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TEACHER LEADERS IN SINGAPORE:

A STUDY OF TWO GOVERNMENT MANAGED SCHOOLS

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ABBREVIATIONS

CDAC	Chinese Development Assistance Council
CIP	Community Involvement Programme
COMPASS	Community and Parents in Support of Schools
DDM	Diploma in Departmental Management
EDU-PAC	Education Service Professional Development and Career Plan
EPMS	Enhanced Performance Management System
FPDE	Further Professional Diploma in Education
IP	Integrated Programme
ITE	Institute of Technical Education
LEP	Leaders in Education Programme
MENDAKI	A Malay self-help group
MOE	Ministry of Education
MUIS	Islamic Religious Council of Singapore (translated)
NE	National Education
NIE	National Institute of Education, Nanyang Technological University
RECSAM	Regional Centre for Science and Mathematics
SAP	Special Assistance Plan Schools
SEAMEO	Southeast Asia Ministers of Education Organisation
SIF	Singapore International Foundation
SINDA	Singapore Indian Development Association
TAF	Trim and Fit
TWA	Teacher Work Attachment
WITs	Work Improvement Teams

**TEACHER LEADERS IN SINGAPORE:
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BY

FRANCIS WU VEN YUEN

ABSTRACT

The concept of teacher leadership is based on the premise that those able to exert the most influence on educational changes and most likely to sustain such changes are teachers from and within the school. They can raise the quality of instruction, enhance both teacher development and student learning, and transform teaching from an occupation to a profession. This study conducted in two government managed schools in Singapore sought to identify the informal teacher leaders and delved into their work and impact on their school. A survey to identify these teacher leaders was developed based on generally accepted characteristics of informal teacher leaders. Once identified, a self completed questionnaire was used to gather demographic information and in-depth interviews were conducted. The study reveals that while informal teacher leaders exist in Singapore schools and share many similarities with their counterparts in other parts of the world, there are differences attributable mainly to the local educational system and its culture. Where teacher leaders are nurtured, they can contribute to the development of a parallel leadership and a better understanding of school leadership in the real context. This parallel leadership holds implications for the central educational authority and the school administrators in their leadership planning and development and ultimately the realisation of a better educational system for the students.

Chapter One

Statement of the problem

1. Introduction

School leadership has been recognised as a critical element in school improvement and reform (Silins, 1994a p.266).

The traditional pattern of school leadership in Great Britain, Australia and the United States, sometimes referred to as the Anglo-American or the Western world, over the last thirty years has invariably centred on the principal as the leader performing different roles at different periods of time in response to different needs (Grace, 1993; Hallinger, 1992). School leadership centred on the person of the principal has over time become institutionalised. Even with all the changes in the last thirty years (Murphy & Hallinger, 1992) principals and administrators continued to be responsible for the proper management of resources, and the teachers accountable for their teaching performance in the classroom (Grace, 1993). This linear and vertical relationship between school administrators and teachers tend to stress the importance of positional power and most schools continue to enshrine power through appointment.

2. The development of teacher leadership in the Anglo-American world

The release of *A Nation at Risk* (NCEE, 1983) in the United States of America focused American public attention on education. Against the backdrop of the cold war, the publication predicted dire consequences for the American economy and linked it to the need for immediate school reforms (Bracey, 2003). The first wave of reforms mainly in the form of legislatures was top down directed on how improvements could be achieved. The impact of the regulations usurped the authority of the principals, the teachers and local

educational boards and by the second half of the 1980s ushered in the second wave of reforms which resulted in the emergence of teacher leaders (Fay, 1992a; Barnett & Ginsberg, 1990; Smylie & Denny, 1990). Moller & Katzenmeyer (1996) traced three catalysts in the emergence of teacher leaders. Firstly, with the educational reform movement in the United States in the 1980s, teachers started experimenting with new approaches to teaching. They latched on to innovative methods like process writing, 4M Learning, co-operative teaching, and team-teaching which became increasingly successful when teachers started sharing their new teaching methods with other teachers and schools. Secondly, with the introduction of site-based decision making, teachers were required to be part of this school planning process. Teachers with their classroom experience could make valuable contributions especially when they were needed to implement the many changes proposed. They began to take on some form of leadership role. Finally teachers became part of a network or consortium of like-minded schools like the Coalition of Essential Schools, the Foxfire Teacher Outreach Network and the Puget Sound Educational Consortium (Lieberman & McLaughlin, 1992a) which promoted study groups, organised symposiums and provided leadership training for teachers. Teacher leaders emerged and began to assume responsibility for their own success. Thus teacher leadership became integrated with the effort to restructure schools.

This development in the United States led many educators to believe that educational changes stand the best chance of success when the teachers become part of the movement (Mayo, 2002; Johnson, 1989; Howey, 1988). Where teachers are engaged in self directed learning they create learning environments for themselves and their students (Aiken, 1998) and transform the school into a learning organisation (Katzenmeyer & Moller, 1996). Teachers represent the last reservoir of untapped leadership in American

schools and when released and channelled into both the learning and the decision-making process, can lead to the democratisation of schools (Gehrke, 1991). These views coalesced into a search for teachers with the ability or charisma to be part of the change movement and these teachers have been given different labels like *master teachers* (Bird & Little, 1985), *lead teachers* (Barnett et al., 1990), *dynamic teachers* (Rallis, Rossman, Phlegar & Abeille, 1995), *teacher leaders* (Lieberman et al., 1992a; Smylie et al., 1990), and *advanced skills teachers* (Crowther & Olsen, 1997b; Watkins, 1994). At the heart of this reform is the growing importance of developing new leadership roles for teachers. Implicit in the existence of this group is the sharing in the school leadership and a “redistribution of power and realignment of authority with the organisation” (Harris & Muijs, 2002a p.2).

Teachers in the United States supported this development as it provided new opportunities for professional development (Lord & Miller, 2000), acquisition of additional knowledge and skills to assist other teachers in their classroom teaching (Smylie et al., 1990), and training in leadership or as facilitators of change (Lambert, 1998; Fullan, 1993) thus raising the standard within the teaching profession (Mayo, 2002). Over and above these is a concern that existing school culture could impede and neutralize the progress that teachers were making independently but perseverance in their role as teacher leaders could “shift school culture in a direction that would support improved student learning” (Aiken, 1998 p.23).

