other enterprise that you may be evaluating as part of your research.
Should you require further information on the research application process, please feel free to contact Dr Karen Barnett, Senior Research Officer, Policy Planning and Performance on (07) 3238 3176. Please quote the file number 550/27/846 in future correspondence.

I wish your study every success.

Yours sincerely

[Signature]

Dr John Dungan
Director
Strategic Research
Policy Planning and Performance
Trim ref: 09/10689
APPENDIX O: TRANSCRIPTS

Transcript 1: Mathematics KLA Team Meeting 1
Date: 18-08-2009
Venue: Resource Centre
Start Time: 2.50pm               Finish Time: 3.31pm
Duration: 40 minutes and 47 seconds

1. Ria: okay (.) rotations in Maths Math (.n) now we had (.)
2. we’ve got lots of different ideas (.n)we need to really
3. start doing this once that computer based thing comes
4. in it will be great then we can work on this rotation
5. (.) I saw something in Jacaranda and I didn’t know (.n)I
6. just wondered (.n) were you rotating your whole class
7. around in ↑rotations
8. Owen: was it English
9. Ria: I don’t know (.n) something was happening in Jacaranda
10. where they rotated (.n)the whole the whole class rotated
11. (.n) it was Gwen and=
12. Owen: =yeah (.n) Gwen was just here
13. Bill: she’s gone to English
14. Owen: where is English
15. Bill: somewhere
16. Sean: that’ll be clinics
17. Ria: they rotate the whole class (.n) don’t ↑they
18. Josh: yeah
19. Ria: you were in the middle (.n) weren’t you
20. Josh: although I’m not quite sure where the fourth group was
21. Ria: well
22. Josh: they never seem to be there
23. Ria: mmm Liz has those (.n) they were in Palmglades (0.2) I
24. found them (.n) but are we looking to do a complete(0.2)
25. [POD rotation]
26. Owen: [I already do] rotations just in my classroom
27. Jess: when I rotate that works
28. Ria: that’s okay (.n) that’s where we are going (.n) aren’t we
29. (.n) we are going class group rotations within your
30. class
31. Kate: mhm
32. Josh: I think it has to be because the aren’t enough
33. computers in any one place to say that’s the computer
34. place
35. Ria: are you minuting↑
36. Jess: eh ↑what (.n) I was just saying (.n) can I just say what
37. I was gonna say
38. Ria: yeah
39. Kate: [yeah]
40. Bill: [yeah] say what you was gonna say
41. Jess: what I was gonna say was I’m trying and I’ve been doing
42. a standard like those cards that Ria’s got (.n) I’ve
43. got a set of smaller shorter ones (.n) so I always have
44. them available the kids write them out stick it in
45. their folder every week check it themselves bla bla bla
46. (.n) so that’s one (.n) I usually do one which revises
47. all the content we’ve learnt that week (.n) a skill and
48. drill one which is basic multiplication division adding
49. subtracting showing all working by hand so long
50. division and then I have a fourth one which is some
51. kind of hands on like manipulating blocks and whatever
52. which is relevant to whatever we did that week (.n) and
53. its working really really well (.n) it’s noisy as
412

54. Jess: you will notice from last week but yeah the kids like
55. Ria: it its fun and I think its good
56. Jess: I think the plan is we do do that and we have one
57. Ria: lesson (. and I think we can afford to have it (. ) not
58. this term because I think this term has been really
59. disjointed I mean I don’t think I see mine till this
60. Friday (. ) I have just one lesson and I think we lose
61. them Wednesday morning
62. Kate: yeah yeah
63. Ria: but whether we aim for at least one I think we have to
64. agree that as from January 2010 (. ) that we go for once
65. a fortnight we do one lesson of rotations
66. Kate: yeah
67. Jess: only once a fortnight (. ) I do one [a week]
68. Owen: [I do one] a week
69. Ria: that’s what I’m saying (. ) are we doing once a
70. fortnight or are we going once a week(. ) we have to
71. decide now and use this time to trial out different
72. things (. ) and use term four as a trial basis so that
73. when we come to term one 2010 we’re ready to go (. )
74. we’ve got our folio sorted out (. ) our criteria Sean
75. sheet all geared up to compliment what we’re doing (. )
76. any worksheets all of of that so we’re ready to go (. )
77. that’s how I see it we see the end of the year out
78. trialing out doing it once a fortnight once a whenever
79. >babababababa< (. ) okay Kate
80. Kate: ((laughter)) can I suggest that we start once a week (. )
81. next term!
82. Ria: mhmm
83. Kate: and (. ) because I think once a fortnight will become
84. too long (. ) [for] them and we have only three
85. lessons per week
86. Ria: [yeah]
87. Jess: >and its good revision<
88. Kate: [yeah its good revision]
89. Ria: [alright who agrees to] once a week (. ) once a week
90. Dan: yeah
91. Jess: aye
92. Bill: do we have smart moves on the same day or is it on
93. another day
94. Jess: no (. ) I do smart moves on my assignment day
95. Ria: yeah I think smart moves can’t happen on that day
96. Kate: I do smart moves on a different day as well
97. Bill: where’s the time table for that
98. Teacher: [it’s been out]
99. Ria: [Brad (. ) you] were against it were you (. ) do you want
100. you were against it for any (. ) do you want to say why
101. you’re against it (. ) or you’re just (. )
102. Brad: ahm ((clearing throat))
103. Ria: [or you’re] just abstaining
104. Brad: [no no no]
105. Brad: I’m not abstaining
106. Ria: [or not bothered]
107. Brad: I can’t see (. ) that I can afford the time
108. (0.3)
109. Owen: [see I do it th]is way
110. Ria: [>once a week<]
111. Owen: one of my rotations is where I break up the teams into
112. six tables but I when I do the directed teaching (. )
113. its all consolidating what we’ve done
114. Ria: mhmm
115. Owen: cos I do mine last lesson of the week (. ) so that way I
116. have the small groups and they can consolidate what
we’ve done in class (.) if they’ve got it then I’ll
give them extra (.) if they don’t get it cos I’ve got
two tables of low end you know (.) so I spend some time
with them to make sure they understand the concept and
it’s a bit more where you’re sort of one teacher to ten
kids whereas other than one to thirty and you can see
what they are doing (.) cos some of the kids are really
good at hiding [what they] don’t [know]

[mmm yeah] [mmm]

so whereas this (.) you know (.) it’s a smaller group
(.) so you’re on to it and you can you can monitor it
a bit more that way

yeah definitely

[I me]an I also think that we should try to do and I
don’t know how time tables work out if but you’re not
if you’re not comfortable or you want to have ideas
is is go in and observe other people that have things
running up (.) so if if you’re not sure how to set it
up then go and see Owen’s one (.) go and see [Jess’s
one (.) go] and see

well I’d

like to do] that (.) it’s a] good idea
definitely [do that]

[but when] (.) when
I think I think that’s what we should do (.) I think we
need to=

no [but I think I think what works] for your class
isn’t necessarily gonna work for Brad’s [class] but [to
get ideas [of] how to ma]nage it (.) and what
kinds of things work and [what kind of things don’t]

[I have it on a Thursday]

[yeah]

[just to get an idea of what yeah]
[but in terms of getting through] that content (.) I
think Brad (.) I thought that at first too and then I
thought well here’s a list of things I want to do that
help kids with coordinates [and I thought] well this
worksheet which I would do normally in a content class
(.) I could do that as a rotational activity (.) so a
lot of my content I just slightly (.) like pulled out
and did that as a rotation and (.) oops sorry spitting
dropping ((spilling food on herself)) because ahm (0.2)
it is a smaller group and because I can maybe sit with
the group some of the harder tasks(,) instead of us
doing them altogether (.) I did them at smaller groups
and that way I can be there to help them through=

[((coughing))]

=so you got the worksheet (.) you got the consolidation
(.) what’s the third group doing↑

well (.) that’s eh like maybe some problem solving
activities which is just generally good because it
helps them build those problem solving skills for
unseen questions and stuff like that

‘okay

but you can have many groups too (.) some days=
but that’s not related to the lesson at all
and I have folders
well it’s not all going to be related but two or three
out of the four groups will be related to the topic
we’re doing now and some days you might just have
two groups split them down the middle (.) if it’s a
longer activity wham split them down the middle (.).e forty five minutes each slot (.). you are still there with fifteen instead of thirty (.). I don’t know (.). just takes some working

Ria: I think I think it is trial and error (.). that’s what I think

Sean: ‘isn’t there supposed to be one lesson per week for the investigation’

Ria: yeah the idea was (.).

Sean: one of the investigations and one of these rotations that only leaves one other lesson

Ria: yeah (.). the way I see it (.). is one lesson content (.).

one lesson investigation but investigation a lot of the content can be taught into the investigation (.). it’s not necessarily them (.). sitting there doing the investigation (.). when I do the investigation it’s pulling the content from the term which is relevant to that assignment so I haven’t done any kind of nets or scale drawings cos all that’s going in my assignment lesson that’s not in my content lesson for this (.).term and then (.). the rotational one

Dan: ‘cos if you spend a whole lesson doing purely investigation some kids will knock it over in a lesson the bulk of it’

Jess: what will they knock over in a lesson

Dan: lot of the investigation

Hugh: they can do a lot if they do it in an hour and a half

Sean: ‘the problem is from these first steps in Maths I find I’m having to go back year four teaching that back up and that’s taking a long time cos kids just don’t have that (.). so I’ve got kids doing folio work while I’m targeting others (.). two of the rotations will just kill everything”

Ria: but if your rotations is going back and doing that grounding foundation because that’s what your group needs then that’s what the rotation needs to be (.). that rotation lesson can be suited to whatever (.). if its backtracking and getting some foundation (.).fine that’s how I see it

Brad: I’m quite prepared to give the one a week a go (.). ahm and yeah I don’t think it should be set in stone particularly when you look at this term

Ria: oh this term has been a nightmare

Jess: ah yeah if you’ve got Ekka week or something (.). don’t do it

Ria: and like this week I thought we

Brad: we had holidays

Ria: we had Monday when we were out

Kate: yeah

Leah: then tomorrow morning

Ria: tomorrow morning is the Maths test and then we see them on Fridays and that’s the smart moves day so that’s an hour

Bill: Ria (.). regarding smart moves we haven’t got a time table for that

Ria: no no and I shouldn’t have brought up the SM word shouldn’t I

Bill: no because the kids are always telling us

Ria: I know

Bill: and we don’t know whether to take them or not you know what I mean

Ria: I keep leaving it on my computer at home
and regarding the rotations have you got all that stuff ready for us to go
yeah now this (.) its just kind of ideas things that can be used
I’m still waiting (.) my laminating bill is twenty three metres ((laughter))
the bill is twenty three metres twenty three metres laminating yeah okay (.) so basically this is one complete set alright so each Pod will have one of these and they will also have
a solution to them
the solutions little booklet copies white copies groups thing
li il bo let ((imitating an English accent))
li il bo let (.) sure (.) yeah (.) okay
((laughter))
speak in English
I am (.) you speak English mate
((laughter))
these could be used within rotations
I’ve already used some of those already done
okay
we’ve got some in Willow as well
no no I’ve got my own

different ones
(.).
there are different ones (.) yeah (.).
so this just set right its got four (0.2) four or five of each one so you can use this in a box and on a rotations day or on a day its great say if you’re not there or something and its problem solving day okay
right finish your booklet grab one copy out the questions set out your working (.) but we need to do is we can’t just let leave them to their own devices on these (.) some of the kids you can and this I think if you’ve got your rotations and you’ve got them into ability group rotations I don’t know is that how you do yours↑ (.) do you do yours on ability or do you
it depends on the task that we’re doing
on the task
but on things like this if you do it on ability (.) then some of them would be able to you can say right you leave it and you know the better ones should be able to give it a good go (.) and when the weaker group gets to it you’re gonna have to sit there and lead them through it a little bit more (0.2) that’s one way I thought of trying to (.) get around it (.) the other thing that we could do is we each take a sheet and make up a scaffolded sheet to go with it like a teacher resource that accompanies it (.) if we each take one then it would take all of us probably half an hour to do a scaffolded sheet to accompany the problem sheet and its half an hour rather than me doing it and spending eight hours on my own putting together scaffolding sheet (.) so I’m asking for delegation
solutions how they arrive at a solution
yeah (.) so you’ve got the solutions in the booklet but just on ways in which to give them tips
Ria: tips to
Bill: and strategies.
Ria: strategies to do it so that if you meet the weaker
group you can say here’s the sheet that accompanies it
and this is how to do it (.). is that
Brad: so that scaffolding (.). is that like progressive hints
Ria: yeah
Bill: yeah
Brad: okay whatever
Ria: yeah so you’re all happy to take one and do one
Owen: I want an easy one
Teachers: ((laughter))
Brad: I asked first (.). I don’t want a pink one
Ria: overlaps anyone (.). pass it around (.). if you like the
look of it take it (.). triangles
Sean: I like triangles
Ria: you like triangles (.). build the windows
Hugh: I’ll get the orange one cos I like the colour
Ria: that’s maggies windows it’s already gone (.). who’s on
build the windows Parsola (.). who likes dots and shapes
and things
Jess: oh my god what is wrong with me ((spills food on
herself))
Owen: ((laughter))
Ria: twisted shapes
Owen: stuff on your mouth
Jess: ah just give me anything
Ria: just pass them round
Brad: how many each we’re supposed to be doing
Bill: we’ll just take anything
Ria: I think we need to have a couple (.). there’s fifteen of
them
Leah: she said one now’s there’s couple
Ria: mystic rose (.). mystic rose (.). there’s nine points of
the compass
Jess: that’ll do
Brad: that’s mine
Ria: okay number rings
Leah: okay I’ll take it
Owen: I’m going to get the hard one
Ria: drinks machine (.). you’ve got the drinks
Jess: I’m doing all
Ria: Jess you’ll need this (.). it’s all about patios and=
Jess: ah
Ria: =things (.).cementing (.). New York cops
Leah: Give it to the forensic
Ria: okay patio parts
Jess: I need that one too
Ria: you need that one patio parts
Owen: you can have these ones too
Ria: hand shakes (.). permutations combinations
Jess: I’ll swap you
Bill: who does racing here
Ria: permutations combinations
Ria: who does
Hugh: well Josh does the stock Seanet
Dan: I’ll do the handshakes.
Ria: easy one (.). there are beetles march on (.). I’ll do
that one
Jess: yeah have you delegated any to yourself
Ria: yes
Jess: c’mom
Ria: and frogs (.). I’ll do beetles and frogs (.). has
everyone got a couple (. ) yes (. ) beautiful (. ) so
Leah: one for Kate please
Jess: and Mel (. ) give me the rest and Melissa will do them
Teachers: ((laughter))
Leah: she can’t (. ) she can’t get away and this one to
Melissa
Ria: who’s got two (. ) [who’s got two]
Leah: [Kate give one] to Kate
Dan: I’ve got three
Ria: yeah I’m doing beetles
Leah: give two to Kate
Jess: Mel’s got two
Ria: has everyone got one then (. ) Kate’s got one
Leah: yeah
Ria: who else is missing
Jess: I got two
Ria: yeah (. ) so then so we can put that can we get those
ready for next Maths meeting
Jess gees please
Ria: in two weeks (. ) what
Jess: just kidding just kidding
Ria: I think otherwise if we say well lets get it will never
happen and we’ll all forget
Jess: yeah I’m writing it on the notes (. ) which will be in
your pigeon hole (. ) due next week
Ria: and we’ve got the How To manual (. ) I’m just going onto
the agenda (. ) we’ve got the How To manual
Owen: can I give you feedback on Maths Online
Ria: yes definitely
Owen: Maths Online (. ) I got an email back from them (. ) they
need one spreadsheet sent to them with every student
that we want to register in the College (. ) [in that]
spreadsheet
Jess: [holy me]
Bill: in the college
Owen: in the college (. ) so its from grade seven up so I need
the names etcetera of all middle school students and by
the looks of it senior school students if they’re
gonna use it (. ) cos its got grade ten eleven twelve
extension work on it and then that one spreadsheet has
to be collated and sent to them and then they’ll send
us back user names and passwords
Ria: right best person to get all the names from (. ) Karen
Brennan
Owen: well I was with mine
Jess: really
Ria: she has it all for sport and electives (. ) she’s got
[the most up to date list and the easiest is she’ll
just flick] it to you
Owen: [I was gonna try and have their computer login as their
user name]
Bill: yeah user name
Owen: but I don’t know whether their Maths Online will
recognise that or not so I’ve got all the middle school
students but there’s a few that don’t have it (. ) I’ve
got to find out what they are they are
Bill: you input that anyway
Owen: ahm I’ve got that from the Techs so the Techs should be
able to give me senior school as well so then I’ll put
all that together and hopefully send it in
Josh: ( . ) and is there an issue with giving out the names
to a private company
Owen: don’t know about that
Josh: all credit to Mackers but we don’t want to get nailed for how dare we hand over those names
Owen: I don’t know (.) I’ll talk to Sue B about it or Geoff Latta or someone
Jess: is it not something the kids could say like it could go to the newsletter please get your kids to log on to these site and stuff
Owen: yeah but if we register them as a class then you can monitor that class
Bill: yeah otherwise you can’t yeah
Owen: yeah
Ria: what happens just =
Jess: =what happens when they move class [sorry]
Ria: [yeah] if they move class (. ) they move [up and down]
Bill: [oh then they] opt to different thing yeah [use the same log on]
Ria: [but that’s just some] thing its possible you can change them (. ) yeah
Josh: well its not been they’re not been limited to a teacher anyway are they
Bill: [no you’re gonna]
Josh: [a teacher and a class (. ) a school]
Owen: no no no they register the kids and we put them into classes so I suppose we could swap the classes around
Ria: yeah
Brad: probably quicker than time chart
Bill: its an excellent programme to use though
Ria: [oh fantastic I’m looking forward to doing it ( . ) I need some can you run some (. ) [in-service in it]
Bill: [I’ve started using it]
Bill: [you can log on] and register yourself
Ria: yeah [and] just play with it (. ) stuff like that (. ) cool
Bill: [yeah]
Ria: okay (. ) so we’re all happy (. ) we’re going to trial at least one maybe for the rest of this term (. ) one lesson per fortnight (. ) give it a bash (. ) [have] a go (. ) try it out rotations (. ) see (. ) link up with someone who does rotations already so who (. ) hands up if you do rotations and are happy for someone to come and have a look in your lesson
Leah: [yeah]
Bill: we do rotations but in a very small scale at the moment
Kate: I do something like that [but not not how]
Ria: [you do something] like that (. ) just so that people who are not familiar with it could go and have a nose just for half an hour (. ) so come and look in mine I’m not bothered I’m sure Jess’s fine about people sticking their nose in
Jess: sure (. ) you’ll watch me going
Owen: rotations with Jess (((teasing))
Kate: [[[laughter]]]
Ria: [yeah] so we’re gonna try that starting from and then in term four trying to go for once a week a rotation lesson and get all this up and kind of running so that from term one next year we’re gonna go for it and have a rotation lesson (. ) boom (. ) yes (0.2)
Jess: boom yes
Kate: yes boom yes
Ria: that’s the plan
Brad: all the new teachers and transferees and that stuff
Ria: yeah (.) when half is not here
Leah: where you’re going Mr Neilsen
Kate: oh I know
Ria: that would give us time to hopefully it’s a seamless
transition to get our homework portfolio sheet all ↑up
which brings me onto agenda item ((laughter))
Ria: flick (.)[ gosh I shou]ld be in entertainment (.)
Kate: something
Hugh: [very good]
Ria: ((laughter))
Kate: right okay so folio Marking sheet (.) any feedback to
Kate: yes
Bill: you got ( )
Kate: that’s what I wanted to know any feedback
Brad: like what
Kate: of the folio Marking sheet (.) the one=
Jess: =that she gave us six months ago
Kate: yeah ( .) about yeah last year
Leah: find it where
Jess: fantastic
Ria: see this is why this needs to be in for next Maths
meeting
Kate: yeah
Ria: right with the scaffolding sheet ( .) that’s your
homework
Leah: Bill said you’re doing the masala ( .) I said it’s the
persala
Kate: ((laughter))
Ria: the only comments we gave you back were about that last
line ( .) about the changes and the wording ( .) about
the working as a group ( .) very difficult for ISS
Kate: the last line where
Leah: hang on ( .) you had it there
Kate: are we talking about the exams
Ria: we’re talking about the feedback
Kate: the folio
Ria: [the folio marking sheet]
Bill: [is that the A to E you’re] talking about
Kate: oh no no I have to
Brad: you’re not talking about that criteria sheet
Kate: yeah that’s what we’re talking about
Bras: that:
Kate: yeah ( .) [talking about that]
Jess: [that’s the one]
Ria: yes it’s the last line ( .) [I think there were changes
made to that]
Kate: [who’s gonna
Brad: actually look at that to Sean] folios
Jess: you are Brad
Owen: ((laughter))
Kate: [I think]
Ria: [did you] make changes
Ria: to be honest it’s a bit daunting to start with
Bill: it is extremely daunting
Jess: I think if you use it about sixty or so times [it will
just be ( )]
Leah: [I think
Kate: I’ll have] to buy glasses to read that
Ria: once you’ve done fifty you’ll be fine ((laughter))
Kate: ((laughter)) see I think the day we do rotations is a
420

good day to use this [because if we] have a table for
this a table for our for whatever we’ve done this week
(.).