In the United States teacher leaders tend to exercise an influence both within the school and the community (Harris, 1987) partly due to the way the American education system operates (Hume, 2005). Within the school there are numerous roles available to them dependent on their strength, experience, preference, environment and the needs of the

school. Within the community they can channel the resources of parents and the community in support of school programmes for the benefit not only of the students but the community at large. In whichever niche area they choose to perform, they are motivated by their “strong sense of values, knowledge, skills and professional development” (Rallis et al., 1995 p.6).

The development of teacher leadership is not confined to the United States though it is extensively documented there (Harris et al., 2002a; Barth, 2001; IEL, 2001; Sawatzki, 1999; Gehrke & Romerdahl, 1997; Yoder, 1994; Fay, 1992a; Troen & Boles, 1992; Futrell, 1989). However teacher leadership has also emerged in other parts of the world like Australia, Great Britain and New Zealand (Stone, Horejs & Lomas, 1997), though in different forms and in varying degrees.

In Australia, the trend to devolve authority to schools affected many of the states. Townsend (1999) made reference to the *Better Schools* which started in Western Australia in 1987, the *Schools of the Future* in Victoria in 1993 and the *Leading Schools* in Queensland in 1997. The efforts in Victoria in the words of Vern Wilkinson (1883), the past president of the Victorian Primary School Principals Association as quoted by Chapman & Boyd (1986), have resulted in “the principal relocated from the apex of the pyramid to the centre of the network of human relationships and functioned as a change agent and a resource” (Chapman et al., 1986 p.55).

The *Leading Schools* initiative in Queensland as studied by Cranston (2000) sought to improve learning outcomes for all schools by devolving the decision-making authority, responsibility and accountability to those who have the greatest stake in the success of the

students – the teachers. It became mandatory for educational reforms in schools to be school-based. This led to changes in the role and responsibilities of those in schools. Principals “moved from their role as leading professional to that of chief executive” (Murphy & Hallinger, 1992b p.82). The instructional leadership formerly exercised by them came to be taken over by the teachers (Cranston, 2000). In another development in Queensland, a five-year collaboration between Crowther of the Leadership Research Institute at the University of Southern Queensland, and Kaagan of Michigan State University in the United States led to the publication of *Developing Teacher Leaders* (2002), which explored the concept of teacher leadership and provided a framework for the development of a parallel leadership by teachers in schools. All these activities have brought teacher leadership to the forefront, emphasised the importance of the teaching-learning process and reflected a change in the role and responsibilities of leaders in schools. The emerging pattern involved teachers in areas of leadership which used to be the domain of the principals, or school administrators.

In Great Britain, the history of state schooling and remuneration has contributed to the system of hierarchical management with teachers continuing to exercise autonomy within the classroom (Harris, 2003a; Wallace, 2002). Though not considered civil servants, teachers remained public employees of the local educational authority or the schools. The 1980s witnessed legislations which sought to increase the power of school governing bodies, reduce that of the Local Educational Authorities (LEAs) and provide for the introduction of the national curriculum (Holt, Andrews, Boyd, Harper, Loose, O'Donnell & Sargent, 2002). While principals continued to be “responsible for the internal organisation, management and control of the school within the framework set by the school governing body” (Holt et al., 2002 p.49), the power relations “have shifted away from the

leading professional towards other interests, parents, community members, business and religious interests” (Grace, 1993 p.363).

The recent changes sought to reward teachers for high performance and the introduction of the *Advanced Skills Teachers* (ASTs) “enabled excellent teachers to progress as classroom teachers without having to take on management responsibilities and be rewarded accordingly” (Holt et al., 2002 p.336). In exchange those appointed as ASTs were expected to share their knowledge and skills with teachers in their school and even those from other schools. The threshold scheme was “intended to reward good teachers who want to remain in the classroom” (Holt et al., 2002 p.336). These changes were meant to support professional development of teachers and improve the quality of the teaching service.

Wise and Bush (1999) noted that the recent reform policies in Great Britain tended to change the outlook on the current division between the principal and the teacher but the impact has not been fully determined. Bell and Rowley (2002) observed in their study that British primary school principals in coping with their executive and professional demands “are shifting the burden to other colleagues, although which functions are delegated appears to vary between schools” (Bell et al., 2002 p.208). While this might lead the way to the early beginning of teacher leadership in Great Britain, Frost & Durrant (2002) maintained that the concept of teacher leadership in Great Britain is new and has not merited serious consideration.

3. The Singapore educational system

Unlike the American education system which because of its history and cultural values does not have a national curriculum (Hume, 2005), the Singapore education system takes its origin from the British educational system having been a British colony until it achieved its independence in 1965 (Ho & Gopinathan, 1999). It has a history of centrally controlled leadership from the Ministry of Education Headquarters (MOE) down to the schools (Ho et al., 1999; Zhang, 1994). Strong school leadership has always been recognised as of paramount importance. “The key to high performing schools is leadership. Effective leaders facilitate and contribute to the quality of schooling, the professionalism of teachers and the learning outcomes of students” (Teo, 2002 p.1).

This leadership resides in the school principals who are the clearly designated school leaders, the chief executive officers appointed and held accountable by the Ministry of Education for the performance and management of their schools (Teo, 2001b; Ministry of Education, 1999b; Yip, 1993). “Principals (as chief executives of their schools) must fulfil several responsibilities simultaneously and contend with multiple management challenges” (Teo, 2002 p.1).

Teachers in schools are generally grouped by subject areas each under the charge of a Head of Department (HOD) (Ministry of Education, 1999b). Principals are reminded time and again of the importance of team work as the key to performance in schools (Teo, 2002, 2000a). As they cannot work by themselves alone “school leader(s must) create the environment that will unleash the best creative energies (and) initiatives of your people” (Teo, 1999a p.3), and “build a strong team to give the best possible education to the pupils” (Teo, 1998b p.1).

Arising from the political, economic and social changes taking place both globally and locally (Goh, 1999), the Ministry of Education in the 1990s sought to make the education system nimble by emphasising on learner-centred schools which would promote values and thinking skills, through improvement in the quality of the teaching service (Teo, 1999b; Goh, 1997). With the devolution of authority to schools and the increasing autonomy enjoyed by schools (Ho et al., 1999; Chong & Boon, 1997), the role of the Ministry of Education and schools changed. The Ministry of Education would “set the broad directions and guidelines not detailed rules and procedure. Schools are in the best position to decide how to run their school programmes based on the students they have and the competencies of their staff” (Teo, 2000a p.2). This meant that principals have autonomy in the way they manage their schools.

With the introduction of the Education Service Professional Development and Career Plan (EDU-PAC) in 2001, teachers wanting to exercise leadership were offered new opportunities according to their “different talents, abilities and aspiration” (Ministry of Education, 2002 p.15). The plan provided for three broad fields of excellence – a managerial track, a specialist track and a teaching track (Ministry of Education, 2002). Success and recognition need not be measured mainly in terms of the managerial track as in the past. Those on the managerial track would include superintendents, principals, and heads of department and they could work all the way to senior appointments in the Ministry of Education Headquarters (MOE). The specialist track would build a core of specialists in MOE Headquarters charged with the leadership in curriculum development. Those who remain in the teaching track would include the newly designated Senior and Master Teachers who would be the recognised authority in classroom teaching and tasked with the mentoring of other teachers within and beyond their schools (Teo, 2001a). The

revised relationship and new expectations of the Ministry of Education have allowed good classroom teachers to exercise expertise leadership without leaving the classroom (Teo, 2001c, 2000e), and recognised the importance of their contribution to the service. This structure is meant to be flexible and teachers could move from one track to another provided “they meet the criteria and requirements of the job on the track they wish to enter” (Ministry of Education, 2002 p.15).

The new designations of Senior Teachers and Master Teachers apart from the additional remuneration, are awarded after a meticulous validation process (Ministry of Education, 2002). These appointment holders are charged with the development of good teaching practices within the school and the school clusters. The Senior Teachers “serve as mentor(s) and role model(s) for teachers within the school” (Ministry of Education, 2002 p.15), while the Master Teachers “(considered) the pinnacle in the Teaching track, operate at the cluster level and assist schools within the cluster” (Ministry of Education, 2002 p.15).

This structure underscores the importance of good and strong leadership in the school, the cluster and at Ministry of Education headquarters. The underlying assumption seems to be that leaders at all level would be recognised and accorded an official appointment. However this strong thrust for official leaders has illuminated an existing anomaly in the schools. There are some classroom teachers who had served as office bearers in professional organisations like the teachers unions and other subject related organisations (Tay-Koay, 1998), or as chairman of the staff welfare committee, advisors to teachers committees and for a few at the community or grassroots level. As they have some leadership experience, should they continue in their role and be recognised only

within the school or should they strive to be integrated into the official hierarchy? As their leadership in the school or organisation is of a voluntary and informal nature, it is best to identify them as the informal teacher leaders as against those appointed by the Ministry of Education with formal authority and known as school leaders. The latter are normally associated with the administration of the school. This distinction between the two groups of teacher leaders is important in this study.

4. The research problem

The Singapore educational system has always stressed the important role of the principals and those who hold official appointments like Heads of Department. Reflecting this importance, researchers at the National Institute of Education (NIE) have conducted many studies on various aspects of the formal leadership structure. School principals have been the subject of studies based on personality profiles (Lim, 1985), behaviour (Cheong, 1987), instructional leadership (Juma'at, 1990), and leadership styles (Zhang, 1999; Cheng, 1995; Thiruvangadam, 1994). Other researchers have focussed on the next level of leadership - Heads of Department (Seah-Tay, 1996; Chan, 1990). NIE conducts full-time courses for newly appointed principals and Heads of Department to prepare them for their new appointment in school (NIE, 2003). To complement this, the Ministry of Education continue to offer many incentives to those willing and considered capable of taking on such roles in schools (Ministry of Education, 2002). The recent structural changes introduced by EDU-PAC (Ministry of Education, 2002) have consolidated the leadership structure of the Ministry of Education.

Learning from the experiences of their counterparts in the Western world particularly the United States at the end of the twentieth century, educational reformers are convinced that mandated moves imposed on schools for improvement and change are unlikely to be effective (Katzenmeyer et al., 1996; Ovando, 1994). Rather, changes in schools can be sustained mainly by those in the system – the teachers, giving rise to the development of the concept of teacher leaders. This was reinforced by the growing popularity of transformational, distributed and team leadership concepts among the business world and their later acceptance by the educational community.

Singapore continues to rely on appointed and anointed leaders in schools. Of interest to Singapore educators is whether Singapore schools have undergone a parallel development on teacher leadership. This is further complicated by the differences in the two educational system and what exists in the West might not have developed or developed differently in Singapore schools. To avoid ambiguity in this study the leadership exercised by those formally appointed will be termed as formal teacher leadership as against those whose leadership devolved over the years in the school and known as informal teacher leadership. This study is concerned with informal teacher leadership in Singapore schools. If informal teacher leaders exist in Singapore schools and if they carry considerable weight and respect among the staff and the students, then it is important to understand them and include them in the context of local school leadership.

With the Ministry's move to regularise leadership in schools, a new concern is whether this group of informal teacher leaders will be tempted by the tangible rewards of the system (Teo, 2000c) and be integrated into the hierarchy, or will they eschew it and continue in a leadership role that is presently not recognised nor understood. As this is the

first study of its kind, the approach will have to be in phases. Initially there is a need to develop a theory-based model culled from reputable literature. This will be followed by a preliminary study and a final study. The data gathered will allow the construction of a model of teacher leadership in Singapore schools.

The research questions formulated for this study form the steps leading to the understanding of an informal teacher leadership model in Singapore. The chapters will be planned around the research questions. The research questions and the expected development are explained below.