(a table for like the skill and drill (.)) then we
can do some of it that day we can do concepts we can do
interpretation like some of it (.)(but again)=

[I use folders]

we all have portfolios for our students

yep

do we all have [a section in there with which has
so we all] do the same thing (.)(we all have a homework
section (.))[a class] work section (.)(a test] exam
section assignment section (.)(do we all have [that in
place]

[we have a folder in there [they put their
stuff] in]

[In I’ve got a folder]

[test exam]

[mhm]

[and skills test]

in the folio

yes (.)(in the folio

separate sections in the same folio

yes

yes

n:o (.)(I put them all in the same folder

because I well I did and from when Kate said it

before I then just put some plastic wallets and got the
kids to put a title page of class work on one thing (.)

so then I just thought that would be easier for me when

it comes to marking (.)(to look at okay [this is

looking at their class work stuff]}

[but isn’t

the class work the class work] they do in their book

or sheets or stuff like that (.)(they get given sheets

yeah (.)(so do you take it out

because normally they’re given sheets that are part of

their folio work

mhm

[they got a book for class] work for class work also

[if they do it in class work]

class work (.)(yeah

yeah (.)(they’ve got their book

yeah (.)(they’ve got a book (.)(which they can put in

the end of the term

[yes]

[yeah]

but then like if there’s any sheets that they do or

anything I just kinda [separate it]

[and I don’t] think we’ve gotta

do this like every week

so like these problems go in class work

yeah

(can I (.)(I try and work on the principle I don’t

handle a piece of paper more than once (.)(so I’ll look

at it and I’ll put a Sean on the front cover of the

folio and then it goes in there (.)(I don’t really want

to look at it again

okay

(0.2)

I don’t want to take out like take the whole folio home

and then take out their sheets and look through that

and Sean it and then put them back in the right slot
I can’t do that. It’s too much

Kate: okay but another thing okay say say say we’re marking homework or when we’re doing homework okay we’re checking their homework so we just take the homework plastic sleeve and we’ll be only looking at their homework for that week over here we’re only looking for those things that will assess the homework (we’re not looking at all of that)

Josh: we just assess assess assess

Kate: I I this might not be correct someone can you know give feedback but in my thinking I don’t think we’ll be doing this every week or every day it will be more of an end of term thing or you know or three times a term that’s what I think

Ria: yeah

Kate: I mean even if its not even if its not physically in separate sections

Kate: yeah

Ria: its in your case in separate sections

Kate: yeah

Ria: as long as we’ve all got that

Leah: so once or twice a term I can take their book the one they use in the classroom and I can look at their class work and fill that in

Ria: yeah

Leah: =I can look at their homework fill that in (skill) and drill (pieces) fill that in

Ria: yeah

Leah: can I do that

Ria: yeah

Kate: yeah (.). yeah just highlight

Leah: I like using their book because its with them all the time they can take it home and revise they can take it home and you know do their homework so no point putting things in the folio and they never take it out

Kate: [well I give] them the opportunity to take home

Leah: [do you agree] absolutely [I think]

Leah: [thank you]

Brad: I think this separate storage place for their work=

Leah: =its its= its nonsense (.). [I mean its is clearly a marking tool (.). its not an instructional tool its a marking tool

Leah: [its harder for me I think]

Kate: and its harder for them to revise as well

Leah: yeah for revision purpose (.). so I’m happy to take their books once or twice a term three times say [and]

Ria: [yeah]

Kate: [whatever you’ve got]

Brad: [on the other hand thou]gh I’ve got a lot of losers who could lose the sheet out of their book anyway (.). [so the fol]der’s there

Leah: [oh]

Kate: yeah

Hugh: we’ll just lose them

Brad: ((laughter))

Kate: ((laughter)) they’ll lose them

Brad: ((jokingly)) what book (( laughter))

Ria: alright ahm so can you can we just have another look at
that (. ) [guys can we have another look]
[yeah please lets just serious feedback ]on
that if everyone can have a serious look at that so
Kate: 
[yeah please lets just serious feedback ]
Kate: 
serious look
Kate: 
serious look yeah and give feedback
Owen: can email it
Kate: 
frowning and everything (. ) the works
and we do it for next [meeting]
Kate: 
yeah
Owen: if you want to email it to me that’s fine
Brad: anyone want to borrow mine
Bill: no its alright
Ria: well can we get feedback to Kate then (. ) is that
better (. ) Kate
Kate: 
sorry
Kate: 
yes I’m happy with that (. ) [I’m happy with that]
Kate: 
have a look at it
feedback to Kate
((side chatter about person with botox))
Beck have you got that (. ) feedback goes straight to
Kate
Kate: 
sure
Ria: 
cool beautiful (. ) okay A or B ((laughter))
Leah: she wasn’t listening
Kate: 
>she wasn’t listening I know she wasn’t listening< (. )
exams
Jess: 
exams (. ) Leah
Kate: 
oh (. ) yes I want to talk about the exams
Ria: 
I know (. ) [>that’s why] I said A or B<
Leah: 
[yes so] I need two questions to come out
from the paper (. ) can we change two questions
Kate: 
>which paper<
Ria: 
which paper [I haven’t seen I haven’t seen the paper]
Bill: 
[we can actually add some questions to] t here
Ria: 
I haven’t seen the paper when did this get around
Bill: 
we can add some questions and take out some questions
(. ) we’ve done some of those questions before
Leah: 
okay this question (. ) the pythagoras formula one I’ve
never taught at grade 8 grade 9 level (. ) [about that
particular rule I’ve never taught] about the power of
half the power of 2
Bill: 
year 11 and university I think]
[yeah that’s
Bill: 
you know why you’re changing the [C square equals B
square equals A square]
Ria: 
[didn’t we do it last
Kate: 
year]
Kate: 
but if they know the square root is the same as do they
know
Leah: 
[I haven’t I haven’t taught them sorry]
Brad: 
[I’ll take that out if you take that quest]ion about
trans yeah
Brad: 
transverse waves
Brad: 
because that’s not taught
Jess: 
I agree (. ) done
Ria: 
deal (. ) [okay]
Bill: 
[but I] did transverse waves yesterday
Ria: 
deal deal no deal its signed
Bill: I’ll take it out right okay

Leah: and the last=

Brad: okay now you have to give me the question you want then
to ask about Pythagoras in a multiple choice format

Leah: ye:ah [we’ll do it]

Bill: [plus there’s] couple of other questions there

Leah: yeah Bill and I

Bill: we’ll talk to you (..) is that alright Brad

Ria: and can we see it

Brad: lets talk about it now

Teacher: ‘some of us haven’t seen it’

Teachers: ((jokingly whispering at digital recorder))

Brad: find it

Bill: so we’ll put something on area and perimeter there

Leah: and the last question (..) I don’t know if any kid will
be able to work it out

Brad: okay (..) that’s a valid point

Ria: excuse me Ria hasn’t got that information

Brad:: ((jokingly squashing chips bag at digital recorder))
sorry captain break in message orders

Bill: yeah there’s one or two questions there (..) [even the
question with the] diagonal

Kate: [that’s a
question in the textbook]

Kate: I think that’s a good question

Leah: but who [which] student will be able to work it out (.)
you showed it to me I know [you showed it to me]

Kate: [can I]

Kate: level five six

Leah: but if you actually sit down and do it

Kate: but that’s the question that’ll tell us who are the you
know (A students)

Bill: that’s beyond their level I think beyond that level

Kate: okay

Bill: so how would your sort that thing

Kate: ((jokingly)) are you the chair can you tell these women
to shut up [so I can get a word] in (edgeway)

Ria: [sorry I was okay]

Ria: Mr Neilsen has the floor

Brad: go::d (..) okay I totally agree with what you’re saying

Leah: yes

Brad: no one will be able to do this

Kate: no

Brad: but what I thought because its one of these fantastic
reflection questions [(.)] is that=

Teachers: [laughter]

Bill: =why are you putting him nervous

Kate: we’re listening listen ((sssh sound))

Brad: I’m actually going to do a scaffolding thing where I
say this is the problem (..) now follow these steps (.)
so I take them through step by step where they show I
show them how to actually solve it (..) up until the
final point

(0.2)

Brad: in the exam [paper]

Leah: [then it] doesn’t become a reflection

Brad: no but what they gotta do (..) so I say step one on this
sheet of paper draw [lines] through the centre of the
thing (..) so now draw this

Bill: [diagonal]

Leah: =right
so what is this length A B and tell them how to label
the points (. ) so lead
them right up to the garden path then say right
then lock the door
so how would you Sean that [in terms of where the
students (fall into)]
[you don’t its reflection
its one of those] really important-
'lead them to the gate'
can I just read it
again
((laughter))
no no no its not just reading it (. ) you have to sit
down and do it (. ) then you’ll realise
((laughter))
read it out Ria
((reading)) two steel discs one with a diameter six
centimetres one with a diameter of eight centimetres
are placed inside a wooden square frame (. ) find the
length of the sides of the frame (. ) here the diagonal
does not equal fourteen centimeters (. ) cool
(0.2)
it is pythagoras
yeah it is Pythagoras
pythagoras yeah
yeah
((drawing sketch)) okay and what actually happens if
you draw lines through the centre=
through the centre yeah
yeah
=and you got that’s three (. ) that’s four so that
hypotenuse is seven
yeah
okay (. ) they’ll wanna go that’s six and that’s eight
so its fourteen but its not (. ) [its only six okay]
[yeah no its not]
because you look at sides there
but you can go okay that distance there is three (. )
that distance there is four because it is same as the
radius there so this is the thing you’ve gotta find
right
okay and you find out through manipulation that’s
actually an isosceles [triangle]
[triangle]
yeah
and if you know that’s 7 then you can work out the side
the lengths there
[tthe sides]
2 y square
yeah
we break it up so right angle triangle there (‘the
triangle isosceles there’)
so you’re going you can then ( )
( )
if you do the scaffold
if you do the scaffolding then its different (. ) but it
won’t be
yeah scaffolding
because on their own they won’t be able to figure it
out you see
you see but (. ) [I still have problems with
reflection (. ) as in what are we looking for
Kate: [but if you say] 
Leah: yeah what are we looking for 
Ria: are we looking for their working as in their 
experimenting as in their trying [or are we looking 
for] (...) I found this really really difficult and how 
well they can then say how they progressed (...) is that 
what we’re looking for [in a reflection] 
Sean: [you can put up certain rules] 
Leah: [well reflection] 
Kate: its so [generalized] 
Bill: [reflection] using mathematical knowledge to 
solve 
Brad: Sean's gotta good (.). go on 
Sean: what if you put up the rules that could be used (.). so 
state the sort of rules that can be used and you look 
at how they apply them= 
Bill: yeah that could be (an idea) 
Sean: =say that is you know you’re looking for (.). you know 
how to do these what these rules are (.). this problem 
requires you to apply these 
Bill: so you’re putting the rules in mathematical language 
Sean: yeah 
Bill: which is better (.). yeah that’s better 
Sean: what happens is they then go through and you have a 
look at the process of how they try and apply the rules 
to the problem to solve it 
Ria: mhm 
Bill: so you can draw a perp- a line through [passing 
through] the circle (.). lets see if they apply it (.). 
that’s good (.). yeah (.). instead of us doing it for 
them 
Kate: [so we can] 
Ria: instead of scaffolding you can say (.). hint (.). start 
off [drawing line from the centre of] 
Bill: [no you’re not going to say where] from 
Leah: it could be similar to [scaffold]olding 
Brad: [I was] 
Sean: [rules] such as[ pythagoras] 
Ria: [pythagoras] 
Brad: I was showing people around here how its solved (.). are 
we still gonna go with telling them (.). I would say 
draw a line through here (.). draw a line through (.). 
[that’s what I’ve actually written down] 
Bill: [maybe not through there then its direct]ed you see 
Ria: or you could [give them] 
Bill: [just say] draw a perpendicular line 
passing through the centre of each circle 
Brad: (.2) 
Kate: yes 
Ria: yeah 
Brady: some of them won’t be able to follow that 
Bill: but they must be able to follow it if they’re 
reflecting you see 
Ria: yes [yes] exactly 
Kate: [mhm] 
Ria: so that is better [to do (.). to do that] kind of thing 
to give them 
Bill: [don’t just give them] 
Bill: yeah just give them hints in terms of mathematical 
ideas and let them (do) that 
Kate: yeah 
Ria: yeah (.). [in mathematical language] [words and stuff 
(.). then they apply yeah] [that’s good love it beauty]
Kate: [just give that hint]
Bill: [so that’ll be good Brad yeah that’s alright]
Brad: good
Bill: [but the other question we’]ll just figure out is this one here
Sean: also like [like things like find the centre]
Ria: [beauty in Aussie language]
Teachers: (chat about Aussie talk)
Bill: you can change exactly the same things to Pythagoras theorem you know (.)
[so C square is equal to A square plus B square you know] so you can say C is equal to A plus B (.)[C is equal to A plus B square]and then=
Teachers: (chat about Aussie talk))
Kate: [can I get to Tupperware now] ((laughter))
Ria: okay
Bill: =C² or you can say A² = B² + C²
Leah: give [one square root one Bill]
Bill: [so you can use those alternatives you know what I mean you can give one of those square root ones (.)]
you can use the same question but just change these alternatives here (. or you give them the answers (.)
say C square is equal to B square plus A square you get it (. buddy (.)) that one there and then ahm
Ria: is there any other business (. ladies and gentlemen Brad: are you not on the Maths DL list
Ria: no (. I don’t think I am obviously (. any other business (. anyone got anything else
Dan: I emailed the techies when you said Brad ( )
Jess: can I bring up what you said about (garf) business
Josh: ah
Jess: if we do something on G drive for instance when I did the assignment for this term its assignment term 3 bla
bla bla where it all should be but its got version 1 (. then I changed it to version 2 version 3 but what
Josh’s suggesting is until it is the final you know Iris’s author[ized can we put in the] front of it draft assignment [because]=
Kate: [authorized it yeah]
Josh: [its just got] 1 2 3 but its not the genuine one until the draft comes off
Jess: =yeah and I think that’s a really good idea
Owen:: then you got the final one the rest come off
Kate: yeah
Hugh: do the same in sport
Jess: that’s a habit to try and get into
Josh: I gotta say somebody really needs to look at that Maths folder and do something with it (. I’m not going to (. it is a dogs breakfast
Ria: yeah
Bill: it is it is yeah it is (. we’ve actually tried to look for some stuff in the afternoon (. Owen and I
Ria: alright so draft on doc on assignment in G drive (.)
and is there anyone who would like to take on tidying up the Maths folder
Sean: there’s an easy way of doing it
Ria: delete it all (. yes
Bill: [Kate]
Kate: [I think] Iris might want to do that
Josh: what would be interesting (. to take the folder to delete it put it elsewhere (.open a new Maths folder
and say these are the headings in it .) if you want to
put something in it you either put it there or ask
somebody to arrange a new heading (. ) that way that
Maths folder becomes the official one and the other
gets in a trash not a trash but a dump
or rename it old junk
I tried already (. ) its like pre- 2009 and that’s full
of crap and then its got 2009 which is partially
organised
partially (. ) but still a mess
okay (. ) couple of other things (. ) dates for exams
[week]
[which] week
[week nine]
[assign]ments we’ve got 5 and 6 assignments are due in
week ten (. ) [cos they’re only getting it] now
[is it week 8 or week 9 Brad]
you wanna talk about the assignment Brad
and then we’re gonna do we’re gonna do their exams
we were I thought we already decided week 9
week nine
week nine
Brad [week nine exams]
yeah week nine yeah
I outa room here to write all these things here
week nine (. ) ahm okay
[is it is it a single day]
[and investigations is] week ten
yeah I was gonna say it’s a single day
5 and 6 is week ten investigations
week ten is investigations
Cheryl (might like) the single day
[assign]ments we’re gonna do 5 and 6 when do we all have 5 and 6
(yeah)
[wha-]
[what]
Maths exams
mine is really spread [out]
[for] one particular day
do we all does everyone have 5 and 6 on a Monday
yes [I do]
[yes]
I do
you’re not everyone Leah
who’s talking on behalf of Maple
ah me (. ) Maple Cypress
Maple Cypress (. ) you’re talking (. ) okay (. )
Jacaranda you can talk on behalf of[ Jacaranda] (. )
[Kurra:::jong a:::nd Illa warra]
Jacaranda has 4s on Monday]
[Jacaranda]
[Monday (9)]
[Acacia]all on Monday
so we can do Monday
>yeh so we can do Monday<
hang on (. ) that’s our smart moves day
but that’s okay
we can swap it that day
we can move smart moves to another day
we’re not doing smart moves
(mon jou)
Kate: we don’t have a smart moves time table
Brad: you just [spoke French]
Ria: [okay so level] the pom (. level 4 5 is going Monday
Kate: level 4 ↑5
Ria: all of us are doing Monday
Kate: [all Monday]
Jess: [all Monday]
Leah: all
Ria: Monday week nine
Hugh: ’I got them week nine first lesson very good’
Kate: yes Monday week nine
Ria: week nine (. and okay beautiful (. okay (. homework sheets (. level 5 6
Bill: 7th September
Ria: 7th September
Bill: September yeah
Kate: which homework sheet
Bill: September yeah
Kate: very very efficient there
Jess: what homework sheet
Kate: ((laughter))
Leah: are there
Ria: homework sheets level 5 ↑6
Kate: homework sheets level 5 6 is ( )
Bill: level 5 6 the same day
Leah: anyone [has got any] homework sheets
Ria: [yes same day]
Daron: website (. homework website
Daron: homework website
Owen: I tried [to upload]
Leah: [yes I uploaded homework for Jacaranda all subjects] subjects]
Bill: [homework sheet is already up but Iris said she’s] [given it to] eh printing
Bill: [tech problems]
Ria: printing (. okay
Dan: they should come out by the end of term
Kate: the homework sheets should be coming out
Kate: [where are the homework sheets (. did you do that]
Sean: [I tried uploading something today it was [going that slow its like they wanna be so dependent on ( ) but at a critical time the system doesn’t work]
Bill: [yeah we did them and gave it to Iris]
Kate: did you do the level 5 6 one
Bill: 5 6 yeah
Ria: they’re done
Leah: how come we didn’t know (. photocopy guys I want to check with you
Bill: [’5 6] get Iris to follow up’
Jess: [well]
Ria: hang on (. excuse me
Leah: I want to ask about photocopying cos I am particularly having difficulty finding a HOC when I want something to be signed
Ria: (you can sign on the rock)
Josh: [you can sign anyway] ((laughter))
Bill: [Daron is always there]
Ria: yeah
Leah: I know ((laughter))
Hugh: ’I can never find Daron” ((teasing))
Josh: find one who is willing to sign
Daron can’t sign the Maths one cos its not fair to
Daron
I know I’ve been told they can’t and they are not
signing it (.) so and today Seal signed my Maths one
because I was looking for Iris over here (.) but it
is (. ) I’m finding it very inconvenient as being a
teacher to have things photocopied on time when you
can’t find a HOC that you know like ( . ) can something
[cant something]
[I don’t think its] going to change though Leah
oh come on keep quiet ((smiling)) ( . ) I’m trying to get
some positives
((laughter))
I’m a [realist here]
[(dont think)]
can something be done so that it is ( . ) it makes our
life a little bit easier ( . ) please
how
how yeah ( . ) what do we want
is there a timetable or some sort of idea of where the
HOCs are at any given time
[no no dont know]
[where’s Susan today] ( . ) she had a lesson she wasn’t
there ((laughter))
she was she was ( . ) she was just in a different room
(. ) different room (. ) she was next door (. ) she was in
Melaleuca ( . ) so that’s her case yeah
don’t lay blame
that’s what I’m saying ( . ) you need to go to her
I’ve got a solution for you Leah ( . ) I’ll talk to you
about it later
((laughter))
oh we know
good gracious
give it 3 days in advance
yes ((laughter))
give it 3 days in advance
((laughter))
okay ( . ) any other stuff (. )
no
beautiful
thanks boss
thanks HOC
Transcript 2: Mathematics KLA Team Meeting 2
Date: 27-10-2009
Venue: Resource Centre
Start Time: 2.50pm Finish Time: 3.21pm
Duration: 29 minutes and 50 seconds

603. Bill: someone came straight to the discipline of students
604. Kate: [{(laughter)}] I thought you are afraid to tell me
605. Wayne: [{(laughter)}]
606. Kate: laughter (.) okay (.) I’m just giving you a reminder
607. about the problem solving sheets that we got (.) from
608. Adele (.) if we can post that onto the in--
609. Dan: =to the site
610. Kate: to the site yeah
611. Dan: done
612. Bill: I’ve done that on the [site already]
613. Brad: [I’ve done it] but I’ve got no
614. idea where I’ve done it
615. Dan: where we’re gonna [when we’re gonna get]
616. Bill: [that site that she asked] us to do
617. Kate: yeah I remember you were the first one to do it
618. Brad: mhm
619. Kate: yeah so she just reminded us to put that there ahm
620. [just put it on the site]
621. Bill: [and is she getting us]
622. Kate: those hard copies that are [laminated]
623. Brad: [its already] there in the
624. resource room (.) we’ve got to hire it out
625. Hugh: oh we’ve got to hire it out
626. Kate: under the POD yeah (.) its already in folders (.) and
627. it’ll be in the resource [room]
628. Bill: [its in] per POD group
629. Kate: yeah
630. Hugh: so is there only one class group per POD
631. Bill: cos there’s four Maths [groups]
632. Kate: [I think] there’s two (.) I
633. think so I’m not sure I can’t remember
634. Bill: but there’s four Maths groups so where should
635. there be two only
636. (0.2)
637. Kate: there might be two per POD
638. Leah: miss
639. Kate: you have to go
640. Leah: Tony’s going in five minutes
641. Kate: okay for that (.) we we’ll do you first
642. Leah: oh okay
643. Kate: ahm invest- so that’s all done
644. Brad: [mhm]
645. Hugh: [yeah]
646. Kate: the problem solving cards all done (.) okay
647. investigation
648. (0.2)
649. Bill: I don’t like the investigation (.) I’ve actually
650. replied to the email
651. Kate: yep we need to
652. Bill: cos I find it a little (.) probably in terms of Italy
653. Italian and Polish (.) I don’t see the relevance of the
654. task in terms of what we’re doing at the moment (.) I
655. discussed it with Brad (.) like he said if it’s a rich
656. task its alright (.) because you’re using fragments of
657. Italian and Polish and everything else (.) but ah

430
they can get some other stuff to do with frequency and=
its confusing as to what the actual [task] is
(0.2)
and the thing is (.). I spoke to Iris (.). she said
you don’t have to use anything in Italian (.). I said
then why=
=well that’s wrong because there are letters letters in
the [alphabet]
[twenty one] letters
yeah there’s five letters missing
and you have to know which words use most of the
letters (.). which use less
of those words letters etcetera
and which one of you two sent the link to that
wikipedia site
no
then they’re there (.). all the languages (.). all the
[fre]quencies
is it all there
yeah
so why we’re doing it then
it took me thirty seconds
okay so this is what Iris is saying (.). I don’t
think the point is that they’ve gotta go and research
those alphabets (.). what they’ve gotta do is see
the probability and chance of the letters appearing
no but you have to know Italian and you have to know
Polish if you want to do that task
(0.2)
because I wouldn’t do a task if I was not e:h fluent at
Italian [to design a board]
[but if we go on the web]site
but if you go on the website they give you the
frequency (.). what you’re gonna do then after that
oh it gives you frequency and every[thing]
[yeah ] it gives you
everything there
(0.2)
so its purposeless (.). that task
(0.2)
[and you]
[myp]estion is (.). can we leave the investigation
and just go ahead with the test as it is (.). cos the
test that we have has a reflection question anyway
[but if you] want to give them a mini-investigation
there’s some nice ones in the textbook (.). I’ve been
looking at that also
[last test]
mhm
we can take one from there
[wel I showed it to Iris] and she wasn't hap[py]
[that’s]
hundred times better than this one (.). honestly I don’t
know >[who thought of this]<
[okay shall we shall] we not finalise on the
investigation now and wait till Iris comes back
then
yeah I think we’ll wait
is that [okay=]
[she]ve it
yeah
Kate: not finalise on that now (.) [because I think that most of us no most of us have issues] with that so lets not go on until Iris comes back [who agrees it should] go on I mean there might be some]

Leah: [and in order to do] and also its not just that (.) we have to sort of give the kids a head start on those things (.) right (.) and probably we'll need time and I don’t know looking at the time we have remaining before the exam whether we’ll be able to sort of give more practice on those [before] we give it to the kids to do it

Kate: [mhm]

Brad: well (.) is it something that is going to be new for them to be doing (.) like are we ticking boxes that were not covered in the test

Bill: nothing

Kate: sorry can you repeat can you repeat that

Brad: so what was wrong with the AFL one that you were thinking about doing (.)the player statistics 'ahm I don’t know’

Leah: she wanted (.) Iris said it to me like this that it wasn’t a reflection question (0.4)

Leah: she wants a reflection question 'that wasn’t a reflection question’

Brad: can we not come up with a reflection question based on that data (.) I mean its just a matter of coming up a with question (.) this is this is so far left field (.) I think its fantastic for a rich task (.) but you can’t answer it without knowing about the languages I mean and even the the paragraphs chosen for Italian is (highly) anyway (.) right we’ve done with that but why not look at the AFL [one]=

Kate: [okay] lets [lets suggest that yeah]

Bill: [and see if we can] come up with the reflection

Paddy: what’s the AFL

Bill: 'is that [scores from creating] data >or something’<

Leah: [oh choosing ah:::m]

Leah: was it AFL or=

Kate: =choosing a team

Hugh: [have you guys seen]

Bill: [so you got scores] of footy teams or something

Kate: [looking at the data yeah]

Hugh: have you seen the level four five assignment

Bill: yeah the level four five is actually a good one

Hugh: they get to reflect on that

Bill: mhm

Hugh: they could use a (spud)

Bill: yeah its similar to that (.) that’s actually the scores of [shooters]

Kate: [another] thing that she said is also if we do this mini investigation (.) whichever one (.) and if its just reflection based as I said then we are we are teaching them to think how to come up with a solution rather than concentrating on getting a right or wrong answer (.) so what process are we using to make them to think okay how are we going to do this what do we have to find out to do this (.) those things (.) so if [we do look at] another AFL one (.) then we have to come up with a question those are
the questions that we can think of for ourselves [to] come up with a question (. ) does that make sense

Bill: [like I said yeah] [mhm]