Research Question 1: What type of teacher leadership structure is likely to emerge from a review of authoritative international literature?

The literature review in Chapter Two leads to the construction of a theory-based model of teacher leadership. The literature review covers characteristics of teacher leadership as seen in the United States, Great Britain and Australia. As this model is heavily dependent on literature from the Anglo-American world, it incorporates many Western practices which might not fit the Singapore education system.

Research Question 2: What aspects of the Singapore educational system and society are likely to influence informal teacher leadership in Singapore schools?

The literature review in Chapter Two examines the uniqueness of the Singapore educational system and its likely impact on the concept of teacher leadership when applied locally. However, if teacher leadership is indigenous in origin, then it would have gone through its own evolutionary stages within the

centralised system. There will be differences between the Singapore model of teacher leadership and that taken from the Anglo-American world.

Research Question 3: What revised framework for teacher leadership might emerge from a comprehensive preliminary study in Singapore schools?

The data collected from the preliminary study is likely to show both similarities and differences with the theory-based model. This will be reported in Chapter Four.

Research Question 4: What are the implications likely to emerge from the revised framework for informal teacher leadership based on the data gathered from the final interviews in the two schools?

One important implication is the concern of teacher leaders for the development and success of their students. Toward this end, they are likely to sacrifice much to achieve their objective. This is where they look to their colleagues for help and assistance to reach these students. Their success will be determined by a new factor – the support of the heads of department and the school principals. This will be further explored in Chapter Four.

Research Question 5: What model of informal teacher leadership will emerge in Singapore schools?

To round off the study, an additional fieldwork will be conducted among the teacher leaders to seek their views on the dimensions of teacher leaders as they perceive or practise it. It is likely that differences between the earlier preliminary model and this final model are due more to emphasis rather than a reversal of roles. This will be covered in Chapter Five.

Based on the changes taking place in the educational system, there will be pressure on schools to recruit the informal teacher leaders and integrate them into the leadership track to serve as Heads of Departments and then on to other posts of responsibility. If the pressure is too strong, this can mean the end of an informal network in the school providing a parallel leadership to the school administration, supporting and in turn be supported by the principal in the initiation of school improvement and in turn exerting considerable influence on school administration.

5. Significance of the problem

This study adds to the knowledge base of teaching in several areas. Firstly, it explores the experiences of a group of teachers who combine effective classroom teaching with informal leadership in school. While little is known of the effectiveness of informal teacher leaders in Singapore schools, judging by developments in other parts of the world, there is the possibility of informal teacher leaders contributing to school improvement. This is likely to impact the current thinking on leadership being confined or be centred on a person or persons or office and can result in the sharing and distribution of leadership among all within the organisation allowing different leaders to emerge and function at different levels and at different times (Johnson & Johnson, 1996). Informal teacher leaders, holding no official appointment but familiar with the working of the school system based on their own knowledge, pedagogy and driven by their own motivation to seek the best in their students, can be the new ingredient in school reform. More important, informal teacher leaders are likely to provide sustainable leadership as this is “embedded in the hearts and minds of the many and not rest on the shoulders of a heroic few” (Hargreaves & Fink, 2003 p.699).

The development of informal teacher leadership is of direct relevance to the Singapore educational system which has invested heavily on those identified for leadership appointment as principals (Teo, 2001e, 2000b) or as Heads of Department, Senior Teachers and Master Teachers (Ministry of Education, 2001c). This study demonstrates to the authorities the value of informal teacher leaders and the encouragement that can be extended to them. A network of informal teacher leaders can potentially complement the official leadership, minimise top down directives, give teachers a sense of ownership and contribute to superior performance (Teo, 2002). This cycle can start with the recognition and acceptance of this group of informal teacher leaders.

This study has implications for pre-service and in-service teacher education in Singapore. Teachers in their early years of service are expected to consolidate their knowledge and teaching skills and many of the in-service courses at Teachers Network are aligned to this objective (Teachers Network, 2003). The courses at Teachers Network have little to offer teachers in terms of the acquisition of special leadership skills or understanding and using leadership in their school environment except for the occasional mass lectures on leadership or the annual teachers' conference (Teachers Network, 2003). The introduction of three strands in the teaching service – the leadership track, the specialist track and the classroom track, has accentuated the differences between the leadership track and the classroom track. There seems to be a need to close the perennial gap between those with formal authority and given formal training in leadership and those who perform leadership roles in an informal capacity but denied such opportunities. The inclusion of leadership training in the existing in-service and even pre-service programme can stimulate and nurture more teacher leaders to contribute at some time or other. The

early introduction of leadership training for teachers can help the classroom teachers avoid the pitfalls of the immature leaders.

To the research community, this is the first study on informal teacher leadership in Singapore schools. While this study is confined to in-site investigation of informal teacher leaders in two selected government managed schools, there is a need to broaden the base and conduct sustained longitudinal studies which can be applied to the whole of Singapore. Of particular importance is the need to understand the motivation of the informal teacher leaders. It has been argued that teaching attracts those who feel that they are in a position to make a difference and contribute to the development of their students (Woods & Weasmer, 2002). Such teachers “place a high significance on the importance of psychic rewards derived from relations and successes with students” (Greenfield, 1995 p.65). Data on this aspect of motivation can be used by the Ministry of Education in their recruitment and retention exercises to minimise excessive turnover and build up the morale and professionalism of the teaching force.

6. Conclusion

This introductory description of teacher leadership is to provide a background on the issue of leadership in a school system. Increasingly many Anglo-American educators see the development of teacher leaders as a possible solution to the issues confronting their educational system albeit with its own limitations and constraints. While the rest of the world has taken note of this development, there is no uniform rate of development of teacher leadership worldwide. Every school and every educational system has its own idiosyncrasies and cultural influences to contend with. Whether the concept of teacher

leadership is acceptable and in what form will have to be determined by the individual recipient.