Bill: yeah its more a reflection question than just using analysis of data etcetera (. ) [we ]don’t want to [analyse data]

Kate: [yeah]

Bill: like I said yeah

Bill: [mhm]

Kate: I have to go (. ) I’m going now

Kate: so just before you go ahm please everyone also give their qcats whatever you’ve marked to the respective teachers

Leah: all Jacaranda qcats is with me

Dan: yeah I’m still waiting for the Willowins

Bill: does anyone have Acacia [qcats]

Kate: [I’ve] got here I’ve got

Bill: Acacia qcats

Kate: [not] yet (. ) tomorrow

Kate: [no]

Dan: [tomorrow]

Kate: Bill I don’t know whether that’s yours or [who’s class but that’s] all Acacia that I have

Bill: [I don’t] know whether that’s your

Bill: [not] yet (. ) tomorrow

Kate: Bill I don’t know whether that’s yours or [who’s]

Kate: [I’ve] got here I’ve got

Kate: some of] your Maple classes (. ) I’ve got some of your

Kate: Maple classes

Kate: alright thanks

Bill: I got ten here

Dan: so do do all of the PODs hand back their qcats (. )

Kate: [I’ve] got all qcats back

Bill: [by]

Bill: mhm I think so

Wayne: ((laughter))

Brad: well I don’t know (. ) Kate and I are sharing

Brad: (.3)

Bill: so Kate there’s ten here (. ) I took ten

Kate: that’s all I have [I only have]=

Bill: [I took ten ]from you just make a note

Kate: =Acacia (. ) I only have Acacia red [with me]

Brad: [watch it] (. )

Bill: it takes hairs out of your chest [I tell ya]

Bill: [I’m not] gonna pull hairs out of my chest

Kate: ((laughter))

Brad: dead one

Kate: I’ve only got Acacia red there Bill

Brad: can I ask a question

Kate: [me]

Brad: [unless we’re all (. ) yeah

(0.2)
Brad: is the reflection (0.2) how do we solve the problem (.)
which is really problem solving (. or is reflection
something else (. or is reflection (I’m reading)
Kate: [I think reflection]
is (.) if you have used this method how can you justify
that method would get you to the solution
Brad: okay
Kate: rather than how have we got it
Brad: so that
Kate: how is the process >you’re correct< That’s how I’m
thinking
Brad: so its problem solving
Kate: yeah
Brad: its getting you to learn how to problem solve (. okay
(.) that doesn’t match with the criteria
Bill: this one here
Brad: well I don’t understand
Kate: how about the criteria (. that’s down there oh yeah
((reading)) ‘thinking and reasoning’
Brad: so that reflection’s got nothing to do with how did I
solve the problem
Kate: nah
Bill: ‘that’s a generalised thing there (. I looked at it
also (. its very generalized (. and a couple of
phrases put in there but anyway’
Bill: I wouldn’t like to do that task cos I find it (.)
harder myself (. I don’t know how the kids are going
to manage it
Dan: ‘hey Hugh (.) you got any year nines in your Maths
class’
Kate: this is (. ‘you’re right’
Brad: so I’m fully in favour of them learning how to do
problem solving but I don’t get this
Bill: and even all this e:::h analysis of problem (.) how you
go about problem solving (.) that’s not totally related
to this there this task actually (.) they got a whole
list of problem solving
Brad: strategies (.) [on that page
Bill: [strategies]
Bill: yeah
Brad: yeah I thought that was good
Bill: >that was good but it was not related totally to the
task itself<
Brad: no (. but you can pick and choose
Kate: we can yeah yeah
Brad: alright
Bill: but we can do that for any Maths problem you know what
I mean (.>)draw a diagram draw a picture put some
information down (. draw a table<
Brad: yeah I think that probably what’s good is they realize
there should be (.) and this to me is what reflection
should be (.) I got this far with it and I didn’t get
any further (.) [how did I solve] it (.) and I went
back and I chose an alternative strategy (.) that to me
is reflection
Bill: [why didn’t you]
Kate: [yeah]
Bill: [mhm]
Kate: and then if you did choose an alternative strategy how
are you justifying that that is getting you to the
(solution)
Brad: this is silly (. ((reading)) perceptive reflection on
thinking and reasoning (.) the contribution of Maths and learning to=
Bill: =yeah its very broad (.) ‘just broad stuff’
Brad: =we’ll just hang around a couple years and they’ll
change it
Kate: =yeah
Wayne: =((laughter))
Kate: =wait to two more years
Brad: =anyway (.) we’re done
Kate: =so is that okay I’m done yeah (.) that’s okay with
investigation (.) we’ll just wait for Iris to come
back
Brad: =yeah we’ll just say we shall not
Bill: =I told her but she said no we must do it without Italy
and Polish (.) I said what’s the purpose of the task if
you got Italian and Polish there (.) she said [no it
doesn’t really require Italian and Polish]
Kate: =[okay say]
say just do the scrabble that we have English scrabble
(.) so what reflection question can we have of that
(0.3)
Brad: =well you could do one that’s based on the strategy of
scrabble but that’s another point (.) how may kids have
you asked your kids how many played scrabble [or not]
played scrabble
Kate: =[yeah]
Bill: =a lot of them don’t know what scrabble is
Kate: =yeah (.) I’ve got them to play scrabble today
Brad: =but you at a at a point in a strategy what’s the
probability of you being able to get that letter to go
in that place
Bill: =you must know how many letters are there in the set
first [before] they know the probability
Brad: =[yeah]
Brad: =[and it’s not like poker where you]
Dan: =[and that just throws up where you] start the game this
way and where your words like evolve to (.) its endless
Bill: =there’s endless possibilities (.) yeah
Dan: =you just stick a word and you get one that goes a ten
letter word (.). I’ve got six seven how many tiles
you’ve got
(0.4)
Brad: =yaatze is a good game in terms of using probability
Hugh: =bobble’s good
Brad: =[what is]
Kate: =[which one] is it
Hugh: =bobble’s a good game (.) but not [for probability]
Brad: =[oh its too noisy]
Wayne: =((laughter))
Kate: =which one did you say Brad
Brad: =yaatze
Kate: =yaatze yeah yeah
Bill: =I don’t know what yaatze is honestly
Brad: =no its good (.) well I’ve tried it
Bill: =what is it
Brad: =its picking numbers [and ro]lling die
Bill: =[mhm]
Brad: =dice
Bill: =okay
Brad: =and you bet and you get its like you know (genowe)
Bill: =no
Brad: =where you have a set or row of five (.) set of three=
Mark: =sort of like poker but with dice
Bill: oh oh okay right
Kate: with dice yeah
Brad: you tick off (.) I’m not as familiar as I’m with
scrabble but once you get a set that’s a number of
points and you can’t claim that any more (.) so you get
this whole list that you can get and it’s a cumulative
score but you make a decision of I’ll claim this
one now or am I more likely to get [this one now or is
this ev]en possible (.) there’s a bit of probability in
it
Bill: [to get a better
score there]
Kate: if you’re saying that on the website they already have
all that they’ll just go to the website and say that we
need that many letters (.) [that’s] not (.) yeah
Bill: [n:o]
Brad: and there’s even a beautiful relative frequency graph
in there isn’t there
Dan: yeah (.) there’s all the stats you need on two web
pages to answer the graph
Kate: no we’re not looking at them to doing that
Brad: mhm
Dan: [if that’s the task they’ll just] cut and paste
Kate: [no we’re not researching]
Hugh: they’ll just google it
Kate: they’ll just google it it’ll come up and that’s what
they’ll do they won’t even
Hugh: they’ll just copy it and hand it in
Bill: don’t blame them too because you’re telling them to
decide in Italian (.goodness [me]
Hugh: [so] many of them haven’t
mastered English
Bill: yeah (.) what do you mean mastered they haven’t come
near English yet (.)’some of them’
Kate: you know all that stuff we’ve got from Sandgate High
they’ve have probabil-oh no ah what do we have do we
have the Maths 3000 kit at school (.) they [have] some-
Bill: [bits of] it
Maths 300
Kate: Maths 300 yeah
Bill: Maths 300
Kate: they have bits of probability in there but I haven’t I
haven’t used any but I know they have probability games
and stuff (.) and we can use that for reflection
Hugh: (0.3)
Bill: what’s the next point (.)we’ll just tell Iris
Kate: shelve this until next time
Bill: that’s it
Kate: that’s it (.) exams who’s got the exams who’s setting
the exams
Kate: exams (.) Leah’s setting the exams (.) she’s got she
Bill: has ahm Iris said that it’ll be only knowledge-based
Kate: exam so this is what I was thinking (.) with chance and
data knowledge would be just too simple
Bill: yeah
Kate: so we can include like with chance and data the
knowledge-base question would be too easy
Hugh: [so th]ere is no process question
Kate: no process
Bill: do something on (box enlists)er
Kate: what she said is we can use=
Bill: =back to back stem and leaf things
Kate: yeah (.) so we can she said we can use the process grade from qcat (0.2)

Bill: yeah but they’re terrible (.) [generally the results] and the qcat results are terrible all Es and Ds [but that’s only]

Kate: that’s right

Kate: but see the reason why she said that well basically she’s asking us do you guys want more marking (.) what I suggested was to have the exam on two sections (.) knowledge and process

Bill: instead of doing an assignment just put some questions on process and cut out the assignment (.) that’s it

Kate: or (.) either that or we do a process and communication assignment and knowledge exam

Bill: no rather do the process in the exam itself (.) the assignment will take longer

Dan: the process from term three

Hugh: why can’t we have the process from the Maths exam

Kate: because see why I don’t know why [what she decided for this term is only for this term]

Bill: [but you know there’s hardly anything to set in the] Maths exam then

Kate: mmm

Bill: what you’re gonna set in the Maths exam if you don’t have process because we’re teaching process at the moment (.) [how do you do the back to back stem and leaf how do you do the frequency] tables how do your= whisickr yeah all of that is process

Brad: =and what’s the point of doing box and whisker if you’re not going to interpret it

Kate: right yeah yeah

Dan: why don’t we give them some graphs [and ask them what do they see in the graph]

Bill: [yeah we can ask them that’s the process] stuff and communication

Dan: they can do a box and whisker but what does it mean

Bill: yeah yeah

Dan: so give them some graphs and say all the data in there

Bill: yeah

Kate: this also have some good questions (.) I just need to check with the library if they have the discs in there maybe they can include that in the exams (.) make the exams an hour and er cut off the exams totally

Kate: Maru ((child spills yogurt on the table))

Wayne: y:::o bugger (.) what was the probability of that happening

Kate: ((laughter))

Bill: it was quite great quite high

Child: ((cries)) ((Kate attends to child))

Bill: alright are the other agenda items that we have guys there isn’t any

Hugh: ‘I think that was it’

Bill: is that it

Dan: Brad do you know what ahm grade nines you got in your Maths class

Wayne: oh sorry what was that (.) what grade nines

Dan: mhm ((teachers look at student qcat and clarify classes students belong to))

Kate: so shall we shall we for the exams is that what we suggest knowledge and process

Dan: yeah knowledge and process in the exams
Kate: are you are you boys happy with that
Bill: for the exams
Kate: knowledge and process both (. ) or [she she was just
worried about how much of marking we want
Hugh: is that for both exams then
Bill: [no but then that’s the same case]
Kate: [no we’re only talking about the] level five six
Bill: we’re cutting the assignment down so we can put the
process question in the exam you see
(0.2)
Bill: instead of marking the assignment with all those
criteria I rather put the process question in the exam
and then gage it from there (. ) what do you’ll think
Bill: (. ) Brad
(0.2)
Bill: instead of marking the assignment rather put two or
three process questions in the exam [and] you gage it
from there
Dan: [yeah]
Bill: yeah plus you have the marks from term three
Bill: no because that’s I agree with having process on the
exam but I think the whole point of the assignment is
there needs to be a reflection question ( . ) whatever a
reflection question is
(0.4)
Bill: you can have a reflection and something else there but
you have to cut down your assignment then
Bill: [so is the]
Kate: [but then and we other thing is if we do that te]am
thing that we talked about then that can include
process and communication both
Bill: [and the other thing is you can mark it in detail]
Bill: yeah you can do that there if you want to
Kate: yeah
Bill: put your process question there with reflection
Kate: I just feel that with chance and data especially with
box and whisker and stem and leaf and frequency tables
they are process types of questions ( . ) [how are we
gonna assess them]?
Bill: [ya they
Kate: are lot of process] questions but they have to use a
little of that [for reflection on it why [would they
choose a particular (player )]
Kate: [or if we want knowledge bas]ed
question its just straightforward you read from the box
and (surplot) and tell us what the median of the
quartile of (. ) that’s like that’s straight forward (. )
that’s knowledge
(0.2)
Bill: I don’t think so (. ) that’s process because if you’re
asking for the quartile range then you’re asking them
to work it out in terms of the lower quartile the
upper quartile
Kate: yeah [yeah]
Bill: [that’s] a process >you know what I mean< (0.2)
Bill: ahm they can use graphs and do communication from that
there (. ) that’s reflection (0.2) so we can give them
some few graphs ask them to do some reflection on that
(0.4)
Brad: is [is there can we go left wing] or left field and=
Kate: [or another thing we can do is]
Brad: =perhaps look at what they’ve done in SOSE or something
and say okay how has statistics and probability (.) the approved knowledge and awareness of (.) or gathering of or dis- dispersal of information (.) how has that changed our lives or their lives (0.5)

Kate: mhm
Bill: mhm
Hugh: cos that’s definitely real [world]
Kate: [that’s ] yeah and that’s reflection
Hugh: and reflection
Bill: so what they’ll have to write a paragraph or something like that
Brad: so the ABS (.) Australian Bureau of Statistics how does that affect (0.2) farmers (.) you know what am I gonna plant this now because they don’t get enough of rain or what about alcoholism because people spend too much monies at pokies (0.2) or health problems with pokies (.) or gambling (0.3) ‘I don’t know’ (0.2) but it just seems to me that’s what stats=
Dan: =so how does statistics raise awareness of issue
Brad: ↑yeah
(0.2)
Brad: how has statistics helped us (.) maybe we give them a choice (.) what’s your knowledge of health or sport or ahm=
Bill: =you don’t want to give them a very broad choice too
Brad: yeah (.) and then they link (.) the statistics of that choice with its effect on society that they’re aware of (0.2)
Hugh: that’ll be a more wo- (.) that’ll be a worthwhile task (.) cos I think (.) I don’t teach the level five six but I looked at it (.) that assignment and I (gees ) I didn’t get it (.) that that one (.) I didn’t see the you know=
Brad: =and we’ll try and avoid them having to do more research by using something they already know
Kate: yeah
Hugh: [yeah]
Teachers: [yeah]
Brad: cos its (.) as you say and you’re right (.) it’s a Maths thing not mm (.) literacy
Bill: cos if you give them that then its more literacy >you know what I mean<
Brad: mhm
Kate: or another thing another thing with any other sports table we can go backwards and say this is a world cricket team ahm (.) justify why you’ve got that (.) why you have those players (.) then they’ve gotta look at the data of (.) the number of runs
Hugh: see that’s similar to the level four five one (.) they’ve got three people and they have to choose who’s going to the Olympics and they do twenty trap shooters and they do it over twenty weeks and they record it how much or you get fifty out of seventy in week one and then sixty and fifty five am I right
Bill: yeah from the graphs (.) they actually ask them from the graphs
Hugh: and then they have to draw= Bill: =the line graphs
Hugh: draw three line graphs work out the >mean median and
mode< (. ) work out the ahm they have to do a frequency
distribution table
Bill: yeah
Hugh: all of the data then (. ) then using the data they have
worked out they have to reflect on why they chose it
so=
Dan: =they gotta justify why their selection
Hugh: why [he’s going to the Olympics ra]ther than him just
from the data (. ) and I thought here’s an excellent one
[they’ve done the work and then th]ey have to decide in
the end why cos even though that median might be high
overall they can justify it anyway they like
Bill: [yeah they have to justify why]
Bill: [that’s an excellent one that’s just]
Bill: [scores yeah]
Hugh: that was a great task
Kate: initially I thought this was good in terms of like
making a game (. ) if you are making a game [why are you
choosing the letters]
Bill: [ya but the
game is relevant to Ita\ljian
Kate: yeah
Bill: I don’t even know Italian [to start of with]
Kate: [I overlooked th]at at (. ) I
just thought about scrabble
Bill: and the worse thing (. ) I said to Iris I have to
Polish my Italian up (. )then she says you must do it in
Polish after that
Kate: ((laughter)) Polish my Italian up ((laughter))
Bill: anyway we sorted that out er=
Kate: =so shall we (. ) for the exams shall we do knowledge
and process or (. ) or do you wanna do process and
communication in investigation and knowledge-based exam
only
Dan: rather stick it in the exam
Bill: rather stick it in the exam
Kate: exam
Bill: yeah (. ) and don’t do the assignment (. ) [do a
reflection]
Kate: [we can we
can] even do=
Bill: =do one reflection question in the exam if you want to
Kate: we can do a reflection question in exams conditions [as
well]
Bill: [for
the] graphs yeah
Kate: why can’t we do that [like we give them and]=
Bill: [give them in the exams] the whole
thing (. ) [process]
Kate: =[and we] give them the data (. ) they’ve got
to use the data to reflect on (. ) we’ll make up the
question we can even do that (. ) we have two different
sessions maybe
(0.2)
Kate: that’s [two exams a year]
Bill: [like the knowled]ge yeah that’s two exams and
the time for that is gonna be a problem for the other
exams [coming] up
Kate: [yeah]
Bill: we’ll have it in the one exam (. ) you should have the
reflection and process and communication in the one
exam (. ) have e:::r they can reflect from A to E on
that question (. ) so you can have a question get them
to reflect on it and we can mark it A to E (.) and
that’s their reflection mark
what do you mean what kind of question
Dan: [whatever]
Bill: [well we’ll] have to look at the question >[you know]
what I mean<
Kate: [ah okay ]
yeah yeah yeah
maybe a graph and from there interpret information and
why do you suggest this should be [the scenario]
that we can have data some sort of data graph or table
form or something (.) and then we say that make a
statement about the data and they’ve gotta justify as
to whether they agree with the statement or disagree
and why
give them the data and ask them to come up with three
pieces of information
[that they can dr]aw from the data
Kate: [yeah yeah yeah]
Kate: that’s reflection isn’t it
Bill: yeah it is
and they’ve gotta use mathematical think
so you’ll communicate that to Iris
yeah no I’ll give all of that back to her (.) this back
here (.) and then she can (.) I did mention that we I
had mentioned about the knowledge and process and the
exam then she said oh you guys would have a lotta
marking then apparently you don’t want a lot of marking
no but it’s the same thing with the assignment (.)
we’re going to get a lot of marking if we give them the
assignment (.) [what difference does it make]
Kate: [maybe its better to do all in] one
rather than have two different lots
ya you don’t have to set too many questions (.) just
set two or three questions on the process one question
on the reflection
well just thinking about time (.) its nearly week four
[week fours] ending
Kate: [yeah I know]
Bill: [week six we’re writing exams]
Kate: [Leah’s done the exam already] [she’s] done the exam
already but like [if Iris sees her tomorrow] row then
if she can just tell us to go ahead then at least we
can include the [communicat]ion in
Bill: [we::r-]
Bill: [but she’ll have to change it]
Bill: [the process]
yeah the process and communication in that
because they’re writing in week six heh
yeah
and you wanna do it at the beginning rather than end
because we will be reporting from week seven
(0.2)
a:h that’s it
((teachers chat about Maths DL))
item three data analysis updates (.) I’m just about to
send it to you the link to you all but it the=
which data analysis
number three
Kate: a::h a::h
probably looking at it from the briefing we had
Kate: yeah
1352. Bill: so what’s it about there now
1353. Brad: you can use this apparently a program you can download
1354. to manipulate data and I’m assuming that you get (.)
1355. NAPLAN data and you can look at it from different
1356. perspectives (. ) so you download it and install it
1357. Bill: and then
1358. Brad: then you feel more professional that you done it
1359. Teachers: ((laughter))
1360. Kate: that’s it (. ) meeting concluded

END OF TRANSCRIPT
Transcript 3: Mathematics KLA Team Meeting 3
Date: 17-11-2009
Venue: Resource Centre
Start Time: 2.50pm  Finish Time: 3.36pm
Duration: 45 minutes and 58 seconds

1. Iris: welcome to our lovely Maths meeting [on a Tuesday afternoon]
2. Bill: [oh thank you ma:m]
3. Hugh: ‘thanks Iris’
4. Kate: thank you
5. Bill: that’s a lovely introduction (.) it’s the first time
6. [in your] life that you’ve done [that]
7. Iris: [I’m just]
8. Iris: [I’m] just wondering would anyone like to volunteer
9. for a a:h to take the a:h to take the minutes
10. Kate: ha:::
11. Dan: ‘Bill could try he’s just here’
12. Bill: [((laughter))] 13. Iris: ’[give it a try] could you sit here (.) [so that way I can get information] and put it all up here’
18. Iris: alright there’s a few things on our agenda item ahm
19. one of them was planning for 2010 (.) the other one is
20. ahm lists fo:r numeracy classes for senior
21. Jess: oh yeah
22. Kate: mhm
23. Iris: oh the ladders that you gave me were excellent (.)
24. there’s a few gaps (.) Cindy and I down in Acacia
25. POD have been putting that on a spreadsheet so that we
can sort it (.) so we can sort it by however we want
26. so maybe by eh their grades and that sort of stuff and
27. I wanna actually see if we can highlight some of the
28. kids that need to go to a numeracy class (.) so we’re
talking children like whoever teaches whoever teaches
29. in ahm Acacia you got students like Shefi Soolky
30. Hasselhof(.) now she would be a good candidate to go
to a numeracy class [(.) so she] works and tries hard
31. but she doesn’t really have the mathematical
32. background (.) so not kids who are lazy (.) I think
33. the lazy kids who could handle it we need to actually
34. have a look at those (.) there’s a list I’ve brought
down (.) there’s full of writing on the back of (.)
35. [ahm]=
36. Teacher: [((coughing))]
37. Kate: [((laughter))] 38. Bill: get your own paper next time Brad please
39. Kate: [((laughter))] 40. Iris: =ahm [whose got one] (0.2) ’I thought I brought it
down’
41. Kate: [((laughter))] 42. Bill: Brad got [into trouble there almost]
43. Iris: [it looked exactly like that]
44. Kate: [((laughter))] oh
45. Iris: there it is
46. Jess: ‘driving me nuts’
47. Kate: I know ay
48. (0.5) ((phone ringing in background))
okay so that’s another item on the agenda is having a look at that.

there was also a Maths PD that I wanna chat about with people and planning ahm for the level five six class (. ahm in terms of mathematical investigations (.)

over at Polar Fresh (0.3) and I think (.) and then there were these certificates of which (0.2) I mean the ones the kids participated in ICAS Maths competition and I’ve got to actually get those back to kids so I think we’ll need to sort through those and take whoever is in your class

[(do we start doing that now]

[( ] this one would (like) an hour on assembly where you’ll just
do you want to pass that to (.) to me [Iris (.) we’ll start sorting out]

actually do that] (.) it’s a good thing isn’t that so you can motivate the kids

alright starting with this ((points to details of planning for 2010 on white board)) we had a few discussion about moving some of these around because in this term we’ve got this (0.2) and for year nines