The distinction drawn between formal and informal teacher leaders is a direct result of the impact of cultural system. In the Anglo-American system where the system is decentralised, there is scope for leadership roles be it for formal or informal leaders whereas in a centralised system, the role of the informal teacher leaders are drastically reduced and limited to only programmes related to and consented to by the school. Thus the informal teacher leaders tend to be more of a localised than a national effort. The concept of the informal teacher leader is not entirely new to schools but to capitalise on their effectiveness both as leaders and classroom teachers will require a concerted effort firstly to understand it and then to effectively deploy them. Educators in Singapore will need to be aware of this group of teachers who can be both good classroom teachers and leaders and make a decision whether to recognise and capitalise on their potential, and deploy them in the capacity best suited to the overall mission of the educational system.

Chapter Two

Review of literature

1. Introduction

The outline in Chapter One on the development of teacher leadership in different parts of the western world is not meant to promote teacher leadership as a bottom up power movement nor is it about the assertion of teacher power or autonomy. Rather it is meant to convey some of the promises of teacher leadership that could be reaped as seen through the views of different writers. Realising the growing importance of teacher leadership, many universities and specialised educational bodies have sought to nurture this concept. The University of Minnesota (University of Minnesota, 2003), and Johns Hopkins University (Clemson-Ingram & Fessler, 1997), offer Master of Education programmes in Teacher Leadership, while the Puget Sound Educational Consortium (Puget Sound Educational Consortium of The University Of Washington, 1988), offers leadership training to teachers. In Great Britain, the National College for School Leadership (2003), conducts seminars and diploma courses to tackle issues of leadership development at different levels in school. The Leadership Research Institute of the University of Southern Queensland in collaboration with Michigan State University has developed a framework for the development of teacher leaders (Crowther et al., 2002). The programmes on teacher leadership emphasise knowledge and skills to allow graduates to assume teacher leadership positions from early career stage onwards (Clemson-Ingram et al., 1997).

While the value of a concept is often in the eye of the beholder, a more rational approach is to conceptualise teacher leadership as an evolutionary process in the school amidst the culture of the country and the institution. Thus teacher leadership that develops in a school is highly dependent on the school culture, the management philosophy of the principal and the board of management, the educational system of the country and the types of teachers recruited into the service. While schools might want to view teacher leadership as a “collegial dimension (incorporating) responsibility, mutual accountability and collaboration” (Frost et al., 2002 p.2), a centralised educational system might not be able to offer it opportunities for growth or development thus maintaining it at the beck and call of the administration.

This chapter seeks to examine the theoretical base for the development of teacher leadership, the likely impact of social and culture influences on its development, an understanding of the term *teacher leadership* and finally the characteristics of teacher leadership in those countries where the concept has developed. This will help in our understanding of the concept and allow for comparison with the type of informal teacher leadership in Singapore schools.

2. The theoretical base of teacher leadership

The efforts in restructuring education have affected the concept of school leadership and with it the philosophy behind educational leadership. Leithwood (1992) noted that while instructional leadership has served many schools well throughout the 1980s and 1990s, the restructuring efforts of the 1990s have caused many school administrators to accept transformational leadership to achieve the visionary leadership expected of schools in the twenty-first century. Just as many business organisations moved

from Type A to Type Z organisation in order to increase their productivity, schools are hoping to achieve the same positive results with transformational leadership.

Schools, possessing a complex organisational structure, have been affected by many changes. As happened in Singapore and Australia, the devolution of authority to schools and a high level of accountability expected of leaders meant a change in the leadership role of heads and teachers. In Singapore, “principals are expected to increase the possibility of innovation without dismantling what is working in the school” (Chong et al., 1997 p.464). In Australia hierarchical forms of decision making are quickly disappearing. “Principals (are) now expected to consult and reach consensus with a wide range of individuals and groups (in decision making)” (Caldwell, 1992 p.7).

This changing face of principalship and the accountability expected of them is clearly reflected in the publication of school league tables, quality indicators, appraisal procedures, profiling and differentially rewarding quality teachers (Caldwell, 1992). Consequently principals are assuming the key appointment in the managerial system and are less engaged in the school’s day-to-day curriculum issues. Hextall & Mahony (1998 p.138) quoted Fergusson’s (1994) comment that “the head teacher (had ceased) to be a senior peer embedded with a professional group...and is becoming a distinctive and key actor in an essentially managerialist system.” Principals are moving from routine managers (Goldring, 1992) to be heads of a decentralised system concerned with “helping develop within organisational members the capacity to craft solutions to locally identified concerns” (Murphy et al., 1992b p.82).

In view of the many new roles for principals, the instructional leadership role formerly exercised by them has increasingly been taken over by the teachers (Cranston, 2000). Principals have to depend on colleagues' support to share the greatly expanded leadership and management burden following central government reforms (Wallace, 2002). To remain effective in their new role, principals realized that they need to work fruitfully with their teachers to achieve success. Since they could not make changes alone or by command, they began to experiment with modified forms of leadership moving from transactional of the 1980s to transformational leadership of the 1990s. "Principals are eased into a metamorphosis, to change from transactional to transformational leaders" (Murphy et al., 1992b p.81).

Transactional leadership as explained by Tucker-Ladd, Merchant & Thurston (1992), "involves an economic, political or psychological exchange between the leader and the follower and involves the use of coercive power to penalise employees who do not perform as expected" (Tucker-Ladd et al., 1992 p.402). Transformational leadership, on the other hand, occurs when "leaders and followers motivate each other toward greater aspiration" (Tucker-Ladd et al., 1992 p.399). While maintaining the existence of a gulf between transactional and transformational leadership, Sergiovanni (1990) conceded that transactional practices contributed to the maintenance of the organisation and getting the day-to-day tasks done, but did not help in improvement. Leithwood & Jantzi (1999c) alerted us to the absence of a unitary concept in the literature on transformational leadership and as such it would be advisable to view transformational and transactional leadership as complementary representing opposite ends of the leadership continuum (Leithwood et al., 1999c; Leithwood, 1992).