Iris should that be term one two three four

gees Maths

ahm in this terms we’ve got (0.2) time problems over doesn’t it

(0.3)

there Kate

like two weeks two weeks (0.2) so ahm for planning this year ahm based on what happened last year in the last two weeks there’s a shuffle up between the third and the ninth of December so if you wanna have those dates down if you haven’t got that info yet (0.2) the planning time last year we were able to have all Maths people off at one time and whole of English team off at once (0.2) that then caused a big problem back in the POD cos when we planned our Maths lessons for that they were really well planned but then Maths teachers didn’t end up gettin taking them so then that caused a whole heap of problems (. so this year we’ll probably get you off as planning teams (. so I wanted to actually have a look at and it really doesn’t Matter where you’re teaching next year at the moment (.) its having a look at where you were teaching this year so a few in say Maple Cypress precinct you guys planned term one this year (. ) Acacia planned term two (. ) Willow and Maple term three and Jacaranda term four so (0.2) that’s what I put up above here and then we can for this year (.) it will mean if Maple and Cypress are planning so it’ll probably be Kate Brad Jess and Nat (0.2) if we can get you guys off or we might only be able to get Kate and Brad off to have a look at the term one for next year have a tweak of it and have a look at what’s wrong what’s not wrong with it (.) so when you have your time off at the end of this this year you’ll actually have one (0.2) unit to look at by precinct or by POD so then I’ll have to work out to bring it up on the computer and have a look at ahm (0.2) so we’ll
mainly be looking at the investigation the curriculum organizer and the exam (. ) and some of the homework that was in there ( . ) have a look at that ahm (0.2) in light of that ( . ) national curriculum is actually going to dictate what agenda what we teach ( . ) so its very closely aligned with the essential learnings so I just went to a national curriculum conference last Friday (0.2) so really what we need to start concentrating on is how we do it because the delivery of what is going to be dictated it almost is now anyway ( . ) and its more focusing on the how ( . ) part the way down the agenda is looking for some ahm I’ve got three days booked of PD for middle school Maths teachers so what we’re looking at is splitting it into three days ahm (0.2) if you mostly teach level four five you’ll be on one day and it’s a whole day run from nine to five and another day for the five six teachers will run from nine to five ( . ) the name of it is teaching teachers how to teach children to think ( . ) so along the lines of getting them to think ( . ) so looking at a deconstructive approach which is ( . ) having a look at you know you put the problem up there and you deconstruct it ( . ) more looking at turning it on its head and having a look at a constructivist approach so (0.2) ahm giving them a problem and then what’s the Maths skill data from it ( . ) now (0.2) of course you’re going to have to teach a combination of those two philosophies (0.2) but I notice (0.4) it’s not my agenda ( . ) I don’t really ( . ) I’m not a Maths teacher but its seems to be we need to get children to think differently ( . ) whatever KLA it is they need to do some more thinking they need to do some critical reflection critical inquiry in sose some critical analysis in English ahm and we need to actually look at that communication justification and reflection section in Maths where they actually think ( . ) what Maths do they need to solve this problem and not you holding their hands so much ( . ) at times ( . ) so if we can get some kids to that level that would be nice ( . ) alright so starting off with this ( . ) so last term it was ((writing on white board)) BE ( . ) Acacia >Willow Maple< and that was Jacaranda ( . ) do we need to swap these around there was some discussion about this ( . ) was that going to move to ; there

Bill: yeah that was in patterns in al[gebra was supposed to move to term three]

Iris: [patterns algebra to go to term three and then] measurement and number back there

Bill: yeah

Iris: yeah I thought about this what is happening

Jess: 'excuse me'

(0.8)

Iris: so does that mean I need to swap (0.2) Owen ( . ) cos you had a bit of ( . ) and Bill cos you had a look at >patterns in algebra this year ( . ) do we want to swap that ( . ) or are you happy to look at space measurement and number (0.2)

Bill: "you can give me anything it doesn’t Matter”

Iris: Owen

(0.2)
Owen: I'm easy (0.2) I'm easy
Iris: okay (.) so we got Willow and Maple looking at
patterns in algebra is that okay (.) alright ahm (0.4)
so in terms of names against whatever we got to look
at (0.2) we've gotta look a::t (0.6) investigation
test folio so whoever's happy from each of these to
have a look at so from Maple and Cypress for
the first term whose happy to look at the
investigation
Owen: Iris (.) is it going to still be three say six
[assess]ment items per semester
Iris: [n:o]
Iris: its gonna stop here ((pointing to notes on white
board))
Jess: e:h
Owen: so its only three assessment items per semester is
that [right]
Iris: [yep]
Iris: yep
Jess: three assessment items in Maths (.) is that=
Owen: =per semester
Bill: [per semester]
?: [oh like what ]we’re doing in science
Bill: yeah
Jess: one assignment
Nat: 'two each one of them is an assignment'
Jess: yeah (.) sure
Iris: yeah so you will have two of these (0.2) so there will
be one of them there (.) and [another there]
Jess: [I'll do the test] 'I
don't mind (.) whatever'
Iris: so Jess
Jess: yep
Iris: yep
Kate: I’ll do the investigation
Bill: Owen do you wanna look at patterns in algebra again
Kate: mhm
Bill: because we used to that eh
Owen: did we do patterns in algebra
Bill: ya
Nat: the five six one (.) I’ll do the four five
Jess: [when]
Hugh: [you] won’t be here
Kate: you won’t be here
Nat: we gotta do it before=
Iris: =we’re reviewing it this year so=
Jess: [are you talking] about
Iris: [I'd rather have] (.) oh ((laughing)) [my pocket’s got
a hole in it]
Jess: sweet
Owen: throwing money out are you Iris
Kate: ((laughter))
Bill: [you wanna make it number space and measurement
not=
Josh: Iris Nat you can’t take that on what you’re
Meslissa: =what
Josh: there’s no reason for you to take that one
Nat: why (.) I’m still here for four weeks
Bill: you’ll do that right okay
Josh: next year
Jess: she’ll still be at [planning]
Iris: [you know] what I’m saying (.) at
the end of this year Josh people are going to have to
review what we did [I'd rather have] the people who
did it

'I'd rather have

she doesn’t have to do it

she just have to look at it and say what’s the

problem’s with it and pass it on

sure we can do that

that’s all

oh you’re talking about ( )

and if Nat gets called away I’ll just do it

and if you fix it up

yeah cos I’ll be spending some time in junior school

and would depend who I can get off together ( ) that’s

what I’m trying to get to plan is who people I would

like off together so that I can give it to the whole

team and we could try and work out who to take off

when ( ) as I said we’re not going to be off

altogether as a big group so ( .) when we get something

done

so

ahm okay in light of this here ( .) if you teach a four

class you know how you have nine one nine two nine

three nine four ( .) the nine four classes ( .) Kate

and I went up to Polar Fresh ahm and had a look at

what mathematical investigations could be done over

there so if you teach a nine four class ( .) the whole

lot of investigation for the whole year will be done

over around a Polar Fresh excursion

what is Polar Fresh

polar fresh is a warehouse distrib[ution] and mostly

[look at]

[ware yeah]

deliver] to Coles

chiller room chiller room

yeah

Bill;

refrigeration

pretty much warehouse distribution

ahm ay what do they run Maths excursions ((laughter))

I’ll tell you what [we’re] gonna do >just let me

speak<

[oh no] ((laughter))

okay ((laughter))

a whole year based on one excursion

yep cos it’ll be mathematical investigations=

=so the kids that don’t go to that excursion or come

later

that’s what that’s what I’ll talk about ahm=

=I’m sorry to interrupt again

yep

what’s nine one nine two phase

[nine one]

[that’s ph]ase one phase two three phase three four

that’s just what [in the computer one nine one]

[that’s this year that’s this

year] its nine=

=one nine one two nine two was semester two=

=[nine one is basically the year] seven class [nine

four is the year nine class]

=so next year it’ll be zero one]

[I don’t know what nine means]

nine is [nine is o:]}

[make it one] two three four it’s a helluva

lot easier
Josh: [nine is] 310.
Jess: [so it is saying you got a group four class]
Josh: [=2009 next year it’ll be zero one zero two]
Kate: a::h
Brad: sorry I disagree
Iris: so it’ll probable be zero one zero two zero three whatever
Nat: >one two three four<
Bill: Iris [what about the nine three class]
Josh: [we don’t stream we just have one] two three four
Jess: ((laughter))
Bill: because they do the same assignment as the nine four normally
Iris: yeah they will they will do the assignment from this term because they won’t have done it yet this year
Kate: from this year
Bill: no net year the year nine fours are gonna do the a:h [a:h] polar fresh
Kate: [nine] fours are gonna do the polar fresh
Bill: the nine threes
Kate: the nine threes are gonna do this years assignment >they won’t have done it< [cos they come from nine two] mostly
Kate: [because they wont have done it]
(0.2)
Bill: yeah but then there’s some year nines [i:n]=
Leah: [=there] are still some year nines who are in the eight year eight
Iris: okay we’re going to have to have a look at that s:o finish polar fresh is a warehouse distribution centre for planning when I now (.) so what they work on efficiency (.) everything is based around ahm Maths so its pretty much they get [goods in]
Bill: [the whole] world is based around Maths
Iris: yep they get goods in but its real life for the kids (.) they get goods in they have to distribute to Queensland and northern new south wales ahm so its about (0.2) how many hours they have to get this amount of stuff to there and its worked backwards (.) over there everything is based on computer (.) if I can get it the four teachers classes over there early next year or late this year cos Kate and I went over there just to have a look it will be looking like setting up a Maths trail over a day (.) so what we’ll do is take all the nine four classes over there together (.) there’s space to have the whole day there (.) there’s classrooms over there [ahm]=
Jess: [they] have classrooms
Kate: yep really nice ones (.) aircon
Iris: =where’ll they’ll do they’ll do ahm they’ll do (.)
Kate: their trail their Maths trail=
Kate: yeah
Iris: =so it’ll be about looking at boxes (.) measurement [vol]ume
Kate: [a lot] to do with space and measurement
Iris: a lot to do with space and measurement so its good to [move] its good to move further that way anyway right at the beginning=
Kate: [a lot]
Kate: yeah
Iris: =but there’s also algebra involved in terms of mounted
hours
Kate: yeah
Iris: so Kate is probably best to work with on that
investigation anyway
Kate: someone with me
Jess: go Kate ((woo sound))
Kate: Jess:
Iris: and then wanting to think about who are going to be
the nine four teachers so I can argue with Renee
as to who has to be on the nine four classes so if you
are more interested than somebody else in actually
having a look at the practical and I’m doing it with
the nine four class so that we can repeat it annually
rather than having to wait for a two year slotty slot
thing (.) so the nine three class will continue to do
the five six programme that we’ve developed already (.)
so there what it’ll be is tweaking the investigation
[and having a look at]
Josh: [so that does mean that] you’re gonna have kids that
never do it
Iris: ahm possibly yes
Sean: that might mean having a sort of second version of it
Brad: that’s easy (the nine three class do something like
this)
Iris: yep that’s right
Josh: sorry
Jess: I’ll do it
Brad: give them the five six programme they don’t do ( )
Iris: if new kids come [which is to an]swer Nat’s
question we’re allowed as a promotional dvd we’re
allowed to take photos so if they don’t come over
some of the investigations can still be done ahm
Josh: [twenty percent]
Brad: how are we going to do (it) WHAT’S IN THE FOG ((making
fun))
Iris: some of the investigations they all can be done by the
kids who still don’t go on the excursion
Brad: is it
Josh: (actually) we can’t we’ll have the second group
through at the beginning of term two [term three]
Iris: [no there’s] no
there’ll probably be one there [and one there]
Josh: [there’ll be spe]cific
Iris: kids who haven’t been there
[is there a cost
Jess: involved]
Bill: there has to be some cost [cost]
Jess: [small] cost
Bill: [there has to] be a bus
Iris: [ah it depends]
Kate: [yeah there] will be
Jess: at the place
Kate: [no no not] at the place
Josh: [Iris]
Josh: Iris you could possibly wield your phase three 03
through there [with your] strays from 04
Iris: [possibly]
Iris: [possibly]
Nat: [and then] they’re missing content
Iris: I don’t want I really don’t want phase three [the
phase]
Josh: [but
they’re] not going to get it any other way
436. Iris: yeah
437. Josh: but that would mean they could take up some part of it
438. >that’s all<
439. Iris: but it’s it’s more for the fact that we’re looking at
440. elevating the kids who are good and giving them
441. something a bit [extra]
442. Josh: [well] that doesn’t mean 04
443. Bill: no but the nine four is not [the best class]
444. Josh: [that’s the trouble nine
445. four is not necessarily good kids
446. Bill: we’ve got a behaviour issue [that we have to sort out]
447. Nat: [next year it’s going to
448. be]
449. Bill: no it won’t be
450. Jess: well it would be in Maple [I’ve seen the roll its
fantastic]
451. Bill: [the nine four is not the
best class] the nine four some kids are struggling
with behaviour and we put them there so that will
[decrease the problem]
452. Nat: [we’re always going to] have some kids that are the
problem
453. Bill: yeah so
454. Nat: generally speaking that class should have the [higher
functioning year nines]
455. Josh: [there
should be the higher end]
456. Kate: at the same time it gives them the opportunity to
457. actually get exposed to those
458. things before they get to senior school where they=
459. =where they won’t be exposed to any of it ((laughter))
460. Iris: [we have to make a cut off] anyway as to who we take
461. (.). I will have to make the final executive decision
462. cos we can’t take everybody [and we can’t] repeat
463. it every year without a programme we gotta take the end
464. of the programme
465. Jess: [who are we kiddin here]
466. Bill: [yeah we can’t]
467. Sean: Iris we have the pressure of the Ds and Es will
468. they basically be out [we’ll get the dvd loaded to
469. clickview so they can do it here]
470. Bill: [>the behaviour of Ds and Es
471. they won’t get a chance to go<]
472. Jess: yeah if its curriculum [D or E is irrelevant]
473. Iris: [if it has curriculum] it’ll be
474. part of it
475. Sean: yeah put it up on the on to click view so they can
476. access and look at it
477. Owen: (the test is curriculum who can’t look at it)
478. Brad: I’m prepared to look at something [I don’t think I
479. think its worthwhile that I look at something that I]
480. prepared you know what I mean like fresh eyes
481. Jess: [no its only for
482. extra curricular that Ds and Es aren’t allowed to go]
483. Iris: [yep yep] [that’s what I asked you for (.).] do you
484. wanna swap over
485. Owen: [they don’t take D and E students]
486. Jess: I’m not saying I want to but that’s Jodie’s
487. Brad: [but you’ve done that haven’t you
488. Iris: yeah
489. Brad: okay
490. Iris: I think so (.). well you looked
Nat: so am I going to be looking at ( )=
Iris: =you looked at patterns in algebra last time you’re
now looking at (0.2) number and space (.) that was the
unit you did last time
Nat: yes
Iris: do you want me to swap those
Nat: [no]
Brad: [I don’t know (paper one though)]
Josh: [do you want me to take on the first term stuff next
eyear]
Iris: first one
Josh: get it out of the way though
Iris: that’ll be for three so someone else’ll be looking at
it so you’ll be planning down here with Kate on nine
four (. ) [we’ve gotta actually look] at the courses as
being four separate courses also (. ) they’re now
because were in the second phase of it we’re gonna
have kids who roll over so we’re gonna actually need
to have four separate courses running so it’ll be one
two three three four]
Kate: [yes yes Brad you will be]
Jess: [as opposed to]
Iris: as opposed to two
(0.2)
Iris: and we also talked about last meeting in terms of your
tests [we’re having asterix] tests so that was done in
moderation [so asterix quest]ions [so that] you’re not
writing four pieces of assessment
Jess: [of having asterix tests]
Jess: [could that be]
Bill: [cos certain questions yeah]
Josh: [its up to you mate]
Jess: well could we do that with the investigation as well
cos we thought of starting with that
Iris: yep yep
Nat: one suggestion would be (reversing) one investigation
per semester (. ) the term one one becomes the year
seven one and the nine one becomes the seven eight (. )
so I can look at both of them tweak them to make them
good [and] then that’s those two classes [one and] two
done
Jess: [yeah]
Jess: [yeah but]
Nat: they’re all ready cos the guts of them are there
Jess: but the term one content is different to term two
content
Nat: yeah but they could start that in term one or they
could start it in term two
Jess: :m::m
Nat: come to think of it [it eases our marking]
Iris: [I’m going to print off]
Jess: >yeah yeah yeah I get what you’re saying<
Bill: so it could be only one assessment getting through
Nat: >no no no< some are grade seven only class would be
starting their investigation (mate) first [with] the
current content (. ) then in term two [the group] two
starts their assessment cos we don’t really want to
drag it through a semes[ter with people coming and
going and stuff (. ) that way [one and one]
Bill: [right] [there’s eights]
Josh: [it’s a good idea good idea getting one
bunch assessment each term]
Bill: [yeah that’ll actually be better actually so you
finish it off you marking is also finished too

Nat: yeah (.) just evens the marking off a bit

Jess: no that’s not what Nat’s saying

Bill: no Nat’s says its years one in the term one year

sevens finish it off and then in term two the year
eights [the next class starts with] their
investigation

Jess: [do their investigation]

Owen: the way Iris’s saw it nine one does the term one
nine two does the term two

Nat: [because in the pods] the next [year it should be] Owen
for example nine one and nine two (.) so they’ll have
two different lots of content so to make it easier to
deliver and collect and mark if he’s doing one one
term and one the next term

Owen: [different months]

Jess: [different content]

Iris: but it’s a whole semester assignment

Nat: but its two different units (.) so [that’ll mean] you
gotta make both units about number and space

Jess: [yeah yeah]

Josh: 'it doesn’t have to be a whole semester'

Nat: that’s what I’m saying so if one does it at the
beginning [and one does it at the end you’re spreading
it your Marking] and you know how much we love that

Josh: [yeah yeah so phase one’s do it do it in
term one I suppose]

Iris: totally yeah I think we should swap each individual
class

Bill: but the thing in the first term you’re gonna have a
shorter period [for them 'to do it anyway]'

Iris: [anyone have to go out]

Nat: it’s gonna be an easier assignment but then we’ve got
short time in term two cos of reporting and so you
don’t want all of your assignments in term two to
mark cos of reporting

Iris: so is that what I’ve heard

Nat: I know its just an idea

Jess: that’s what you’ve heard but except it’ll be there and
there

Josh: yeah [you can stop it]

Kate: [it’ll be broken] [it won’t be continued]

Josh: [put an arrow at the end] of term one [put an
arrow there] (.) stop

Jess: [that would be it]

Owen: so they wont have an investigation nine won’t have an
investigation [in term]two and term four

Josh: >[ term two]<

Josh: yes

Kate: [so they all do]

Nat: [no but they can] have mini things

Josh: yes you can do other things

Kate: they’ll all do only two investigations [a year]

Josh: [could we could we co]ordinate that with the could
we talk to the language people [the English people] if
and see something like that could be done where they
swap that and do it the other way around

Iris: [which is what we said]

Kate: [yeah]

Kate: [at different times]

Iris: I teach English=

Josh: =well=

Kate: [yeah]
Iris: we don’t we don’t even do anything like that
Nat: they don’t do all these sane ( )
Iris: whoo ((laughter)) we do [we do something that goes] through there and then through there
Josh: [they have major assignments]
Nat: well that was just a suggestion [for ease of Marking]
Jess: Cypress)((looking at students Maths competition certificates))
Josh: hey have major assignments
Nat: well that was just a suggestion [for ease of Marking]
Jess: Jamie McCoy [is that]
Kate: ((looking at students Maths competition certificates))
Nat: well that was just a suggestion [for ease of Marking]
Iris: ↑ who:o ((laughter)) we do [we do something that goes] through there and then through there
Jess: Brad’s on test there
Nat: no he’s on five six
Iris: five six is down there
(0.2)
Jess: well I can do both tests (. ) it isn’t really bad
Iris: well then someone from Acacia (. ) Owen
Owen: ah what we’re doing
Iris: ahm test over here i:s (. ) someone from Willow Maple
Jess: why are we up twice (. ) cos we’re super
(0.2)
Iris: someone from Jacaranda
Josh: oh no not the five six (difficult with five)
Iris: you (can) take the five
Josh: oh it is ( )
Iris: okay down here (. ) the (. ) ah:m like looking at the four five stuff (. ) five six stuff (. ) tests (. ) who wants to do
Jess: that one’s easy
Iris: someone from Maple Cypress
Brad: you want one there or term one or term two
Iris: I think you set that one (. ) Kate
Brad: so not [four]
Kate: [yeah] I’m fine yeah ((laughter))
Nat: so Kate’s doing the test and the investigation
Leah: ah not yet
Nat: yeah she is its up there
Jess: well I can do I don’t care (. ) let’s just do it
Iris: I’m just putting up these its not definitive yet
Kate: ((laughter)) Brad
Nat: Brad’s taking the minutes down
Josh: well I didn’t bring my camera down (. ) if somebody takes a photo of that at the end you won’t have to write it down
Iris: okay
Josh: I didn’t bring my camera down
Iris: right in light of the nine three investigation (0.2)
Bill (. ) I don’t exactly know whose on the nine four classes at the moment but Kate came across to polar
fresh so she exactly knows [what’s] over there (.)
she’s not going [to design]

Bill: [mhm] [I can wo]rk with her

Iris: she is not going to design nine four by herself=

Bill: =I can work with her=

Iris: =but across here is going to have to be a few people
(.

three investigations are already [in] [so] someone

will have to review them (. so I need someone [from]=

Leah: [all the nine put all the nine’s

there]

[three will be similar]

Kate: [in]

Bill: [yeah]

Bill: =[I can] do that nine three

Iris: so Bill

Bill: mhm

Jess: ‘I don’t care’

Iris: what I’m saying is a whole team of people on four

remember [who] can teach nine four will have to write

the nine four one [with you]

Bill: [yeah]

Jess: [well I will] be on that team

Leah: that’s what I’m saying all the nines

Bill: yeah we’ll be one the team hopefully we’re teaching it

Iris: ahm

Jess: I’m pod coordinator (. I’ll do anything

Kate: ((laughter))

Iris: over here somebody from Willow Maple or Jacaranda

you haven’t looked at anything yet (. is there

anyone there isn’t is there

Nat: Dan

Bill: no Dan is there [Dan is there]

Iris: [can someone] look at

this nine three (. the nine four it’ll be Kate

leading other people (. the nine four programme will be

investigations

Nat: Sean

Iris: Sean (. Josh (. Josh’s already done (. Sean would

you mind having a look at that investigation

(0.2)

Sean: level five six one

Iris: its just looking at it and having ( ) so I can spread

it out planning wise before the end of the year

(0.5)

Iris: hey at the top here (. investigations (0.3) everyone

in Bankisa and in Cypress have been used is that

correct

Jess: yes

(0.2)

Josh: well does it fit (. the person whose doing the test

will do the investigation

Iris: Nat

Jess: that’s too big to do

Josh: the person whose doing the test will do the

investigation

Iris: Nat that’s the same one right

Nat: yeah that’s the no they’re two one for grade seven=

Iris: =yeah=

Nat: =one for seven eight

Iris: yeah but it’s the same

Nat: for the whole semester
Iris: who else is there anybody not used have I’ve not used anybody else from here

(0.3)

Jess: you don’t have enough teachers

Iris: no I don’t

Jess: just put my name down again (. ) I don’t care

Sean: looking at this one we could tweak it there

Jess: oh that’s right

Josh: Jess

Jess: hey

Josh: you and I can do that that last investigation we’ll do together (. ) is that alright

Jess: whatever

Josh: you put your name down [and write me] down as well

Jess: [write me down]

Iris: okay so (. ) for 2010 when we start 2010 can we stop doing that for a second ((teachers sorting out student certificates))

Jess: yep

Iris: for 2010 when 2010 comes up (0.2) for each term I’d like to some things a little bit more ahm (0.3) to have some choice but a little bit more of variety (. ) ok so we’re only doing one investigation per semester (. ) that hasn’t been the case this year (. ) we (. ) something happened and it morphed (. ) we only want one (. ) we are going to have to have a look at the tests (. ) do we only do knowledge here and test (. ) process and communication over there or do we do the whole thing (. ) [we have to have a look at those

Kate: >the whole thing<]

Bill: [no the whole thing]

Kate: no whole thing

Bill: [whole thing]

Nat: ['whatever']

Iris: ahm folio pieces (. ) need to be starting thinking about problem solving and showing kids a different way to think (. ) not just the whole deconstruct this is how you do it hold their hand (. ) make them think ahm (. ) in English what I’ve been going through when I do my focus questions is I write one word on the board so I might write Mr Bill (. ) I might write Miss Jess I might write Miss Kate okay guys you’ve got to write a question where that is the answer (. ) write the questions (. ) and they go this is hard [its hard to think of it]

Bill: the best teacher in [who’s the school (. ) Mr Bill]

Kate: ((laughter))

Iris: [its its]

Josh: [((laughter))]

Iris: its hard to think of the question= ah ah that’s hilarious

Iris: = and I said okay what (0.2) teacher who teaches Maths and science in Acacia POD for level for phase threes (0.2) mr Bill (. ) so okay its not so hard you just have to think specifically what you have to say so that you get that answer (. ) and some of them will write the question and then they’ll give an answer which is supposed to have an s on the end (. ) I say well that doesn’t suit because there’s no s on the end of that (. ) now you gotta reword your question so I don’t know how that would work for Maths (but
its] that back to front thinking

Bill: Maths jeopardy

Iris: yeah

Kate: ahm I just like to suggest that for the folio we have
set things [so that all of us are doing the same thing
so maybe problem solving] know homework like

Josh: [yeah yeah if that’s the task if that’s the
folio task then everybody does it]

Iris: and mention what it is (. ) [it is is it]

Kate: [so that all of] them do it

Bill: skills test [problem solving homework]

Kate: [yeah like skills test problem] solving

homework and [a:

Bill: [and a class

reflection

Kate: [yeah yeah]

Sean: [isn’t that] why we’re going up those other things
that Adele was (. ) had started off

Iris: yeah [that’s]

Kate: [four] four three to four that’s good enough

Iris: problem solving (. ) homework

Bill: skills test they do skills test

Kate: yeah like like a quick ten or something like that

Bill: yeah

Kate: yeah

Owen: was the folio supposed to reflect the work that they
do in class

(0.2)

Iris: [well]

Bill: [yeah] that’s class work all that

Josh: it was [it was]

Bill: [except] homework (. ) homework is also
included in the [folios]

[the problem is if it gets too
prescriptive

Leah: homework bookwork

Iris: I’m not saying that we have to do the same thing (. )
I’m saying we have to do stuff under the same
headings [like you all] have to be doing some=

Nat: [science has]

Nat: =science has prescriptive tasks [and optional]

Owen: [which relates] to the
content

Nat: sorry

Owen: relates to the content of the subject being studied

and that’s what I’m saying (. ) if you are the person
who is designing the investigation some of your
folio pieces should be leading to the investigation

(.) it should not be something way out of the left
field (. ) some of the problem solving stuff why does
it not lead to the investigation (. ) [breaking] down

the investigation that becomes the problem solving=

"[it does]"

Jess: =but each term Maple and Cypress for term one if
those guys can think through okay we’ve got this this
and this the investigation is being reviewed at
the end of 2009 what are we doing in 2010 (. ) Maple
and Cypress team have a look what goes in the folio
(. ) okay right (. ) okay because you don’t want you
marking 24/7 [I mean I don’t] want to be worried about
you guys trying to Mark two investigations (. )

Jess: [no I don’t]
Iris: we don’t want two investigations a semester we want one (.) two tests yes but the tests aren’t gonna be this long (.) less is best and lets get some quality rather than quantity (.) folio pieces (.) I would like to be able to when we set up our assessment thing and I’ve gotta sit with the HOC team we don’t want all the assessment due in week seven so if we’re breaking if we’re breaking down the investigation what folio pieces could be due in week two (.) what we do in week four what could be due in week eight (.) lets break it down a bit more make it easier marking and easier for the kids to actually get done (.) so think [when you do]=

Kate: [mhm]

Bill: [that’s what they] do at the moment anyway

Kate: yeah

Iris: =when you’re doing these reviews though Bill some people aren’t (.) they’re leaving it you know and we’re all putting the test in week seven (.) does it have to be or no

Leah: Maths probably we can’t avoid it

Bill: yeah but the content you cover in seven weeks

Leah: yeah the Maths

Iris: if you have to test (.) if you are doing the (.) if you are assessing the content for investigation why do you double assess it

Jess: I agree

Iris: so you need to have a look at=

Bill: =no but the investigation the content is probably assessed but also you notice they get a lot of assistance and help

Jess: in the investigation

Bill: in the investigation (.) by their parents by teachers [by peers] etcetera but in the exams clear cut stuff of do you know or don’t (.) so you can get an evaluation and that gives a better reflection I think

Jess: [serious]

Iris: [lets make some of it]

Iris: why does the investigation have to be taken home (.) it doesn’t (.) we can mix it up (.) we can say this one is an in-class investigation (.) it is only done in class (.) that way you don’t have to double test it (.) we got to start varying it up (.) you don’t you know there’s not just one way to assess and a test is not the best way to assess sometimes either (.) its practical its easy its what’s the done thing its being done for fifty years or two hundred years

Nat: couldn’t we do something in qcat

Iris: yeah

Nat: not qcat I’m not saying use the qcat but even those ones from wherever that high school we went to

Jess: Sandgate

Iris: you could do it in a lesson

Nat: I don’t think a whole investigation spread out

Iris: some of them are too big the investigation (.) I’m trying to get it across to you we can think in short sharp spurts (.) because these kids attention doesn’t hold (.) you’re not getting the best out of it and you got this much stuff (.) lets think smart (.) like have something due in week three which is easy (.) then in week six and not all in week seven and have a think about all of you are planning science all of you are
planning Maths think about when things are due in
science (. ) probably wouldn’t make them due in the
same week (. ) gotta think lets start thinking how to
break it down so when you’re doing the reviews could
you please think what could be taken out what could be
kept in and we want the higher order thinking stuff so
if there’s too much knowledge stuff in these
investigations do you need it you know that need
little scaffolding as far as (. ) anyway that last
investigation everybody had an argument with me about
((laughter)) its more about getting kids to think
the kids it looks more like an ability to count
letters (. ) that’s what it looked to me (. ) they were
just counting the letters in the ItalOwen Polish and
English language so I don’t think it’s a good task to
get them to think as such
it is no no it is because [now] they’re going I got
the numbers what are they going to do now [and] I say
[you’ve] gotta figure it out yourself (. ) I’m trying
to hint but you know
good E
no I think we have to help them around somewhere (. )
otherwise you’re gonna get a lot of kids with Es
right so=
= no but I it helps to do that investigation that you
include that you gave us (. ) the nebaloso one it helps
to do that first
[what]
[what’s]a nebaloso one
ah that one Iris you know Iris gave us a pack
(. ) to all of us
it was a activity of pedagogy (. ) [I’ve been the big
thing is] (. ) we need to be
helps
we need to be looking at our pedagogy
(0.3)
'we’re not teaching good enough!' 
ahm no (. ) [I’m not saying that you’re not teaching]
good enough (. ) [I’m saying] what aren’t you doing
(you know what aren’t you looking at
[but the strategies were good Iris]
[Iris]
'that’s what Kim told us'
[the strategies were good there] so the kids are
getting ideas (. ) if they can’t solve them this way
(. ) they can use another method to solve it (. ) so
there’s a difference (. ) ya
[‘that’s just what Kim tells us’]((sorting out student
Maths competition certificates with Kate))
Iris: okay that’s fine (.). what method are they using (.)
what strategies are they using (.)[show] them all the
strategies
[ahm][(sorting out Maths competition certificates)]
Brad: okay but [how are you ratifying] that with
your (.)[we’ve gotta stop holding their hands=
(0.3)]
Jess: [I just messed up the system]
Brad: =at some stage (.). I mean is this investigation
supposed be done without holding their hands (.)
are the answers saying (.). go and figure it out how to
do that=
that’s what I’m thinking (.). I’m thinking what Maths
do you use (.). what formula do you use (.). they
need to be coming to you (.). I don’t know< (.). all I
know is=
Bill: [ya but then they’re not using it]
Brad: =and I’m going I’m not telling you (.). you gotta
figure it yourself
Bill like the relative frequency and all none of them are
coming up with that
Iris: =you could guide them a little bit (.). >I don’t know<
(.)I just know when I teach English (.). I’m trying to
get them to be self directed thinkers (.). this term
I’ve been really really happy because they’ve come to
me (.). they’ve come to me and gone miss (.).I’ve found
this (.). should I include this here (.). I said well
that’s probably a good idea (.). or: nah (.). I don’t
think you’re on the right track (.). miss (.). do I put
this in here (.). well what do you think (.). that’s
all (.). that’s all (.). I could have got that off the
internet (.). I want you to show me something extra
(.) where’s your examples=
Kate: yeah
=oh yeah didn’t think of that (.). so they’re coming
I want them to be coming to me asking questions (.).
so if they’re coming to you Brad you going what do I
do next (.).you could go (.). well have thought about
what formulas you use (.).have you thought about: (0.2)
ahm how do you work that (.). do you work that with a
strategy (.). [where are you] gonna use this (0.2)
have you thought about (.). >I don’t know< (.).
>whatever else you think about I don’t know< (0.2) its
more that facilitator role perhaps in the
investigations
Jess: [oh my god]
Josh: its for the level five six
Iris: [yeah]
Bill: [yeah] the (.). [investigation]
Iris: [well obviously] level four five
programme is gonna be different but we need to know how
is it going to look different (.). how is even your
teaching going to look different (.). you’re getting
them from junior school obviously its going to be
different (.). they’re doing the 1 programme (.). the
1 programme can be taught differently from the 4 programme
and how does it look different (0.2) you know what’s
the progression there (.). that’s why some teachers
gonna need to be specialist 1 teachers like Owen (.)
I’ve seen what he does when they come from junior
school and some of the stuff he does (.). then I’ve gone
and I’ve had a bit of a look at Dan’s class and seen
how they’re a little bit more ahm I don’t know (.)

they’re asking him questions or Brad (.).

they’re asking him questions (.). same when I go to Bill’s classes they’re asking you or Leah questions (.). then you ask the class heaps

‘they just sit and talk’

in a perfect world Bill ahm okay so from that I’m going to print off every investigation and every assessment item and I’m going to [hand them to those people in a hard copy] (.). after you had a look at [it write your notes]

[and give it to those respective teachers]

> [but its on G drive anyway]<

its on g drive but [I’ll have a discussion with] the people who were there and=

[feel free to print it for me]

=and we can tweak it a little bit if we want to hey

oh definitely

there are some areas that they didn’t do well

oh definitely (.). that’s why you’re doing it tweaking it (.). alright space measurement (.). patterns and algebra (.). number space chance and data [and number]

[chance and data]

is that the class mark lists

[they need help in Maths in senior school]

so Iris that’s different from the kids that are just lazy

yes (.). write lazy beside it if they’re lazy (.)

numercy or lazy is all I want and the rest will be normal Maths

when did you print this off

just this morning (.). so you won’t have the updates (.). [but aga:in]=

[it doesn’t matter]

=so you’ve got the updates (.). you’ve added the marks on there

[I’ve added] mine some marks to mine

but why was your marks missing Brad ((teasingly))

sorry

why was your marks missing

only write those things beside it (.). and if you don’t have anything beside it I’ll just put them into a normal Maths class

is there any higher Maths task

yeah they’ll be the one’s that don’t have anything beside it

like secret challenge

do that (.). space and numeracy enrich and anyone who doesn’t have anything beside it will be normal

Iris (.). question (.). if they’re not in numeracy or enrichment leave it

yeah again I’ll lazy numeracy enrichment (.). if they don’t have any of that they’re going to a normal
[Maths class]

Kate: [yeah great] thank you

Bill: what's enrichment for enrichment is for what

Kate: enrichment is the smart enrichment are the A plusses

yeah

Kate: I just wanna give them the info

Bill: so can we use the letter L-N-E

Kate: L-N-E-I or nothing ((teachers categorize students))

Iris: can you put this in your diaries (. ) the thirtieth the

first and second is in-service and I’ll let you know

what dates you’re on

Kate: thirtieth of December oh sorry thirtieth of January

Iris: no thirtieth of the eleven (. ) first of December and

second of December

Kate: okay (. ) thirtieth first and second

((teachers continue to categorise students and hand

completed lists to Iris))

END OF TRANSCRIPT
Transcript 4: English KLA Team Meeting 1
Date: 04 August 2009
Venue: Resource Centre
Start Time: 3.30pm - Finish Time: 4pm
Duration of Transcript: 24 minutes and 41 seconds

1. Jen: okay people (. ) let’s go lets go (. ) FUNCTIONAL
2. Jen: grammar (. ) Beth (. ) here (. ) ahm (. ) I went to the
3. Jen: first five day one that most of you are going to get
4. Jen: to go to (. ) after that I felt as though okay I’ve
5. Jen: dipped my toe in something (. ) now what do I do with
6. Jen: it ahm (. ) the one that Judy and I went to then
7. Jen: in swiney week (. ) ahm (. ) by Wednesday (. ) by
8. Jen: Wednesday our heads were done in (. ) we’re driving
9. Jen: home ((making sounds goa goa)) ahm they said we’d come
10. Jen: out the other side=

11. Judy: =the manual is [about that thick] ((starting the
12. Judy: laptop computer))
13. Jen: =knowing something (. ) and we did
14. Jen: come out the other side (0.2) there’s a couple of bits
15. Jen: that just felt useful (. ) I mean (0.2) there was a lot
16. Jen: of theory to it (. ) but the bits immediately that felt
17. Jen: useful (. ) one of them is (0.2) there’s quite a few
18. Jen: little bits (. ) but the one that I’ve started with (. )
19. Jen: with two of my classes is (. ) oh log out and log in
20. Jen: Again
21. Gwen: no there’s actually a drive network drive icon on your
22. Gwen: laptop (. ) so close that
23. Nell: ‘or minimise it’
24. Gwen: or minimise it
25. (0.2)
26. Gwen: I did this the other day and it worked
27. Eva: yeah
28. Gwen: now they’re on there somewhere at the top (. ) that’s
29. Eva: it yep yep
30. Eva: yep
31. Gwen: (. ) click on that one (. ) double click on that one (. )
32. Gwen: right now try it again and you’ll probably find its
33. Gwen: there (. ) that what happened to me the other day and
34. Gwen: it worked
35. Eva: YAA:Y
36. Judy: I’M LEARNING (. ) HOW GOOD IS ↑THAT
37. Eva: it worked (. ) how good’s ↑that
38. Judy: OH THANK YOU GWEN
39. Nell: how did you know
40. Jen: it came as an email because you have to log on and
41. Jen: log off again because the computer was a bit slow
42. Beth: yeah it’s because (. )
43. Gwen: and not only that Beth (. ) so I went >click click
44. Gwen: click< ( ((laughter))
45. Beth: oh good on you
46. Jen: okay (. ) the bit that I was doing is nominalisation
47. Jen: (. ) and all that is (. ) just making words into nouns
48. Jen: (. ) which sounds easy peasy (. ) why bother↑ (0.2) ahm
49. Jen: but it’s a really good way in (. ) for our kids who
50. Jen: have babyish writing (. ) they hand something in and
51. Jen: you think o:h that’s really babyish (. ) what do you
52. Jen: say (0.2.) and (. ) nominalisation (. ) can just make
53. Jen: them (0.2) think (. ) one example is (. ) ahm one of the
54. Jen: boys in grade seven (0.2) the sentence was just (. )
55. Jen: Hamish is strong (. ) and they had to nominalise strong
56. Jen: (. ) to make it the strength (. ) so when they changed
the sentence around and the kids said (. . . oh the
strength (. . . ah the boys strength and then he
realised he had to finish it off with something (. . .)
the boy’s strength is phenomenal (. . .) I said EXCELLENT
you’ve picked it up okay that’s a better sentence (. . .)
that’s more interesting (. . .) he said (. . . yeah (. . . but I
wouldn’t have done that (. . .) in my writing (. . .) I said (. . .)
(. . .) I know but you can (. . .) can’t you (. . .) he said yeah
but I wouldn’t have thought of it (. . .) I said Ned (. . .) but
now you can think of it (. . .) so the words are in their
heads (. . .) most of them (. . .) the vocabulary is there (. . .)
but its not vocabulary that they write because they
don’t speak it (. . .) and the whole point is (. . .) here’s
another new word (. . .) ahm the MODE (. . .) I hang little
charts in my room as I go through the stuff (. . .) the
boy’s strength is phenomenal (. . .)
I said EXCELLENT
you’ve picked it up okay that’s a better sentence (. . .)
that’s more interesting (. . .) he said (. . .)
(. . .) I know but you can (. . .) can’t you (. . .) he said yeah
but I wouldn’t have thought of it (. . .) I said Ned (. . .) but
now you can think of it (. . .) so the words are in their
heads (. . .) most of them (. . .) the vocabulary is there (. . .)
but its not vocabulary that they write because they
don’t speak it (. . .) and the whole point is (. . .) here’s
another new word (. . .) ahm the MODE (. . .) I hang little
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that’s more interesting (. . .) he said (. . .)
(. . .) I know but you can (. . .) can’t you (. . .) he said yeah
but I wouldn’t have thought of it (. . .) I said Ned (. . .) but
now you can think of it (. . .) so the words are in their
heads (. . .) most of them (. . .) the vocabulary is there (. . .)
but its not vocabulary that they write because they
don’t speak it (. . .) and the whole point is (. . .) here’s
another new word (. . .) ahm the MODE (. . .) I hang little
charts in my room as I go through the stuff (. . .) the
boy’s strength is phenomenal (. . .)
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that’s more interesting (. . .) he said (. . .)
(. . .) I know but you can (. . .) can’t you (. . .) he said yeah
but I wouldn’t have thought of it (. . .) I said Ned (. . .) but
now you can think of it (. . .) so the words are in their
heads (. . .) most of them (. . .) the vocabulary is there (. . .)
but its not vocabulary that they write because they
don’t speak it (. . .) and the whole point is (. . .) here’s
another new word (. . .) ahm the MODE (. . .) I hang little
charts in my room as I go through the stuff (. . .) the
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that’s more interesting (. . .) he said (. . .)
(. . .) I know but you can (. . .) can’t you (. . .) he said yeah
but I wouldn’t have thought of it (. . .) I said Ned (. . .) but
now you can think of it (. . .) so the words are in their
heads (. . .) most of them (. . .) the vocabulary is there (. . .)
but its not vocabulary that they write because they
don’t speak it (. . .) and the whole point is (. . .) here’s
another new word (. . .) ahm the MODE (. . .) I hang little
charts in my room as I go through the stuff (. . .) the
boy’s strength is phenomenal (. . .)
I said EXCELLENT
you’ve picked it up okay that’s a better sentence (. . .)
that’s more interesting (. . .) he said (. . .)
(. . .) I know but you can (. . .) can’t you (. . .) he said yeah
but I wouldn’t have thought of it (. . .) I said Ned (. . .) but
now you can think of it (. . .) so the words are in their
heads (. . .) most of them (. . .) the vocabulary is there (. . .)
but its not vocabulary that they write because they
don’t speak it (. . .) and the whole point is (. . .) here’s
another new word (. . .) ahm the MODE (. . .) I hang little
charts in my room as I go through the stuff (. . .) the
boy’s strength is phenomenal (. . .)
I said EXCELLENT
you’ve picked it up okay that’s a better sentence (. . .)
that’s more interesting (. . .) he said (. . .)
(. . .) I know but you can (. . .) can’t you (. . .) he said yeah
but I wouldn’t have thought of it (. . .) I said Ned (. . .) but
now you can think of it (. . .) so the words are in their
heads (. . .) most of them (. . .) the vocabulary is there (. . .)
but its not vocabulary that they write because they
don’t speak it (. . .) and the whole point is (. . .) here’s
another new word (. . .) ahm the MODE (. . .) I hang little
charts in my room as I go through the stuff (. . .) the
boy’s strength is phenomenal (. . .)
part (0.2) can the go in front of them (0.2) over the page (0.2) and some little easy exercises here (. ) he was devastated when he lost his dog (.) how would you make that sentence (. ) what would you change lost in (. ) nominalise it first (. ) and lost would ↑be

the loss

Jen: the loss (. ) okay (. ) so how do I make that (. ) the loss of his dog devastated him (.) he was devastated by the loss of his dog (. ) so there’s no necessarily right answer (. ) so you’ll get different answers from kids and their quite like (. ) having OH YOU’RE RIGHT

OH I’M RIGHT TOO (.) ahm (0.2) so just going down the bilby is going to be extinct (.) number three (.) the extinction bla bla (. ) habitats are being destroyed (. ) the destruction of the habitats (.) ahm (. ) so they did those as as exercises (0.2) turning the sentences around so they looked better (. ) moving further up and along

Judy: have you said why is nominalisation important to do↑

Jen: ahm yeah (.) because (. ) because of that (.) that’s what I said (. ) moving from spoken up here to (pointing to poster))to the more written style [of writing]

Judy: also with nominalisation you can actually fit far more (0.2) ahm information (. ) into a sentence↑=

Jen: Yeah

Judy: =ahm without having to keep swapping↑(.) into different parts of a sentence↑ (.) you can actually ha-

Jen: =I haven’t done any of that (. ) building (. ) yet (. ) up in the classes (. ) I haven’t done any of that that’s the main purpose of nominalisation (. ) being more factual and to be able to write (. ) a lot more information clearly and succinctly in sentences

Nell: does it also make the sentence from passive to active↑

Jen: it does and it looks good especially in (. ) reports (.) scientific reports (.) sose reports rather than (.) you know (. )NARRATIVE (. ) it can work (.) I’ve got a little script there that I’ll show you later (. ) but narrative I mean you can break the rules and write pretty good stuff but mainly for the reportee analytical stuff (. ) I think (. ) yeah (. ) they’ve had a go at longer bits of text like the bilby one (. ) prey was the only word but there was one kid in both classes who knew predation (.) ahm and once one kid knew it the others all stole it (.) we did start with nominalisation first (.) and then turning the sentences around (. ) the kids who’ve got it (.) like getting it (.) because there’s not a lot of stuff you actually teach in English (. ) there’s a lot of reinforcing and new stuff that they catch on HA YEAH (. ) I GET THAT

(0.2)

Gwen: and when they read that they’d be able to see themselves the change [in sophistication] of a sentence=

Jen: [yes it does]

Gwen: =they can see that yeah (.) ahm haven’t done the two other long ones (. ) I’m taking it fairly slow (. ) one lesson a week ahm so we’re working through that one (0.2) and (0.3) this is just the first the (0.3) first little piece at the top was written by a grade seven (0.2) grade seven
girl (0.4) and the task it was just one of their
demand writing tasks where they had ten minutes (. . .) the
topic was the beach (. . .) and they just had to come in
and write (. . .) no thinking (. . .) just snap start writing
(. . .) ahm I deliberately gave them the beach because
that’s my cliché > and then we packed up the car and
then we did this and then we did that and we all
hopped in it was a lovely day and then we came home<
(. . .) ahm where they write a recount (. . .) so yes she did
start writing a recount (. . .) exactly that (. . .) the
highlighted words are suggestions that could be
nominalised↑ (. . .) the circles were just you know (. . .)
boring words (. . .) see what you can do (. . .) okay so just
have a look at the first the first one (. . .) there’s
still work that could be done on it (. . .) [and then the
second one]

[highlight and] circle or did the child highlight and
Circle
no no I did (. . .) yeah
Okay
I don’t know if they’re up to finding their own yet
yep yep
(0.4)

once you start changing something (. . .) then you have to
think of how (. . .) oh okay > what do I really want to try
and say< (. . .) have to think of something to end it (. . .)
ähm (. . .) so the process of doing it (. . .) ahm
(0.8)
yeah so I mean it’s still not (. . .) it’s still not a
great piece of writing (. . .) however (. . .) you know (. . .)
it’s getting [a bit more]

[getting them] started
yeah it’s a bit more mature you know (. . .) a bit more
moving up here from > we went to the beach we
packed the car we had an ice cream and blab la bla<
(. . .) it’s moving up (. . .) along here ((pointing to
poster)) (. . .) she’s only in grade seven

yeah
and that’s about all I want to say about it except I
just I think it’s going to be a useful tool (. . .)
there’s more (. . .) more with it like Judy said about
packing words on (. . .) haven’t done any of those with
the class yet (. . .) I just thought I’d do this little
bit with the stuff that I’ve done and=