Transformational leadership is seen by Silins (1994b p.274) as the “bond (between) leader and followers within a collaborative change process and contributes to the performance of the whole organisation...(as against transactional leadership which) does not bind leaders and followers in any enduring way and results in a routinised, non-creative but stable environment.” This implies a value judgment where transformational leadership is favoured over transactional leadership (Bogler, 2001; Silins, 1994b). “Transformational behaviour is conceived as higher order behaviour and its emergence depends on experience and learning” (Silins, 1994b p.275). Leaders for change are often characterised as being transformational in nature (Tucker-Ladd et al., 1992).

A study of Singapore schools by Cheng (1995) confirmed that teachers who perceived their principals as exhibiting transformational leadership were motivated in putting the extra effort and that effectiveness and satisfaction in schools are linked to the transformational leadership of their principals. A similar pattern is noted in Australian schools (Silins & Mulford, 2001) where satisfaction with leadership is dependent on the extent that school leaders are skilled in transformational practices and that “higher levels of teacher learning and leadership are more likely to occur where there are transformational leadership practices” (Silins et al., 2001 p.9). However, transformational leadership alone will not resolve problems (Crowther, Gronn & Townsend, 1997a). It can function well only if there is trust between the principal and the staff and within the staff (Lashway, 1995) thus emphasising once more the importance of having some form of teacher leadership, not working by itself, not functioning as an alternative administration but working together with the principal to effect and sustain school change. Originally this ability to inspire employees to look beyond self-interest and focus on organisational goals was seen as a personal quality but over time it came to be regarded as part of a broader

strategy and described as facilitative which is “power through and not power over others” (Lashway, 1995 p.2).

The facilitative style seems to fit the school context as teaching demands autonomy for the teachers and discretion on the part of the leaders. Facilitative leadership allows constantly changing responsibilities and patterns of relationship but holds the principal accountable. The school leaders remain at the centre of change and improvement “devoting extensive time and energy into team-building, communication networks and work on the school’s ideal and vision” (Black, 1998 p.35). Leaders are no longer in charge of followers but as part of a community of practice (Horner, 1997). The leader takes on new roles and responsibilities such as facilitation, coaching and managing relations outside the group. With this development the concept of leader and followers no longer fall into neat packages. Successful leaders need to facilitate other individuals to unleash their potential and abilities. However where the groundwork is not solidly laid, teachers could view the new roles and responsibilities as zones of indifference, outside their area of responsibility, causing irritation, resentment and even non compliance (Black, 1998). Where properly implemented this leadership style can allow multiple initiatives to start but the principal must maintain a balance between keeping a tight rein without discouraging innovation. Again it is important to convince the teachers and secure their co-operation when implementing changes (Teo, 2000e). Even as school leaders move into transformational behaviour, it has to be recognised that “principals are key but not exclusive leaders and managers” (Wallace, 2002 p.167).

The concept of leadership, as exercised by many rather than just the formal leaders, is gaining acceptance. In Great Britain school leadership and management remain hierarchical but widely distributed (Wallace, 2002). The same pattern is discernible in Singapore. The emergence of this pattern has led to the evolution of new leadership terms like leadership density, roving leadership, shared leadership and distributed leadership. Tracing the concepts of leadership density and roving leadership, Hess (1998) explains that “leadership density occurs when a few teachers take on non-traditional leadership responsibilities creating a culture that nurtures teachers as educational leaders” (Hess, 1998 p.50). An organisation wanting its change to be effective and sustained can achieve it when many leaders emerge from within the organisation to share, support and sustain the vision. Very similar to roving leadership is the concept of distributed leadership where the leadership function becomes a distributed process stretched over the organisation’s social and situational context (Spillane, Halverson & Diamond, 2001b).

Distributed leadership is based on the specialisation or competencies that people have acquired in any organisation or system. Such competencies can vary among people even in similar roles based on their preferences, experience or knowledge. Synthesising all these components require a good understanding of how the skills of one person can be complemented by those of others, and when the requisite skills are not forthcoming, the willingness to search for it from other sources outside the organisation (Elmore, 2000). “This collective leading depends on multiple leaders working together, each bringing some different resources – skills, knowledge, perspectives – to bear” (Spillane, Halverson & Diamond, 2001a p.24).

Distributed leadership in schools is not just assigning tasks to people. Implicit in distributed leadership is the development of the school and the community. When practising distributed leadership principals must know their teachers and community well – must know their areas of expertise, knowledge and skills and are able to recruit the best person to lead in a particular situation. It means that “the aggregated leadership of an organisation is dispersed among some, many or maybe all of its members. It allows for the possibility that all organisation members may be leaders at some stage” (Gronn, 2002 p.429).

Distributed leadership helps in an understanding of teacher leadership. In the first instance it allows teacher leadership to extend beyond those with formal appointment. It “incorporates the activities of multiple individuals in a school who work at mobilising and guiding school staff in the instructional change process” (Spillane et al., 2001a p.20). Secondly, it helps in understanding the social distribution of leadership – how school leaders work together and/or separately to conduct leadership functions. This stretched-over function shows “that distribution of leadership involves not only those who take responsibility for which leadership tasks but also how leadership activity is accomplished through the interaction of multiple leaders and followers” (Spillane et al., 2001a p.20). This suggests that the interaction between leaders could be more exponential rather than simple progression. Finally, distributed leadership implies interdependency among leaders and followers in the various roles and responsibilities that they share. From a distributed leadership perspective, followers constitute an important element in leadership activity. They “are best understood as a composing element of leadership activity” (Spillane et al., 2001a p.25). This interdependency is also ‘reciprocal’ and requires other members to facilitate the activity. “When authority and responsibility for decisions are shared, real

improvement takes root and survives and students' opportunities to achieve at high levels are increased" (Neuman & Simmons, 2000 p.10).

Distributed leadership opens up opportunities for more teachers to take on leadership roles and seems to be more democratic and collective in nature. It does not suggest that no one is ultimately responsible for the performance of the schools. In fact it requires the formal leader to create a culture or glue that will hold all in place. In practice, distributed leadership is more than the inclusion of the voice of others. It is the creative use of individual skills and abilities to maximise the human capacity within the school. It could form a rich framework for the study of leadership in schools (Spillane et al., 2001b). Distributed leadership requires all in the school and the community "to take responsibility for student achievement and to assume leadership roles in areas in which they are competent and skilled" (Neuman et al., 2000 p.10).