= and that’s what they advise you to do (. . .) they tell
you not to try and do a whole stack of stuff (. . .)
you’re better off doing a small piece (. . .) and having a
go at that and getting the idea and students get the
idea and then you look at what’s another little bit I
can start to look at and you do the next bit

a just sort of mentioning it (. . .) then you have to do
[something]

[because we]’re doing nothing
you either do nothing or do something and doing
something even if it’s that small (. . .) is better than
doing nothing at all
do you have any of these in electronic copy
I do (. . .) I’m not sure (. . .) I don’t know whether I put
it on my USB or if I did actually put it on G drive
core functional grammar (. . .) if it’s not on G drive now
it’s on my USB but I can out it on anyway
Gwen: I think we’ve got this functional grammar stuff on G drive
Jen: ah (. ) maybe I did put it there
Eva: I’ve never seen it but I haven’t really looked for it
Judy: can I find it here
Jen: no no no (. ) I was just saying to (. ) I actually
started a (. ) ahm I took some things that Jen and
I were given and I scanned them this morning and I
wanted to throw some of them on the drive for you but
I just haven’t got back to do it (. ) and now I can
only find five of the twenty five items that I put on
there this morning so which is a bit of a peeve
because it was actually a nominalisation sheet there I
could have had up while you were looking at that (. )
anyway so what I thought I’ll do is scan the rest of
these items to make them electronically available to
you and put them on a drive (. ) I have to find out
where if Jen can show me where the drive is
Jen: yeah
Judy: this one anyway was just basic a basic introduction to
functional grammar (. ) what I like most about
functional grammar is that it gives the student a way
of not only analysing text and pulling it apart quite
easily (. ) not too ahm technical (. ) its quite easy to
say OH YEAH we can just put that part of the sentence
(. ) cos basically all sentences are very similar in
structure and they have a particular process and a
circumstance (. ) so you’re looking at those plus they
have other little things that you can use (. ) like
little (. ) I don’t know (. ) little tools or little ahm
ahm what do you call it (. ) ways of pulling a sentence
apart
and they get to colour them in too (. ) so for people
who like to see things in colour the idea of a blue
green blue green red sentences and then they’ve got a
whole page of blue green red sentences and note that’s
a boring structure ahm change change some of those
around
as they say here (. ) you can do it in any like
functional grammar can be used in any in any like uh uhm
subject area using any particular genre (. ) you can
have a look at whether is it more spoken or more
written or whether you’re trying to do different ahm
things (. ) different purpose for the text (0.2) anyway
I’ll ahm I’ve only got like these squiggly few here
(. ) I don’t even know (0.2) I wanted to try and put
them ahm in like have little names for each one so you
can see what each one’s about this is even on the
common drive (. ) I’ve haven’t even pulled them off and
get them on my own drive to sort out and give them got
titles (. ) I’ve only got so I’ve a long way to go as
far as getting a file set up ahm (. ) with functional
grammar stuff on it (. ) but I thought that maybe each
time we can spend maybe not as long as Jen and I
have now but we could show you like I could just show
you one sheet [ or Jen]
[yeah]
Judy: could give you one snip quick snip about hey look the
next we did today was this this and this and you guys
can go and try it (. ) I mean I’d like to hear what
Jen’s got to say
Jen: you’ve just heard it ((laughter))
like the stuff that you’ve been doing and the only way
to do it is to share it in these times (.) so can you
just show us where that is [if I can ask]
[well I think] go to G
= and if then we all look at that one spot so I’ll put
the stuff in the same one (.) so we have the only one
so have any of the kids we’ve got now they won’t have
come through with the functional grammar
next year’s lot (.) next year and the [year after]
I believe the]

senior school is talking the mode bla bla language
yeah okay

I actually when I heard about it I think it makes a
lot of sense

well even next terms really good’

“nominalisation”
planning documents (.) maybe (.) 2008
probably it’s still on my flash drive (.) okay
so maybe if we look here (.) will we put it into
planning documents
no (.) set up a new folder
okay why don’t I just put one
in there now (.) but if I put in here functional
gram you’ll know
you could make Functional grammar Jen- functional
grammar
oh yeah could to
you could
okay (.) so if we just call it that (.) and its like
normal English planning documents you just go down (.)
and I’ll put mine I’ll put scanned (0.4) documents
"PDF"
scanned (.) we know what you mean
resource of scanned=
= scanned conference notes or something
there’s actually activities as well you know [general]
for your]
folder just put something like that and you could=
= and we’ll sus it out=
you could and we’ll just sort it out later and we
could even put it in separate folders
I’ll actually scan some of those
oh good okay
we could put them into different themes (.) we could
go through them and put them into activity sheets (.)
[information sheets and stuff like that]
[I did colour ones (.) I actually put so]me of these
on this morning
Yeah it’s probably worth one person spending=
so these will be the sort of things you’ll see ahm
when I’ve scanned them (0.2)I didn’t do that bit
I’m pretty sure I did that one
yeah (.) so (.) and I’ll scan the sheets from the book
that actually have activities for the students=
mhm
=student activities
=are there any books that we can buy (.) I know there
would be (.) but are some inexpensive

((laughter))
Judy: did you take down some of the book titles that she had there
Jen: yeah
Judy: so maybe in this folder I could type in some of the books
Jen: yeah (.). there’s one from that school Saint Judy’s (.). I didn’t contact them (.). but I have known about them
Judy: oh yeah
Jen: and its only a twenty dollar book
Eva: HA
Gwen: WOW
Jen: one of them put it together (.). they must have PD money or something
(0.4)
Jen: okay so that sort of thing (.). a bit from me (.). just a little taste every now and again (.). it’s intriguing and=
Judy: =to me I think if you analyse text first (.). and then from there you could go into the construction writing (.). because then that way you can get a bit of an idea into the sort of writing (.). you can get an idea of how to pull the text apart using a particular (.)
Jen: the genre mapping that they did too was interesting (.). on how this particular genre (0.2) sort of end up with this particular colour scheme (.). you know (.). you’re doing this it would look like this (.). that’s how your sentences will go (.). your doing this (.). your sentences will look in these sorts of colours
ahm=
Judy: =yeah (.). she had different genre and then we colored in [certain] things
Jen: [yeah]
Judy: so we would all the pink in that genre (.). then we found all the pink in that genre which is the type and part of sentence and we go WOW LOOK IN STORIES WE HAVE WAY MORE PINK THAN ASSIGNMENTS
Jen: yeah yeah
Judy: and its like OH MY GOODNESS
Jen: yeah (.). so if we get surprised by it (0.2) kids will probably be surprised by the fact that there are things that you can do to improve your writing rather than saying oh this is a bit babyish (.). make it a bit more sophisticated (.). it gives them something to do
Eva: excellent
Jen: cool
Eva: thank you very much ((clap))
(0.2)
Eva: that’ll be good (.). very handy
Judy: yeah if we follow up ahm (0.2) just telling you different things that we’re doing in class
Eva: it’s good (.). I was saying Judy (.). I grew up at a time when there was no grammar teaching (.). they didn’t teach me grammar (.). I never got taught it (.). and so (.). to go to a course like that on functional grammar helps to clear up wrong conceptions because I got functional grammar and traditional grammar mixed up in a school of excellence
Transcript 5: English KLA Team Meeting 2
Date: 08 September 2009
Venue: Resource Centre
Meeting Start Time: 2.45pm - Finish Time: 3.20pm
Duration of Transcript: 27 minutes and 15 seconds

1. Gwen: I have to go at four o’ clock
2. Liz: okay (. ) the thing is (. ) probably the people I need
3. (. ) see Judy’s on duty and who else is (. ) Ange is
4. on duty;
5. Jen: no no she was [yesterday]
6. Liz: [somebody] is on somebody
7. else is on duty [right now]
8. Jen: [okay]
9. Jen: no Ange was [yesterday]
10. Liz: [Judy and] somebody ( . ) I’m here
11. anda nd Eva is here (. ) Iris won’t be here so
12. you’re the (. ) it just would be good to do with at
13. least one from each POD you know so we can talk (. )
14. its not actually going to affect you (. ) we’re going
to talk about qcats quickly really
15. Gwen: I’ll listen (. ) cos I’ll listen and learn (. ) isn’t
that the way
16. Liz: I haven’t got enough of these [here]
17. Gwen: [no no] I’ll just listen
18. and learn
19. Liz: so lets gets started [cos other]wise we can’t get on
20. (. ) we’re going to start now qcats I don’t even know
what qcats stands for (. ) or yes it does Queensland
21. comparable assessment tasks (. ) I knew it was
22. something to do with assessment [tasks] (. ) we’re
actually going to start in at section two page
23. nine (. ) [to find out] what we’re actually going to do
24. Jen: [mhm mhm]
25. Jen: [yeah]
26. Jen: [section two]
27. Pierce: is English here
28. Jen: ya ya
29. Pierce: where is Maths
30. Liz: conference room (. ) so basically the qcat is ahm where
31. it’s a kind of a moderation (. ) it is a moderation so
32. assessment tasks the kids have to complete (. ) and
33. they get some we get to do some preparation time with
34. them but what I thought we’d do is we’d go over what
we have to do
35. Eva: and is it just year nines
36. Jen: [yeah]
37. Liz: [just] year nines (. ) so Ross and I have spoken
38. about it already because we’ve got the eight nine (. )
39. he’s got the nine class I’ve got the one nine [class]
40. Eva: [cohort]
41. Gwen: Iris she’s I’ll hand it on to her but she’s really
42. the year nine coordinator
43. Liz: it doesn’t matter (. ) I’m figuring like I’ve only got
44. about eight grade nines (. ) Tom you don’t really have
to know about this but you might as well be in on it
45. (. ) and it is a tw- (. ) essentially the assessment
task is a two hour time that we’re blocking (. ) its
going to be on tue- the second week of ah term four
46. (. )
47. Gwen: ‘so when’s the Maths one isn’t it the same time’
48. Liz: ahm Maths and the English ones are going to be done on
the same day one after the other (.) [two hour] sessions (.) we’re blocking off Oak [and Cypress and] other kids will get distributed [to the other] PODS

Eva: [oh hoo]

Gwen: [ah so the Ban- okay]

>yeah yeah]<

Gwen: I didn’t realize they we’re doing them both on the same day

Liz: yeah okay so essentially we the the task is actually maybe we won’t start there (.) start at page seventeen (.) this is the [task]

Eva: [second] week

Liz: second week Tuesday

Jen: parent teacher interview day

Liz: yeah

Eva: o:h ((laughter))

Jen: ((laughter)) [what a day]

Liz: [okay so this] actually is the task and the model answer

Jen: aha

Liz: so what is they’re appreciating an ad and you have to (.) that’s the actual ad they’re going to get

Jen: okay

Liz: ahm Beth you’ll need to take one of those

Beth: thank you

Liz: ahm I only have enough for the people who are actually grade nine [teachers

Gwen: [>yeah yeah<]

(0.2)

Liz: okay (.) Ross you’ll need one of those (.) so that’s the actual model response that they’ve given there with the questions

Jen: okay

Liz: okay so they’re gonna appreciate an ad and they you know have to add write to that and then=

Jen: =first thing we should do is run down to the common room and get the newspapers today the middle section=

Eva: =I know I saw that=

Jen: =yes has about five different photos [I’ve got it upstairs] too about five different photos and questions about the photos

Eva: [I didn’t make it]

Liz: okay

Jen: visual appreciated of text or something that’s what it was yeah

Liz: okay [they then have to]

Jen: [I saw that and I ri]pped it out ((laughter))

Liz: anyway let’s just quickly look at the task (.) they then get the next section where they then get the next section where they have to prepare their o:wn advertisement (.) and then they have to reflect on the advertisement so there are three stages in the two hour test (.) so if you go back to where we started off it was page number

Jen: ‘nine or so’

(0.2)

Liz: nine so all of us (.) this is what we need to do (.) they get a group discussion for about thirty minutes where you can just set the scene and remind them about what makes ads you know memorable
Jen: can I write on this here

Liz: yes (. ) okay (. ) then they actually get twenty

minutes for that appreciating (. ) so they gave us those

questions that were with the model answer in the

actual ad (. ) then they have thirty minutes to

construct their own ad and another forty minutes to do

the reflection (. ) so if you read through this I don’t

think I need to read through (. ) it makes sense when

you read through so that’s actually the task and off

course at the back of the booklet on the back of the

student booklet then is the moderation (. ) and this is

actually the the exact thing for using judgments

(. ) about their learning and we’ll have to have

discussion in a minute about how we’re going to

moderate that because of all the year nines we then

have to send samples of five away that reflect the

different grade levels (. ) so we have to make a

decision about that (. ) alright so going back to the

beginning ahm and I’m just trying to find (. ) maybe

its not the beginning didn’t get this in order okay

resources (. ) at twelve (. ) this is what the whole

qcats about ((reading)) qcats will assess the students

know and understanding and can do (. ) the following

selection of year nine essential learnings form the

basis of this assessment (. ) so in our preparation for

this we really have to touch on all these essential

learnings (. ) so in other words to get an A we’re

going to have to ahm do these sort of things so when I

was reading this through ahm (. ) some of them are just

fairly open like for instance these ways of working

((reading)) construct non literary texts by planning

and organizing subject matter and making judgments

justifying opinions and reflecting and analyzing and

language choice but you get down to the nitty gritty

more in the knowledge and understanding

Jen: mhm

Liz: so basically (. ) bearing in mind that we’re looking at

ahm advertisements (. ) ((reading)) its words groups of

words visual resources and images that can position an

audience by presenting ideas and information

portraying people character places in a particular way

(.) and then that comprehension of drawing on

knowledge from you know all the clues the subject

matter and that kind of thing and then so that will

form the first part where they will have to analyse

and then they’re going to have to write and design so

obviously we’re going to want to see that they’re able

to use those elements and words and phrases and

symbols etcetera to design their own thing and then

we’ve got ahm this idea about you know manipulating

grammar punctuation and vocabulary (. ) ahm and (. )

with (. ) and if you go down to the next one with

the purpose of you know looking at what the purpose

the audience and the subject matter is so there’s some

ahm you know there’s a lot in here and I think so ten

that’s what we will probably having need to do week

and week one

Gwen: I was just gonna say are you able to now [that] your

poetry is pretty much finished (. ) are the grade nines

able to do some work [on advertising]

Liz: [yes]

Liz: [yeah yes] that’s correct

[so one of the things ]
Gwen: [its only a few lessons] but it’ll help them
Liz: one of the things it does talk about it here and you’ll need to do it talks about student orientation (. and ahm basically so this is in ahm your qcat preparation (. and there’s something that said (.)
sorry
Ross: what page is that Liz
Liz: ahm [page four] ahm four and five (.) there was a place here where it does talk about the preparation and one thing it says ahm [and I’m]
Jen: [page four]
Gwen: [I’m sure] that preparation activity doesn’t involves rehearsal=
Liz: =yes where was that=
Gwen: =of the actual assessment or a similar one (.) page five [under] student orientation (.) dot point four
Liz: [yeah]
Liz: in other words when it talks about stuff you can give them opportunities to work in each of those ELs and familiarize themselves with the expectation of the assessment but when you look at the conditions you can’t rehearse (. so you can’t actually give them exactly you know an ad exactly the same or no [slightly the same] [of the] same topic with the same questions
Liz: [or even any ad]
Tanae: [or even any ad]
Eva: [o:h]
Eva: oh off course (. you can show them an ad and give them questions
Liz: yeah exactly
Eva: [yeah]
Tanae: [so] you can give them the questions
Liz: no you [can’t]
Eva: [not] the questions give them a set of questions that are similar
Liz: yes similar
Eva: ((laughter))
Gwen: so [so you might wanna avoid ads about] about things like [about green energy and maybe do something] else
Liz: [yeah so should have preparation]
Eva: yeah exactly (. maybe[a car or something yeah a car]
Liz: [what we do what and I thought] that this might be a clever idea was that Iris when she >cos she picked up the Maths and English one the same time< she said (0.2) why don’t we do film advertising;
Eva: oh yeah with the film unit [coming up]
Liz: [so in other] words we try and draw from advertisements to do with= Jen: =>the movie that we’re watching>=
Liz: =[to do with] films and how people market [it ]
Jen: [yeah yeah]
[mhm]
Liz: and films and that kind of thing now I don’t know if you can do that for all kinds of them cos you might not get all of the [the] things that you want (. cos sometimes its more about celebrities on the front than it is about you know catchy catch cry phrases and that kind of thing but that might actually be our in task because you do have something in there (. I looked at assessment about you know marketing marketing that particular film or an aspect of it so we can actually kind of link that into for the grade nines they would have to do its more about marketing
and here is how films market themselves and do some comparisons between films and cars [and chocolate bars]

Jen: [mhm]
Eva: [mhm that’s a good idea] yeah compare and contrast yeah or with the idea of so they get the idea about these

you know how we do advertisements and we give them an opportunity to do a little mock up you know but they
do talk about here you know they have to actually do their own ad they actually have to draw it but ahm
what it does say there is its no coloured pencils its just really like a sketch

Jen: 'yeah'
Liz: so we probably would need to give them some practice
with sketching cos some kids would read that and go oh
I've gotta draw something like this

Eva: but that could be part of your twenty minute round up
at the start to say I am not after beautiful pictures
(.) I mean that shouldn’t be=

Liz: =oh yeah yes=
Eva: =too much of an issue [you know]
Liz: [so to me] it seems pretty when you read what the teachers can talk about [there’s] actually quite a lot and it does say ((reading)) >students listen to tasks discuss the content and issues and ask clarifying [questions]< (.) so that half hour you get on the day;

Eva: [mhm]
Eva: [great]

Eva: [half an hour is a big chunk of time once you’ve them sitting down]

Liz: [they do get quite a lot of scaffolding isn’t it]
Liz: okay now the student booklets are basically this bit here [this] this and that page

Eva: [yep]

Liz: alright so I think you probably need to read it and kinda digest a little about what you think is gonna be appropriate (.) maybe if we find some good resources (.) Ross and I were talking about you know there must be ads that are actually I mean some of them [can be moving ads] too I think like trailers like we can talk about trailers and how they start trailers off

Eva: [some prize winning]

Eva: there are advertising awards that are generally have some fantastic [ads] in them that are stills [so] you could use just like this ((coughs))

Liz: [yeah]

Liz: [so]

Liz: yeah so I think we probably need to [have a look at] trailers you know how they start things off but we can also do still ads so if we can find websites and share that I think that would be really good

Eva: [I’ll have a look]

Eva: mhm

Liz: and the last thing is really the discussion bit because we need to make some decisions (.) now where is this (.) okay we actually have to ah once we’ve got the student responses in we then have to decide on what approach we’re going to take so in other words
they’ve given three approaches here (.) we’ve got the calibration model (.) which is where (.) ahm (.) a facilitator or somebody selects the samples deemed to be of a standard and then we put them together and then we talk about is this and we all mark separately (. you know we then ahm share our As our Bs and then from there we select the one which is most like an A or and it talk about the advantages the advantage is it saves time because you can do a lot of filtering first (.) you’ve done your own marking and you’ve already filtered out the As and the Bs and Cs etcetera then we are just as a team the year nine people coming together and going looking at them all and talking about all of the As and then saying we agree that this is the most like an A etcetera (.) or where teachers grade things individually and send their representatives (.) actually have I got this around the wrong way (0.2) ((reads booklet)) conferencing model where we actually get together and we look at the student responses and talk about the descriptors you know together we talk about the individually select student samples that are representative the meeting is convened conferencing to enable to share samples discuss judgment task specific descriptors are used (.) maybe I talked about the conferencing model first

Ross: which is basically moderation in other words Liz: or the expert is we give them all to Jen Jen: oh no I hate that one ((laughter)) that is so stupid (. no way ((laughter))

Teachers: ((laughter))

Ross: that way they’re all based on one person’s interpretation Jen: yeah it’s a great idea (. no ((laughter))

Nicole: Liz do Laura and Charles have to do qcat

Liz: there [what it says about] I did read that (. special consideration so ahm

Gwen: [‘oh yeah cos Jake’]

Jen: ‘I read it somewhere’ (.02)

Liz: this is about including all students so it is about identified with specific educational needs they may be assisted using adjustments and support usually available in class (.) and they can also use assistant technology teacher aides and reading support (.) so well these are the three categories (.) then there’s ones with English that’s not their first language and they can actually use electronic devices to allow them to participate and then it says in exceptional circumstances where the task may be a traumatic experience (.) so I think they actually have to do it

Ross: it just means we don’t choose those [responses]

Jen: [((coughing))]

Ross: it just means we don’t choose those (responses)

Liz: we do have to send in the results for the whole lot (. results for the whole cohort and these aren’t published anywhere (. they are (. the aim of these is to get people more familiar to do that moderation kind of thing that often happens in senior but doesn’t happen in the middle school [so] much because we don’t have a mechanism a paid mechanism for this to happen (. so did you re-read that conferencing one
I just thought I had it clear in my head about cos (.) we do need to decide what we’re going to do (.) not conferencing

Gwen: the calibration [thing]

Liz: [calibration model]

(0.5)

Gwen: someone selects a range of sample [to start] with (.) a facilitator selects samples

Eva: [s:o]

Eva: so does that mean they select what they think will be Es [and] what they think will be Bs and you get all the Bs and you get all the ones I think are Es

Gwen: [mhm]

Jen: [yeah]

Liz: of a certain standard sorry you’re right so that one there I had it round the wrong way (.) conferencing

model is [we mark]=

Jen: [is what we] do sort of

Liz: =yeah we mark and we bring what we think is As (.) the calibration model is all the Bs go to somebody [and the Cs]

Gwen: [yeah]

that] sort of

Liz: and the last one is the expert model

Eva: then with that one where the Bs and Cs go to different people you might pick what I’m marking all the Bs say (.) I pick what I think is most a B in this (.) but it’s one person picking the B and it might be totally different to the As and it might not be right

Jen: [mhm]

Liz: [so] we need to decide what we want to do (.) is there any (.) ahm takers for the expert model↑

Eva: Jen [[[laughter]]]

Liz: [[[laughter]]]

Nicole: mark all of them (.) [very consistent]

Jen: [that’s crazy]

Gwen: just give then to Iris (.) she’s likes English (.) she’s not here today to defend herself

Eva: [[[laughter]]]

Jen: [[[laughter]]]

Liz: [yeah sorry]

Eva: [no we’ll mark] them all [and then give the final decision]

Jen: [extra week holiday I can bargain] for that (.) extra week holiday

Eva: [could we just] say we have a bit of moderation but then someone has the final (0.2) I think (.) boom

Liz: [it talks about]

Liz: well we have to decide (.) if we go through you know (.) so if we decide the expert model is perhaps not the way we want to go↑ (0.2) yes or no↑ (.) do we want to consider it↑

Jen: if you had a small number (.) ‘we could do that’

Liz: so the teacher grades all students responses and submits the selected samples to an expert for confirmation or whether adjustments are needed (0.2) or we go for a conferencing model where we bring our stuff and then we have a round table discussion (.) or we actually divide it and ahm somebody takes all the Bs (.) maybe two of you take all the Bs two of you take and you don’t consult across A-B-C-D

Eva: ‘I don’t think that’s good’

(0.2)
Ross: [ahm]
Liz: [we] have to do it
could we do some sort of a mixture of both it↑
yeah that’s what I was thinking (.) where we all have
a bit of a conference about it (.) say and then say
what we think about it (.) say this pile here (0.2)
this pile of four (0.2) are Bs (.) but then give it to
an expert (.) say what’s your final choice↑
Nell: could we do some sort of a mixture of both it↑
Eva: yeah that’s what I was thinking (.) where we all have
a bit of a conference about it (.) say and then say
what we think about it (.) say this pile here (0.2)
this pile of four (0.2) are Bs (.) but then give it to
an expert (.) say what’s your final choice↑
Jen: I like the idea (.) I like the concept (.) of of doing
that (.) cos I think we do need to conference (.)
because that’s part of the (.) part of the [moderation	hing anyway]
Liz: Yes
Ross: [the thing is though] after we do what you just said (.) do we
then go back and remark all that we’ve already marked]
( .) according to which one is the actual
Jen: no no ( .) take it on board ( .) for next time
Liz: [we take it on board I think]
Ross: [well that’s what its saying] ( .) it says=
Liz: this advice is used by teachers
Ross: =extra time is needed to review and adjust previously
 graded work (0.2) so I guess the idea is if we do it
that way then we ask those to go back and read through
them what we’ve already done ( .) according to the
expert opinion
(0.2)
Eva: but if we’re offering up which is one of our Bs
Liz: it sounds [to me the same as the senior ladder] you
know ( .) it could be the same as the senior ladder
Eva: [I see what you’re saying you’re right]
Liz: because you kind of calibrate it
Eva: yeah
Liz: you say this is ah ( .) this is where we say mid-B is
and then you know ( .) I’m not suggesting we do B1 B2
B3 B4 B5 B6 you know up to ten like senior ( .) but you
might you know B B-plus B-minus and there’ll be a
certain group of kids who are like ( .) exactly like
this B sample ( .) so they remain there ( .) but the
group that ahm we think ( .) they just kinda drop ( .)
you know we already put them on a kind of a ladder ( .)
so the calibrating actually happens when you [just]
simply move stuff
Ross: [yeah]
Liz: but it we’re happy with the Cs ( .) and its actually
only the Bs that are and the As and if we’re happy
with the Cs and the Bs then what might happen a
little upward push this way ( .) you don’t have to
actually necessarily re-mark
Gwen: [mhm]
Ross: [mhm]
Liz: you just simply
Ross: adjust
Liz: make little adjustments
Eva: then we can say that we’ve done it
Jen: and it is useful to compare
Eva: mhm
Jen: say ( .) you know ( .) is this one better than this one
Ross: yep
Jen: and they you have to say [why]
Eva: [why] ((laughter)) all that
Jen: why
Liz: some of that (.) I mean if this is a good tool (.)
500. just where that teacher judgments comes to the fore
501. Jen: yeah
502. Liz: but because we only have one sample (.) we won’t
503. actually (.) I think its going to be a bit harder to
504. be able to apply your teacher judgment (.) like I
505. saw them in class actually have a go at this task
506. already (.) well that doesn’t actually count cos its
507. all about that (.) so it probably will just be
508. Eva: the way it is
509. Liz: so here it is (.) this is the evidence (.) this is
510. what I see (.) that’s it (.) and I don’t think this
511. one is good as this one because one’s got a tick that
goes=
512. Eva: =are we gonna swap PODS then so that we’re not marking
513. our own kids stuff
514. Liz: would you like to do that
515. (0.2)
516. Jen: ahm yeah
517. Eva: yeah
518. Liz: you could do that
519. Beth: by knowing the students sometimes
520. Eva: you go oh I know he that
521. Jen: yeah yeah
522. Liz: I don’t wanna take any more time on this because you
523. need to actually have a read through it and kind of
524. digest (.) and it is good a good idea (.) I find it
525. actually easier to read the task and then it helped
526. inform my (.) you know when I read the then started
527. reading the essential learnings (.) having a model
528. answer actually helps
529. Eva: what’s the turnaround time between the kids getting
530. the thing and us having to mark it and get it back
531. Liz: we actually have to (.) final date for submitting is
532. the second of November and we are going to be doing it
533. on the something like
534. Eva: twelfth
535. Liz: is it the twelfth of October
536. Eva: thirteenth
537. Liz: thirteenth of October (.) so yeah
538. Gwen: by week two
539. Eva: same day as parent teacher
540. Jen: yeah
541. Liz: so basically I guess we’ve got three weeks
542. Eva: that’s right
543. Ross: can I go with one last idea↑
544. Liz: mhm (.) yes↑ you may
545. Ross: ahm (0.2) if we (0.2) work in pairs(0.2) and (.) one
546. pair takes (.) all E (.) level responses (.) and one
547. pair takes all the D >etcetera etcetera< (.) come
548. to some consensus between the two two of you (.) so
549. that you are still getting that calibration (.) but
550. then just (.) concentrating on your (.) whatever your
551. level (.) of achievement is↑ahm=
552. Eva: =but then how do you know where the lines are (.) that
553. A (.)that it actually pops over into the A
554. Jen: ((cough))
555. Beth: but someone would have to scan (.) yeah this is an A
556. (0.2)
557. Beth: [isn’t it]
558. Liz: [well I think]
559. Ross: [well no] I’m just (.) I’ve done it that way before in
561. moderation
562. Liz: w- I’m actually thinking that we would (.) in (.)
563. Jacaranda mark together
564. Ross: ’yeah'
565. Liz: we’d actually take (.) whatever group we get†
566. Ross: ’yeah'
567. Liz: ahm even though I’ve only got seven kids but I think
568. (.) probably my (.) our two classes (.) I think (.) my
569. feeling is that (.) if you got nines in it (.) like
570. we’re all in pairs (.) then probably (0.2) it’s just
571. too hard (0.2) to separate (.) you know if Ross had
572. a class of I don’t know how many (.) if you had all
573. the nines then it’ll probably be impossible (.) that
574. my eight nine (.) my group of eight nine would
575. actually just do the task with them (.) [the
576. preparation]
577. Jen:
578. Beth: [((cough))] (0.2)
579. Liz: [but] when it comes to marking it (.) we’d share it
580. (.) and we’d probably talk to (.) sit together and do
581. the first few (.) together
582. Ross: yeah (.) yeah† >that’ll be best<
583. Liz: yeah†(.) and then we we would actually have a (.)
584. common (.) [understanding] about [(what it’s like)]
585. Jen: [consensus]
586. Eva: >[I like the idea] of
587. Liz: working in pairs like that<(.) yeah
588. Ross: yeah (.) so maybe you are (thinking of it as) marking
589. buddies ((laughter))
590. Liz: marking buddies (.) so you can check in with each
591. other (.) [and] then we got our=
592. Beth: [yeah]
593. Liz: =then [we can
594. Ross: [and so you got your
595. Beth: I think I’ll be more confident
596. Eva: I’m just worried cos my marking buddy will be Iris
597. and she’s hard to tie down (.) [to try and sit down]
598. and get some time with her
599. Liz: [laughter])
600. Eva: thank you
601. Liz: I don’t think that matters eh and ahm (0.2) we need to
602. talk further (.) but I think you need to read this and
603. just kinda get your head around what planning might be
604. appropriate (.) yeah†
605. (0.2)
606. Liz: and now the SOSE meeting has started

END OF TRANSCRIPT
Transcript 6: English Grade Level Team Meeting
Date: 19 October 2009
Venue: Jacaranda POD
Meeting Start Time: 10am - Finish Time: 10.31am
Duration of Transcript: 30 minutes and 59 seconds

1. Liz: okay so
2. Eva: cos I was away on Friday (.) I didn’t know (.) exactly how to mark it when I was marking this sheet (.) I’ve just got it down here
3. Liz: yeah (.) okay (.) alright (.) so (.) can I grab my pile (.) over there (.) alright (.)okay (.) so (.) here we go (.) this is I actually kind of put you in pairs to have a little discussion about (.) it might not actually work out right but we can (.) alright so (.) before we get started (.) again we going to be trying to moderate and say so Liz you gave a D to a student (.) does that look like a D to you (.) and what looks like an A (.) but we probably have to get to terms with a couple of things (.) now the first thing is I don’t know if you realized but I realized when I first started marking it that I had a purpose statement (.) for reader across the top there (.) so in other words this is like our global aim (.) so the purpose was in all of the things they did (.) to demonstrate how well you can use language to influence different audiences (.) so that is our kind of you know global standard (.) that statement is about us recognizing that they have to use language to influence an audience (.) that is what I kind of took out of that you know (.) whatever an audience was and so if they didn’t actually get to grips with that then they’re probably not going to be terribly successful (.) so that’s the first thing (.) just keep that in mind (.) that’s the overall aim (.) now the second thing is (.) you’ve got a teacher guide and you should probably (.) I don’t know if you had a look at this (.)
43. Eva: yep
44. Liz: to doo doo doot (.) oh these things (.) here we go (.)
45. Eva: mhm
46. Liz: so its really important (.) like I found it really important to actually go back to explaining how for instance you know question one (.) did the student actually explain how advertising features are used to influence the target audience you know so all those features of the sentence you know all those features of that sentence=
49. Judy: yeah
50. Liz: =when I was marking it (.) actually had to be articulated there (.) the other thing is in our teacher guide (.) what page was that (.) twelve and thirteen (.) this is actually all the elements they say they’re assessing (.) which I find quite extraordinary really
51. Eva: yeah absolutely
52. Liz: you know so in other words I found it useful to actually just kind of see though you know (.) for instance I’ll just read the top one (.) they’ve got (.) construct non-literary texts by planning organizing subject matter according to a specific text structure and referring to other texts (.) or making judgments and justifying opinion about the qualities (.) you know so there’s like lot of
Eva: mhm
Liz: more information that can help you (.) I actually found it quite difficult personally to internalize all that mhm mhm
Judy: yeah its too much
Beth: I don't know (.) when I looked at it I just looked at the criteria and compared it to what I usually do okay
Liz: taking all that in was good reading but that’s it okay so (.) I think that’s interesting and if I had to make a judgment I’d come back to this mhm
Beth: you know (.) a little bit
Eva: I thought when we were planning things we were told to specifically go for a few ELs
Liz: mhm (.).
Eva: (.), they’ve told us that we cannot possibly assess that many points in one small piece of assessment and what have they done
Liz: mhm (.), well I thought that was interesting
Beth: mhm
Liz: (.), I just thought that was interesting that was there (.), and I found that was useful to go back there and go hhm you know have they for instance (.), language elements, they’re talking about (.), they’re talking about figurative language there (.), you know (.), and are the kids using figurative language
Eva: mhm
Liz: and all those kind of things (.), now (.), the other thing that you probably haven’t seen (.), we’ve got in our teacher booklet an A sample (.), okay so
Beth: yep
Liz: model answer
Beth: yep (.), yeah
Liz: however (.), online there is a B (.), a C (.) and a D sample
Teachers: a:::h
Liz: they didn’t tell us that (.), it was just because I was sneaking around to see if there was more information (.), so I think its really useful (.), so
Beth: ((laughing)) a D
Liz: alright so (.), what I’m thinking that we might do (.), and it’s a real pity that they didn’t actually tell us in our teacher booklet that these are available for us
Beth: o:h I was reading through it (.), I think they did
Liz: well [its]
Beth: well [that] you could print it off (.), and there were samples (.), I think they did
Liz: it is a bit obscure (.), if you go to the place they send you (.), its very (.), you can’t get it
Judy: that’s one thing on page four (.), note samples are available
Beth: download from whatever whatever
Beth: download from whatever whatever
Liz: yeah (.), download but its very hard to get it through there
Eva: my Bs are quickly turning into Cs after reading this
Beth: no (.), my Bs are fine ((laughter)) my Ds are very fine
Liz: alright so before we start (.), what (.), you know just the ones you marked (.), how did they go (.), just the ones you marked
Ange: once we sat (.), Jen and I (.), once we sat down (.), we got into a kind of flow (.), but (.), there were quite
a few that were borderline.

Judy: here we go. I was brave enough to do a top of the line there. for them.

Ange: we we got a couple of top lines

Liz: you know what I had.

Ange: (sur)prisingly very few at the bottom

Beth: oh no I had a few [down there like >bottom bottom bottom<]

Judy: [I haven’t got any at the bottom yet

but I] haven’t done=

Liz: =I had real trouble with question five. you know (.).

so they got a D for a text and visuals have a generic environmental (.). message

Judy: yeah because I found that I had to (.). do a (.). half way like this

Beth: yeah

Judy: because the student actually did do (.). it was relevant to school (.). but [it was more] this

Beth: [it wasn’t]

Judy: but because it was relevant to school I felt compelled to shade in just a tiny little bit of that one

Beth: but they encourage that (.). they say mark on the scale where you think it is (.).it doesn’t necessarily have to be against those arrows

Liz: see this was an example ((looks at sample of student work))(.). like for instance this one here (.). you know (.). that’s the kind of generic thing (.). I’ve got a rubbish bin (.). I’ve got trees

Eva: yeah (.). I’m seeing a lot of that

Liz: is that what you consider to be (0.4) [generic]

Ange: [well its] generic

Judy: Mhm (0.4)

Judy: well I found (.). this one here

Liz: I had a lot of difficulty deciding

Ange: this one was very subtly (.). its generic (.). but very subtly listed as school because [knowing Vanessa Funk this is] actually the hill (.). outside Maple Willow (.). and she actually mentions in the=

Judy: [this one is actually quite good]

Judy: =this one’s quite good (.). he actually went right off the wall as far as time’s ticking (.). and he had a green light bulb (.). I thought that was really quite clever

Liz: so

Judy: so I don’t think that

Liz: but is that generic

Eva: that’s not generic (.). it’s not a message particularly for the specific school

Liz: mhm

Ange: but its very clever

Eva: it is very clever (.). but they’re asking for some kind of message that is for the school

Ange: the justification might make the connection to the school though (.). which is what I found (.). is some of them (.). even though the advertisement itself seemed very generic (.). it can be for a very wide and open audience (.). when reading what the kids have written about how it links and how they think it persuades students at our school

Judy: we should have had this discussion before we marked

Eva: I agree

Judy: because now I’ve marked these kids [work and I’ll] have
to put a big circle and say oh I’m sorry

>no no no< we need to come to an agreement I think

because I really str- in the whole thing I didn’t
realize until I started marking it what you know what I was actually being asked to mark on and I don’t know.

so we this isn’t particularly clever its not as clever as the light bulb for instance.

but so is that generic

is that what we call generic

Beth: mhm

Liz: well what’s not generic show me something that’s not

I had one that was not where he had where he was going on about [gum at our school]

help the school (.) defend the school

yeah that’s school

this one is not very good but is says pick up rubbish on the way to class

yeah that’s about the school that’s targeted

keeping our school clean no need to work in a messy environment

(0.2)

we had a [couple]

[this kid] talks about an environmental club (.) helping friends

yeah that’s more specific

mhm

see this one goes (.) better environment better school

(0.2)

where’s my gum one

very subtly

so you know I just we need to I’d like some clarity

here my gum one he’s working on the negative

the detention

yeah he goes now do you really want to do this

scraping gum off the table

yeah

no no [but a good consequence]

this one’s got Daleview Gardens uniforms but no justification what would you call this one with Daleview Gardens uniforms and clean club dot com

is that specific to the school

I think so I don’t think it needs to be blatantly

this one is very subtle its got DGC on the side

mhm

good [picture]

[of and its] very subtle like school it doesn’t necessarily

mhm (0.2) anyway we need to make a decision because I’ve marked mine in pencil because I was too scared

[[(laughter)]]

[yeah oh me] too

o:h and I was being [brave]

[I’ve got] a separate sheet cos I was too scared to mark even the pieces of paper
Beth: [no you’re the diligent one]

Liz: so so what do we feel the criteria is actually [can we look at that one]

Eva: [do you want to step on] gum

Beth: yeah [that’s a good one]

Liz: [can we can we look] at this and actually come to some agreement about what we think (0.2) ahm this is saying to us (. it says the purpose is ((reading)) to demonstrate how well you use language to differentiate different audiences (. in this case its says combine texts and visuals in an advertisement that suits the school environment (. so the audience is obviously the=

Eva: students

Liz: students

Eva: or school people

Liz: people who are in schools (0.2) and then its an A is emotively you know connect emotively with environment issues for students in the school so it’ll have to be uses emotively language or figurative or something [plus] they need it to be for students in the school (. the opportunity to see all elements (. the next one is ((reading)) connect an environmental message for students in the school (. so it would have to be directed straight at students isn’t that right

Eva: [mhm]

Eva: yeah

Liz: very clear that the audience is not ahm the crows (. that I have lots of for some reason (. okay the next one is (. ((reading)) that is relevant to the school (. their message is relevant to the school (. does that exclude things that are not (.0.2) does that if they haven’t addressed=

Eva: relevant though but relevant to the [school] (. general]

Liz: [yeah is that a gen]eral relevance it could be relevant to the school and it could be relevant=

Eva: =to [the shopping centre]

Ange: [well it probably be ]both anyway because the environmental [ issues that are rel]evant to the school are relevant at a global scale

Eva: [I think it could]

Eva: I think to get a C you could have a general mess[age]

Liz: [so]

does that mean (. cos I might have been a bit tough (. about this generic thing (. I don’t know

Eva: so you=

Liz: so what does generic mean

Judy: have no connection with the school

(0.4)

Judy: [that don’t don’t] talk to school students in particular

Liz: so generic environmental message (. cos litter is

Eva: that’s generic

Judy: yes it is (. but if they specifically targeted the school students that makes it not generic anymore (. I don’t know

Liz: no that’s right (. I don’t know either (. what’s the difference between (. relevant (. relevant to the school or generic (. what's the difference
Judy: I think generic is to do with not not specific[ally for
th]e school not [specifically CCC]
Ange: [a specific] audience
Beth: [as in clean up your] world
Ange: I think it’s just a non specific audience
Judy: yeah
Ange: it doesn’t mean it’s not specific to school (.) it just
means a non specific audience
Liz: what’s that what’s that then
Ange: where would you sit (.) that a non specific audience (.)
not necessarily
(0.2)
Judy: that’s generic (.) [its not targeted] at our school in
particular (0.2) you know
there’s a lot of these (shindies) just gonna go down
Ange: [that’s generic]
Liz: well well I’m just (.). I don’t know
Judy: but I agree with you (.). I think you’re right (.). I
think its generic
Liz: yeah I think its generic
Judy: and it specifically says (.). school environment
Eva: to persuade students to take care (.). just like that
Judy: yeah (.). it says school environment again
Ange: but then it says in here ((reading)) text and visual of
environment that is relevant to the school
(0.3)
Eva: see that’s a very [tough one]
Ange: [see that’s a] very fine line
between the two
Eva: where’s the samples (.). what does a C sample say (.).
it’s a B sample
Judy: whereas A
Ange: oh we got A ((looking at sample of work))
Liz: oh you got an A
Eva: imagine if this school was a pig sty (.). that’s a B
Liz: this one is= ((looking at sample of work))
Eva: can we practice environmental week (.). so that’s=
Ange: =that’s a C
Eva: that’s a C and it’s not anything to do with that school
environment
Ange: but its relevant to the school
Eva: its relevant to the school buts it’s generic (.). that’s
a general environmental message
Liz: I will give that a B (.). so like (.). I’m going down [as
well]
Eva: [I’m going] down big time (.). my Bs have turned into Cs over
this
Beth: see something like that (.). I’m (.). not sure what I
would have done
Ange: I think I need to see a bit more of some connection
Eva: this is B
Beth: I’ve got the D sample
Eva: this is where it is at the school (.). this one here is a
C (.). whereas a more general=
Liz: =what does a B look like
(0.2)
Beth: keep the environment clean (.). environment clean and
live a better lifestyle
(0.2)
Ange: so basically for a C (.). comment is ((reading)) gives an
environmental message as relevant to the school (.).
basically anything like that (.). anything that doesn’t=
but you could look at this at the A.

Ange: it needs to (.) its kind of

Judy: the only thing that connects that with the school is the word [school]=

[at school]

Judy: =cos you could have that (.) you could change school to office [and] straight away its generic=

[yep]

Eva: mhm

Judy: =but because this is A (.) obviously it hits A there at the top

Ange: its specific to an office audience then (.) isn’t it so its not generic either

Judy: the only thing that makes non generic is school

Liz: except that makes that so much more clever because its got (.) switch on to the world (.) switch off at school (.) you know

Judy: it is clever

Judy: yep

Liz: so we’ve got all the other (.) its not about the drawing

Judy: but aren’t we looking at only one particular point here (.) theres lots of other points

Liz: oh yeah

Judy: the point we’re looking at here is whether is generic

Eva: for that particular criteria

Liz: well that the one I struggled with

Eva: me too (.) but I took that (.) see to me I’m with you

Beth: mhm

Eva: I was marking a bit higher (0.2) like my marks are=

Ange: =I marked down enough

Liz: I’ve marked really low (0.2)

Ange: I think I’ve marked down enough

Eva: yeah (.) general environment messages here (.) is it a C (0.2)

Ange: well that’s (.) its relevant to the school

Eva: come an participate in (.) relevant to the school

Ange: but its not specifically targeted towards (0.4)

Eva: well come and participate in sort of gets (0.2) to the audience (.) you get what I mean

Beth: mhm

(0.5)

Judy: that’s a B

Eva: [this is a C]

Ange: [this is a C]

Liz: oh that’s a C

Eva: where it has the school

Judy: yeah this said school in it as well

Eva: mmm

(0.4)

Eva: so I think yeah we can safely mark it at a C if its a=

Liz: =[general general]

Eva: =[a message that ]is relevant

Liz: and has the other things=

Eva: mmm

Liz: =you know like

Eva: this information

Liz: the things we are looking for (.). you know (.). yeah

Eva: but gee (.). my kids don’t have this much information in there

Teachers: n::o
Ange: neither have mine

Eva: cos I don’t think I’ve seen any of them like this (0.2)
mine will look more like this (.0.2) ah [that’s my]
teacher booklet

Ange: [that’s an E]

Eva: that’s an E

Ange: that’s a lot in there

Eva: that’s what I end up [generally getting]

Jen: oh they’ve used up figurative language ((laughter))

Liz: ((laughter)) do we (.) is there anything else that we
want to talk about (.). with this

Beth: yeah (.). can I just ask

Liz: mmm

Beth: with this (.). do we (.). is this sort of must (0.2)
because (.). it says here (.). basically this tells you
(0.5)

Liz: ahh (.). I actually (.). well this is an example I’ve
written (.). ahh this is a student that I think is as (.).
you know (.). just on a B (.). ((reading from student
answer booklet)) good job on the task (.). covered the
main points required in talking about the features of
your ad and your (.). but you could have used more themes
(.). so its

persuasive language and linked paragraphs ideas and just
that areas you know

Beth: so (.). is that compulsory for us to do that

Liz: ahh

Beth: because its just me when I’m marking I don’t know any of
these kids=

Liz: =that’s right

Beth: =whereas I find it easy if I know the student and
they’re most likely to do it you can relate more detail
in this

Liz: well

Beth: (.). but here (.). I don’t know (.). [I’m struggling]

Ange: [(its not

context)]ualised

Beth: yeah I’m struggling to [give a fair comment]

Liz: [I took it I took it as] well I

just looked at it as what would they have to do to

improve it

Ange: mmm

Liz: what would they have to have done (.). so I’ve written
things like ((reading from student booklet criteria
sheet)) like to see more clarity and precise language to
demonstrate your understanding of how and why an ad is
persuasive

Beth: yeah

Liz: or some

Beth: so you want us to fill that in

Beth: I think if we’re going to be fair we probably should

Beth: okay

Liz: like if we like to relate (.). link your drawing to the
school and students more clearly