The practice of distributed leadership has helped teacher leadership to grow and develop. Frost et al. (2002) wrote that parallel developments have continued to stimulate the growth of teacher leadership. These developments taking place around the world are associated with the school effectiveness and the school improvement movement, and the democratic argument. While school effectiveness and school improvement are different in their approach and mission, both share a common objective, "a mutual involvement in educational quality and the importance of education" (Creemers & Reezigt, 1997 p.420). Drawing on different sources, Cotton (1995) of The Northwest Regional Educational Laboratory (MWREL) has synthesised the studies on effective schooling practices. She found that out of her three categories, the leadership of the teacher featured prominently in the first two categories dealing with the classroom and the school.

Teacher leadership can help reinforce the intangible concepts taught in the classroom – democracy and morality. As microcosms of the community, the school can teach these concepts best by the way it organises itself. Such values must be practised by the schools and especially the teachers to allow the students to imbue them. As Barth (2001) commented “the more the school comes to look, act and feel like a democracy, the more students come to believe in, practise and sustain our democratic form of government” (Barth, 2001 p.444).

The leadership of the teachers has a great bearing on the ethos of the school, which is one great determinant in improving student performance (Townsend, 1997). An effective school ethos requires teachers to practise good classroom management as reflected in the use of curriculum time, routines and the establishment of rapport with students. When teachers accept students as individuals, they spend time monitoring their performance and helping them overcome their difficulties both personal and academic (Tanck, 1994). Their success with their students both in and out of the class gains them the respect of the students, other teachers (Howey, 1988), and the administration (Yarger & Lee, 1994). This is the basis for the development of teacher leaders.

Meanwhile changes brought about by the world economic outlook and technological advances (Dimmock, 2003; MacBeath, Moos & Riley, 1998) have led to the growth of the global village. The free exchange of information from around the world had a great impact on education. Many educational authorities especially those in developing countries look to organisations and schools in first world countries to help them make the quantum leap to the status of a developed nation. This cross fertilisation of “educational policy, practices and even general management has made its way even to many of the

highly centralised educational systems of Southeast Asia” (Hallinger & Leithwood, 1996 pp.4-5). The success of others provided the developing countries with the legitimacy for their adoption.

To appreciate the success of any imported idea it is necessary to understand the influence of culture in the host country. Dimmock (2004) explained that culture embraces the “values, beliefs, traditions, symbols, folk lore, myths, rituals and ceremonies that distinguish one group of people from another” (Dimmock, 2004 p.308.). Hofstede (1995 p.152) defines culture as “the collective programming of the mind which distinguishes the members of one category of people from another.” Every culture, whether at the national or regional or even institutional level carries with it many sub-cultures. Thus any foreign idea being imported is confronted by the societal and organisational culture of the host country. Of the two, the societal culture is more difficult to overcome as it is rooted in values and beliefs whereas organisational culture is made up of practices rather than values and therefore easier to manage and change (Hofstede, 1995). Hofstede (1995 p. 159) concluded that “practices, values and theories and even the categories available to build theories from are products of culture.”

In interacting with policies and practices for adoption, societal culture will act as “filters and mediators” (Dimmock & Walker, 2000 p.307) but where ignored, can give rise to problems at the implementation stage. Cultural sensitivity is thus of paramount importance in dealing with new ideas and policies for adoption. As a case in point many writers in Yoder’s (1994) *Teacher leadership: an annotated bibliography* consider teacher leadership as part of the solution for sustaining school change and improving professionalism in the United States. When this concept is applied to the Singapore

context, it encounters a cultural barrier as education has long been considered a tool of manpower development for economic, social, military and administrative ends (Ho et al., 1999), and the organisational culture in the school is centralised in their leadership and authority. The societal culture will have to make adjustments to accept these ideas while the school will have to consider teacher leadership against its practice of centralised leadership and authority. Goh Chok Tong at the Seventh International Conference on Thinking Skills (1997 p.3) hinted when he said that “what is critical is that we fire in our students a passion for learning instead of studying for the sake of getting good grades in the examinations.” However the roots of history and culture continue to remain deep and in the words of Dimmock (2003 p.6) “while some aspects of culture are susceptible to change, other more deep-seated cultural characteristics, forged over centuries remain stubbornly in place.”

The cross-cultural framework proposed by Dimmock et al. (2000) has six cultural dimensions based on sets of polarities to help us better understand the impact of societal culture. In this respect every idea making its way to a host country has to be considered vis-à-vis:

- The location of power i.e. whether the power structure is centred or dispersed;
- The group orientation i.e. whether individuals are influenced by the group or by self interest;
- The level of competitiveness i.e. whether there is a need to achieve or to be supportive;
- The prevailing attitude of the people i.e. whether the people are proactive or fatalistic towards change;
- The society’s outlook and its predisposition to creativity or to replication, and,

- The level of interpersonal relationship i.e. whether rules are applied equally to all or whether kinship or patronage counts.

Thus whether the concept of teacher leadership when applied to Singapore will retain its basic characteristics or be so changed by societal culture to produce a new creation or maybe even totally rejected will be determined by these six dimensions. In addition, the concept has to contend with the acceptance of distributed leadership, the organisational culture and the personal attitude of the principal and the staff toward authority and leadership in the school.

Within the school, the culture of leadership affects the growth and development of teacher leaders. The confidence and willingness of principals to share authority and decision making with their teacher leaders on a school-wide basis nurtures their growth (Barth, 1988, 1987). Teacher leadership has always been assumed to be present when a principal is able to persuade or delegate part of the administrative work to some of the teachers. Teacher leadership is more than that. Teachers must be change agents (Fullan, 1993) and more so when they do not have a formal role. They have to be equally at home in the classroom improving the conditions for learning as in working with others to bring about continuous improvement. Barth (1990) wants everyone in school, principal, administrators, teachers and pupils, to be a chief of something or other.