Beth: yeah okay

Judy: something positive (.). just what you can do

Liz: some good ideas (.). or just good job (.). some (.). good
ideas in your justification (.). you did a nice job with

questions one to four (.). ah good job on questions one
to four (. ) need to connect (. ) most of it is about
correcting their ideas (. ) ahm (.2) you could have
improved your grade by being more precise and detailed
(. ) your conclusion was too brief
Beth: okay so you want [ like]
Liz: [I put] something nice
first (. ) you covered the main [ele]ments (. ) good job
(. ) [well done]
Beth: [mmm] [they can im]prove
Liz: and then I give them that might have=
Beth: helped them
Liz: helped them
Judy: are you doing all of your stuff in pencil
Liz: well I did because I’m a scaredy cat
Judy: hhh
Ange: I did too
Judy: so what do I do with the students who I’ve marked (. ) I
have to leave them like that (. ) I can’t scribble all
over it (. ) I’m so sorry
Liz: no that’s alright (. ) that is why we [actually]
in moderation (. ) we found you’re actually not very good
Beth: you’re not actually very good that I thought you were
((laughter))
Liz: the second question we have to ask was what are we going
to do with these results (. ) are we going to include
them as (. ) for the grade nines as part of their
assessment task (. ) or is this going to be a bit like
the folio where its additional evidence
Judy: I think additional evidence
Liz: rather than
Eva: I think so (. ) cos my guys are going ((laughter))
Liz: rather than
Eva: they didn’t do a very good job on it
Liz: yeah I must admit that I’ve got lots of Ds
(0.2)
Beth: yeah (. ) I mean I haven’t marked all of mine (. ) but the
portion I’ve marked (. ) they’re mainly Ds (. ) some Cs
(. ) now looking at these (((laughter)))
Liz: [so]=
Eva: =well I’ve marked some of these ones at almost a B level
and looking at this they will be almost a C level
Beth: ye:ah (. ) some of mine are gonna B=
Liz: =I found that they didn’t address the task
Eva: I wish I had seen these earlier (. ) before marking [cos]
that would have been (. ) right (. ) okay (. ) got that
Liz: =yes
Liz: mm (. ) and that’s just a learning experience because
this is the first time [that]we’ve done qcats in English
Eva: [mhm]
Eva: but where do these results go=
Liz: =we have to
Eva: =do they go to qcat
Liz: we have to enter them (. ) you will be getting your kids
back (. ) you know (. ) these will have to go back to
the class teachers and (. ) a window is going to be open
up about November 2 or something like that (. ) I’m not
entirely sure of the date (. ) Allison would have given
it to me (. ) oh no it has to be done by November 2 I
think
Liz: these have to be marked by the end of this week
Eva: basically (. ) I just (. ) I wonder if it says in here (. )
does it (. ) the reporting (. ) and it goes on to one
school
Ange: I signed up to be sagitarian ((laughter))
Liz: you’re not signing up for it (. .) we’ll have more inf-
(. .) the good thing is we have more information (. .) now
that we’ve done it once (. .) I think it’s difficult
doing things once (. .) isn’t it
Beth: mmm
Liz: yes (. .) we have to submit ahm (0.3) betwe- (. .) it says
here between the twenty fourth of August and
Eva: [what]
Ange: [what]
Liz: no (. .) start again (. .) final date for submission of data
is second of November
Judy: oh (. .) that’s pretty soon
Eva: so[ if we] get them marked by this week (. .) are we
saying by Friday all qcats [must be marked]
Liz: [so so] [and you’ve got to] enter
Judy: you’ve got to enter (. .)
Judy: mark and enter
Liz: so (. .) you’ll have to enter it under your code
Eva: I personally enter what you’ve done
Liz: yeah (. .) no you have to enter
Beth: these are not mine
Liz: [do you know what I mean (. .) I’ve only got] seven grade
nines (. .) [and Ross’s got the rest]
Ange: [I’ve got to find out you’ve got my kinds]
Eva: [yeah but I only got ab]out that yeah
Liz: so you’re gonna be big time entering=
Judy: I know
Liz: =because you’ve got lots
Judy: two (. .) lots
Eva: but is it just for for [marks students] that’s you’re
entering for your students
Liz: [and its just A B]
Judy: no you can’t (. .) I’ve got to enter on my code
Liz: so you have to enter=
Eva: =the overall
Liz: overall
Judy: right
Liz: so we are going to have to indicate an overall
Judy: yep
Liz: and I haven’t=
Judy: =oh is that the only entry (. .) just the overall (. .) okay
Eva: yeah
Liz: yep (. .) and the other thing [it says here I haven’t]
heard that we have to do it but we do have to actually
submit a sample A B C D E if required (. .) so we may be
required (. .) and whether that’s going to be random (. .)
you know where they just say [where they go over the
res]ults and go I’ll have=
Eva: [that won’t take long]
Eva: [you’d be lucky to get]
Judy: I’ll have=
Liz: =I’ll have Jo Smith
Judy: =that boy from your class and Peter from you class
Liz: yeah (. .) and somewhere (. .) I guess that’s what this
moderation is about is actually right now (. .) us kind of
well lets hope they don’t pick one that I’ve already
done ((laughter))
Liz: okay (. .) what I thought (. .) this is what I thought we
could do is (. .) just to clarify understanding (. .) is we
each select one sample (. .) one (. .) one student (. .) so
you might select your B for instance and you two have a

conversation about why (.) so (.) what’s your reasoning

behind the assigned level (.) what descriptors does it

match (.) what evidence is there (.) what areas of

improvement (.) how can you give feedback to the student

(.) what strategies would you suggest to help improve

their learning (.) that’s just some ideas (.)so just say

(.) Judy (.) think I put down that you and me would

work together (.) so we will have a chat (.) and I’d

show you my students (.) you (.) one of my students (.)

you show me one of yours (.) and we’ll have a chat

about that (.) and that’ll help clarify in our mind I

think about the criteria (.) so in a sense we’re not

actually going to moderate the students work (.) we’re

actually going to [clarify] our own [understand]ing of

what our reasoning [of what]

Beth: [moderate]

Judy: [thinking]

Judy: [couldn’t] couldn’t we do one here

amongst all of us and then go and do the others

this takes a long time (.) to read one sample where

there is a problem

oh

so for instance if we did a B sample=

mhm

=on my B sample or your B sample (.) and we use this B

and then we can actually compare your B and my B

( .) with this B and talk about it ( .) so that would then

clarify our understanding of what a B is ( .) and if we

get more time we could do a C together ( .) but some ( .)

does that make sense ( .) here

(0.4)

Liz: yes ( .) I think that’s probably where we are at the

moment ( .) about clarifying our understanding ( .)

because I think we don’t ( .) we’ve got a whole lot of

stuff here that I found really difficult to mark

Eva: yeah ( .) me too

Liz: yeah ( .) no ( .) yes ( .) no

Ange: find my top ones to see if they really are at the top

Eva: so who’s with who

okay ( .) I did put down Iris with Ange but Iris’s

obviously got caught up ( .) and I put Ross with Beth

(.) so what about Ange and Beth work together ( .) and

Judy and ( .) oh actually do you want with a: h I

don’t know ( .) do you two wanna have a talk about you

know ( .) Bs and then we will look at stuff that I’ve

marked and we can talk about whether I’ve been too hard

(.) okay and then the samples are here and remember

you’ve got an A sample

END OF TRANSCRIPT
Transcript 7: English KLA Team Meeting 3
Date: 19 October 2009
Venue: Resource Centre
Meeting Start Time: 10.45am - Finish Time: 11.10am
Duration of Transcript: 20 minutes and 27 seconds

1. Liz: okay (.) so can we all see each other↑
2. (0.2)
3. Judy: so what time are we working till↑ (.) twelve fifteen
4. Jen: N:O
5. Liz: twelve (.) we’re almost done (.) I think it’s eleven ‘o clock
6. Gwen: eleven to twelve is lunch
7. Eva: eleven to twelve is lunch
8. Judy: okay
9. Liz: yep (.) okay (.) film music (.) FILM STUDY (.) where are we up to↑ (.) what are people doing
10. Eva: I’m just working through booklets at the moment
11. Tom: mmm yeah
12. Judy: I’m only going to do one of the assessments (.) I’m not going to let them do the whole three (.) it’s just too scary (.) we’ve got such a short bit of time (.) so I’m choosing the poster for my class to do
13. Liz: [okay]
14. Zoe: [I’ve] chosen the poster for my class too (.) I was just (.) cos I was meant to actually yeah teach it explicitly in some class (.) in class time (.) and I was just going to say kids who have a particular affliction to technology (.) they could do it do on the computer if they wanted to (.) and then what’s the other one (.) or=
15. Judy: =yeah
16. Zoe: =or IF SOMEONE WHO HAD A CONTINUAL THING FOR DRAWING (. ) which is the picture book ( . ) that could easily be transcribed to the poster as well ( . ) but if kids really wanted to go with it ( . ) they could
17. Beth: it’s the same ( . ) Judy wanna do the same
18. Zoe: I just wanna do poster
19. Liz: okay ( . ) ahm one thing is ( . ) we are ( . ) this unit is actually gonna run right through until the end of the year
20. Judy: so we are doing assessment until the end of the year↑
21. Liz: so ( . ) this is a suggestion ( . ) >Ross and I sort of talked about this ( . ) I think somebody else too to about the fact how many characterizations they have to do= before you know they can do a characterization< ( . ) so in other words ( . ) in terms of the assessment ( . ) if you choose ( . ) like we’re doing whale rider so if you just choose maybe one or two you know ( . ) like you’re in choral ( . ) then (0.2) that is enough ( . ) and they can come back and complete the journal ( . ) like ( . ) so they might do one you know do do a little (sentence) paragraph on ( . ) leadership for instance ( . ) and come back to the other things ( . ) later on ( . ) so in other words ( . ) the journal ( . ) I don’t know ( . ) does everybody feel the same↑ ( . ) does everybody ( . ) the journal doesn’t have to be complete to be assessed
22. Gwen: do we have an actual task sheet↑
23. Liz: yes ( . ) the task sheet
24. Gwen: oh okay
25. Liz: I or I sent you a file path ( . ) you don’t get my emails
26. Gwen: I don’t get some of them ( . ) I get some of them ( . ) not
the others (.) some I haven’t seen

58. Liz: Eva’s got them ( )

59. Eva: I didn’t (.) I would’ve (.) I didn’t know you (need them

60. or I would’ve got them this morning)

61. Liz: its under (0.2) film [study folder]

62. Gwen: [on G drive]

63. Liz: yeah yeah so they’re all there (.) ahm and then the

64. other thing is (.) you know (.) try not to make it eh

65. bigger than Ben Hu:rf↑ (.) you know (.) so when you’re

66. talking about eh for instance some of them have the

67. option of making a postcard (.) now we suggested that

68. when they do the postcard they don’t actually do it on

69. postcard size (.) they actually do it on maybe A fi:ve

70. (.) or something like an enlarged version because of the

71. little (.) same as the book mark (.) they might actually

72. do (.) it won’t be a REAL book mark (.) it’ll be the

73. mock up that will go to the printers because (.) you

74. going to you know (.) they’ll be doing this tiny little

75. detail (.) and so (.) ahm its about (.) the idea is its

76. about being selective (.) you know (.) so that they

77. can’t fit the whole movie (.) onto something this big

78. (. ) they’re actually going to have to select an

79. important element (.) you know (.) a visual element (. )

80. and part of this is about visual literacy (.) so its

81. about representing and selecting (.) of a visual element

82. and obviously the analysis comes in where they’re asked

83. to write (.)one paragraph I think >isn’t it< (.) phase

84. one

85. Judy: two to three

86. Liz: two to three (.) or is it one to two (.) two to three

87. (. ) three to four (.) so it’s actually about (.) a

88. little bit like this qcat actually (0.2) here’s the

89. drawing (0.2) you know (.) here’s your poster (.) here’s

90. your bookmark

91. (0.2)

92. Eva: justification

93. Liz: okay justification (.) so those of you who hadn’t had a

94. look at the qcat might have a (.) you know (.) look at

95. one of these samples here=

96. Judy: mhm

97. Liz: =so its about (.) again it’s about being persuasive=

98. Judy: mhm

99. Liz: =hopefully that will link in to what the grade nines

100. have already done (. ) ahm some of my grade eights have

101. already got a bit of a dose of that kind of thing (. )

102. so I think its really up to us to not make it too

103. complicated↑ (.) I think sometimes we’re actually on our

104. own worst enemies (.) we actually keep on asking kids

105. for >lots and lots< of stuff were in fact what we want

106. is (.) a small (. ) quality item (.) that they construct

107. (.) themselves mhm↑

108. Judy: mhm

109. Liz: any more thoughts about the film study

110. (0.4)

111. Liz: when are we when are we putting a due date↑

112. (0.2)

113. Ross: well it has to be week six (.) doesn’t it↑

114. Eva: yeah it has to be (.) week six (.) we’re having our

115. things done for week seven

116. Liz: yes (.) okay (.) so we’re all going to have it handed in

117. week six (.) I think that’s going (.) I think that’s

118. fair

119. Nell: you mean the journal
Liz: yeah (.) and

Gwen: not the whole journal (.) the items there

Ross: no no no (.) the whole journal doesn’t have to be done

( . ) yeah

Liz: no I don’t think

Nell: so what are you expecting by week six ( . ) a visual

literacy item and some other item

Liz: I think a sel- ( . ) [you know] within

Ross: [a selection]

Liz: a selection from within the journal ( . ) so for instance

answers the plot ( . ) something there ( . ) you know ( . ) I

think it says plot characterization ahm exploration of

themes ( . ) so in their journal what I’m saying is for

instance in whale rider there’s actually three separate

themes that are listed there but= ( . )

Nell: yeah

Ross: =choose one

Liz: choose one ( . ) so your kids for instance=

Nell: so you’re only wanting a selection [from the journal] by

week six

Liz: [from the journal]

Liz: six

Zoe: are the kids expected to type that work up ( . ) or=

Liz: =well I think it needs to be [ahm] I=

Ross: [mhm]

Zoe: =because I’ve been doing it the other way where I’ve

been drafting it in class

Eva: me too [and then writing it] into a good copy

Zoe: [and then BEFORE]

Zoe: yeah before it goes into] the journal which is a good

copy

Eva: yeah ( . ) I’ve done that as well

Gwen: mine’s

Zoe: I told them that the journal was essentially what I

would be assessing

Liz: yes ( . ) that’s right

Gwen: that’s what I (mentioned)

Liz: and I ( . ) well I’m similar in a sense that I’ve got them

to pull the journal apart ( . ) put it in their folios so

that they’ve actually left loose leaf pages ( . ) so

actually their draft is in there as well ( . ) so that

drafting their paragraphs ( . ) but they also ( . )
you know ( . ) could put a slip ( . ) [slip a good copy] in

there ( . ) you know so that there might be some homework

(.) that they had to do ( . ) so they get [things to do]

Teacher: [((coughing))] you get the

Judy: paragraphs for journal ( . ) paragraphs for the [justifying]

their

Liz: [for the

journal] ( . ) so in other words like under the plot

setting ( . ) the plot and setting >bla bla bla< the kids

have actually pulled their journals apart because

there’s not enough for them to write in there in some of

those places=

Ross: yeah

Liz: =and they’ll put it into their plastic pockets with pa-

blank you know loose pages waiting ( . ) so that that ( . )

its not=

Judy: yeah

Liz: =not too and they’ve got ( . ) yeah I don’t want them ( . )

its too hard to write in their journals I think ( . )

there’s just not enough space for kids to draft and do a
good copy (.) whereas if they got loose leaf pages
between the pages in the journal they can insert
especially I think (.) well from my perspective (.) I’m
really concentrating on getting them to write (.)
properly constructed sentences and paragraphs (.) because
that was you know from work that I’ve seen (.) that
something that they struggle with (0.2) answering
questions (.) its always in (.) half sentences and (.)
so you need the room (.) which isn’t in the booklet
mhm
(0.2)

yes so (.) my suggestion is >you have a look at the
criteria sheet which I think< (.) from memory has (0.2)
plot (.) characterization (.) themes
(0.2)
in the journal

>yeah yeah< so (.) in other words (.) but they don’t
have (.) I mean how much do they have to do to be
evidence that they can do it (.) so I think you can just
choo::se (.) select all items what they’ve done in class
for instance you’ve already done (.) I’ve seen (.)
yeah with the kids (.) and scaffolded (.) plot summary
(.) so everybody should have a plot summary (.)
everybody should have some character (.) one or two you
know (.) depending on how much time we’ve got (.) we
want quality not quantity (.) and then you can come
back and complete some of these things (.) later on†

and what about the (0.2) ahm poster and the paragraphs
(.) what do you want there (.) justifying
yes (.) so again it’ll be about talking about some of
those same visual elements really that are ahm=
=but that all has to be done before (.) week six
yes
in week six
well you are going to have to mark it (.) so you’ll have
to (.) I think you will have to have it in week six
a visual literacy item
(.) in other words (.) but they don’t
ding (.) I mean how much do they have to do to be
evidence that they can do it (.) so I think you can just
choo::se (.) select all items what they’ve done in class
for instance you’ve already done (.) I’ve seen (.)
yeah with the kids (.) and scaffolded (.) plot summary
(.) so everybody should have a plot summary (.)
everybody should have some character (.) one or two you
know (.) depending on how much time we’ve got (.) we
want quality not quantity (.) and then you can come
back and complete some of these things (.) later on†

and what about the (0.2) ahm poster and the paragraphs
(.) what do you want there (.) justifying
yes (.) so again it’ll be about talking about some of
those same visual elements really that are ahm=
=but that all has to be done before (.) week six
yes
in week six
well you are going to have to mark it (.) so you’ll have
to (.) I think you will have to have it in week six
a visual literacy item
(0.4)
and really (.) I don’t know (.) have you people seen (.)
you know the sprucing that happens outside you know (.)
if you go to New York and you go to shows (.) they hand
you stuff (.) you know (0.2) and often they are postcard
size (.) and all it has is you know (.) some say theatre
date (.) a key ahm (.) image from the movie or show
(.) and on the back it might have something like (.) New
Yorker (.) THE BEST SHOW I’VE EVER SEEN you know (.)

OKAY YEAH [yeah]

[so at] the back of the postcard it’ll have a
kind of slogan there or (.) you know=
=so you’re advertising for people to come and see it
yeah you’re saying=
=you apply [the marketing (tool)]
[(there was a thing)] on there it made sense
(.) it said information about the movie or something↑
(.) it could be included on the poster↑
well (.) it could be (.) [well I think]
[well some] kind of information
about the movie (.) yeah
well maybe even [just]
[we’ll] be even looking for more of a
bit of a catch phrase or something (.) couldn’t we (.)
[more than the in]formation
literacy da da da
yeah yeah so that kind of thing
yes (.) so really (.) you’re looking for one slogan (.)
maybe some information [like]
[may]be even the short review
quib (.) you know how they some
one (.) so and so
the Courier Mail said=
but where you’re gonna put that (.) on the back↑
yeah [yeah]
[you] can do that on a book mark (.) and a post
card (.) but a poster are only ever one size=
yeah
=but they’re slightly bigger ( )
yeah
=they could have a scene
[they pulled] off the movie itself
can they use (.) actual shots from movie to put them in
front [of their]
[I would] think so
so they could pick (.) they could actually have a scene
shot [they] pulled off the movie itself
(yes) they could
but they better make sure its one that’s captured
something
its got to be
that justifies why did they put that scene in there
yeah yeah that particular image (.) and it may not
have an image at all (.) so with Whale Rider (.) I mean
like an actor (.) it might actually be just a scene like
(.) you know a deserted beach or a you know
yeah yeah
it could be (.) as long as they can justify it (.) and
how that relates to the movie and the theme
and the audience
and the audience
that’s the big thing
connecting to=
=connecting to the audience (.) which they (.) couldn’t
seem to do in the qcat [(it] was most common
[mhm]
(0.4)
yes I think the trick is going to be make sure you get
what you need (.) without making it too hard (.) for
yourself (.) and for the kids (.) you know (.) don’t
overcomplicate it
mhm
yeah
I’ll see (.) I might even have (.) I’m just trying to
think (.) cos I (.) sometimes collect stuff (.) you know
when I go overseas and go to the shows↑
I was (.) cos I was just gonna say (.) like (.) both my
classes are all phase one=
mhm
mhm
494
Gwen: =and its been (.) a good week (.). of class work (.). on

the >plot summary<=

Liz: mhm

Gwen: =we haven’t done anything else you know (.). we haven’t

finished

Ross: =that’s alright (.). there’s still three weeks to go (.). [you only need]

Gwen: [I’m away for fi]ve days

Nell: =we’re missing two lessons this week

Judy: =that’s right (.). Monday Friday out this week=

Ross: =well if you’ve done [plots]

Judy: and I’ve got (.). that’s what I’ve got ( )

Ross: that’s plenty of time

Liz: okay (.). [just remember]

Ross: [two character] summaries [and a]

Nell: [primary] evil group

Teachers: ((laughter))

Liz: just remember though (.). you’ve had a lot of evidence

already (.). you’ve got all term three evidence (.).

you’ve got their folios (.). you’ve got your anecdotal

notes (.). ahm I don’t know that there’s going to be too

many surprises (.). are there↑

(0.2)

Gwen: =ah n:o but (I’m just saying)

Ross: [eh]

(0.2)

Gwen: but its impo- (.). if you’ve got a criteria sheet that’s

says to get an A you must have produced this much work

(0.2) then you have to give them the opportunity to

produce that much work (.). that’s all (0.2) and I’m just

saying that (0.2) there’s a very very short period of

time left

Liz: mhm

Gwen: incredibly short (.). and I have grade seven

Zoe: also the modified (.). the modified booklets are online

as well (.). I was going to say (.). if you (.)."they’re on

the drive now"

Eva: ‘ are there examples of advertising resources↑’

Judy: ‘yeah but is there some examples [on the net (.)] that we

can have a look at↑’

Ross: =Gwen (.). don’t worry

about quantity so much as quality (.). I know [it says

there]

Liz: [OH HERE

WE GO] ((looking at through resources on the computer))

Gwen: ( ) we’re still quite not finished

Ross: yeah

Zoe: the reason the reason I was just thinking about the

modified booklets was because for the modified ones I

just got them to do one I think (.). one character (.)

like in a whole page

Ross: yeah

Zoe: like if they only one character really well

Ross: yeah well that’s all they need to do across the board

Zoe: that’s why I changed that (common) modified

Ross: yeah

Zoe: (. ) there’s few other things too

Ross: just the main character

((teachers talk cluttered))

Zoe: they don’t need to do four (.). just do one really well
they can do the four in class when they practicing character how to do character profiles
you can do the rest of them after the assessment period the rest of the term the other three get that out of the way afterwards so that’s not as big as a task that they think if you’ve got plot summary one character or two at the most character description and one theme explored
they can draft it in class yeah ((teachers talk cluttered))
one week for plot one week for character one week for theme yeah I’ve already done the plot so it’ll be one week for character one week for the theme one week for the poster basically from now on
AH FOLKS these are two examples of some quite nice things did you see them?
what are they slides
counters well this is postcard size and it got an image and its got BEAUTIFULLY PERFORMED BY A MAN WHO KNOWS WHAT HE’S DOING TONY MARTIN yeah
so and then there’s somebody here that’s RICHARD WATTS TRIPLE ARTS SMART ARTS
smart arts
so and then (. so and there’s people’s (. eh director’s choice (. win in a little thing (. so and this one here is also interesting (. what’s this how many of those do you have
we don’t have any (. [we’ve gotta scan] them (. and then we’ve gotta give them back
[we’ve got one]
oh I do
couple that’s what I was gonna say (. we’ll scan them and then we’ll also colour copy
the interesting thing is (. see on the back (. this is a bit like a book mark (. it could be a book mark if it was just a bit slimmer (. ahm size (. and then on the back there’s stuff about you know (. oh you know (. again it’s a bit of information about where it is and where you can buy your tickets
make sure you read them
I don’t think there’s anything rude here (. some SMOKIN cos if there are they’ll find it ((laughter))
((reading)) razor sharp (. personal political ride (. plenty of sass (. I don’t think there’s any rude words on here (. its just (. but it is quite persuasive yeah (. its quite persuasive
so (. yeah
that’s the kind of style (. I think kids could do that what’s that what’s that sassy (. attitude (. yeah
thank you does that give you some more ideas that it doesn’t have to be too complex
435. Judy: you know
436. Nell: Talene’s got too much sass
437. Teachers: ((laughter))
438. Teacher: sass me girl
439. Liz: right ladies and gentlemen I think we’re finished (. ) so
440. please eat some more

END OF TRANSCRIPT