In reality much depends on the context of the school and the educational system it is affiliated to. Where schools operate independently and are responsible only to their respective boards of management like those in the United States, the latitude for school leaders to experiment is greater than schools like those in the Singapore educational system, where even with the devolution of authority, the line of accountability remains very clearly marked. In the Singapore situation, it is likely for the principal to want to exert more influence to achieve targets needed to place the school favourably in the league tables and in work performance. As such teacher leaders are likely to be confined to relatively minor roles and limited in their initiative. This does not help in their leadership development and partially explains why the concept of teacher leadership remains relatively undeveloped in Singapore schools. Yet within these constraints, it is possible for some form of teacher leadership to develop especially when working with the concept of distributed leadership. This concept allows different members to perform a variety of functions including the leadership function at different times. It benefits both the individual and the schools as this is “one of the most concrete and direct approaches available for improving a person’s leadership skills, for improving the effectiveness of the group” (Johnson et al., 1996 p.198).

Teachers and more so the teacher leaders help schools remain effective by attaining a high level of consistency in output together with the sharing of common values and collegiality among staff (Sammons, Hillman & Mortimore, 1995). Thus teacher leaders are an important phase in the development of effective schools. In a similar vein, effective learning in school is strongly influenced by teachers’ involvement not because they had to implement a new programme or syllabus but because they believed in it (Greenfield, 1995). There has to be a culture of on-going professional development among all members

of the staff – an environment closely related and fostered by staff collegiality. Elmore (2000) commented that collaboration and collegiality among teachers is a necessary though not sufficient condition for improvement. Dimmock (1993) is confident that while the linkage between staff collegiality and improved student learning has yet to be systematically tested, there is increasing evidence of this.

Another development at the organisational level is the competition among schools to recruit quality students for its programmes. This new role places additional demands on the teachers which far exceed their traditional pedagogical skills. Teacher leaders use this opportunity to rally their colleagues and persuade them to acquire new skills to market their school, plan new programmes to attract students (Robenstine, 2000) and improve on their efficiency (Sherrill, 1999) resulting in gains not only for themselves but ultimately for their students (Moller et al., 1996).

The environment at both the national and the organisational level will determine the feasibility of the concept of teacher leadership in Singapore schools. Where the concept has an indigenous origin, then the importation of the concept will encourage its growth and development but not necessarily along the imported lines. Where it is entirely new, then the concept will undergo some form of adaptation to fit the local educational system. The exact nature of teacher leadership in Singapore can only be ascertained after the study has been completed.

3. Dimensions of teacher leadership

As part of the school restructuring effort in the last century, policy makers and school administrators in the West have adopted and adapted many management and leadership models from the business world for implementation in schools. This attempt has produced mixed results (Cohen, 2002; Bush, 1995) as schools are very different from other organisations in many critical areas (Dimmock et al., 2000; Greenfield, 1995).

School leaders have moved from the traditional coercive power enshrined in the person of the principal to that of power derived from other sources like expertise and empowerment of teachers (Leithwood, 1992). Leadership has become “a process of influencing others to achieve mutually agreed upon purposes for the organisation” (Patterson, 1994 p.3). Self-leadership and the super (self) leader should lead others to lead themselves (Horner, 1997) making leadership a highly complex and interdependent phenomena involving “learning together, constructing meaning and knowledge collectively and collaboratively... generating ideas...reflect(ing) and creating actions...out of these understandings” (Lambert, 1998 pp.5-6).

School leadership continues to remain complex requiring more than one leader exercising different forms of leadership. This explains the value of teacher leaders who are able to serve in the true democratic fashion empowered with knowledge and experience of the classroom and with the support of their fellow teachers, to bring about lasting changes in learning and teaching from and within the school system. Teachers of the future apart from actively improving the conditions for learning must be equally at home in the classroom and in working with others to bring about continuous improvement (Fullan, 1993).

As the concept of teacher leadership evolves there is a need to have a common frame of reference. In its original context teacher leadership was “based on a premise that the specific responsibilities...should not be prescribed a priori but should be varied, flexible and idiosyncratic” (Smylie et al., p.157) so as to be able to meet the needs of individual schools. Since then many definitions have arisen. Fay (1992a) in her paper presented at the American Educational Research Association characterised a teacher leader as “a practising teacher, chosen by fellow faculty members to lead them...has formal preparation and scheduled time for leadership role which (has) neither managerial nor supervisory duties” (Fay, 1992a p.6). This definition seems to differentiate between teacher leaders formally appointed by the administration and with supervisory functions and those selected by the staff, independent of the school administration and without supervisory duties i.e. formal and informal teacher leaders. Ovando (1994) and Leithwood, Jantzi & Steinbach, (1999c) have mentioned this distinction between formal and informal teacher leaders.

Others like Lord et al. (2000) and Moller et al. (1996) see teacher leadership as a generic term depicting a variety of roles. There are teacher leaders who have been taken out of the classroom fulltime, assumed leadership role in a formal capacity and tasked to “promote changes in classroom practice among large number of teachers” (Lord et al., 2000 p.1). Other teacher leaders are those while remaining in the classroom assume leadership role over and above their teaching duties. In this they differed from Fay (1992a) in that teacher leaders could include non-practising classroom teachers but LeBlanc & Shelton (1997 p.32) quoting from Pellicer and Anderson’s (1995) *A Handbook for Teachers*, stressed teacher leadership as the “ability...to engage colleagues in experimentation...and instructional practices in the service of more engaged student

learning.” Childs-Bowen, Moller and Scriver (2000 p.28) were in general agreement with that definition but added the proviso that their definition “does not focus on teacher leadership as an alternative track to the administration.” Thus the whole objective of teacher leadership seems to be geared to the improvement of student learning.

In presenting their study LeBlanc et al. (1997) expanded the concept of teacher leadership to include “modelling positive attitudes,...devoting time to make the school work better, enhance student learning through improved pedagogy and finally being valued and appreciated for their effort” (LeBlanc et al., 1997 p.33). Crowther, Kaagan, Ferguson & Hann, (2002) commented that while the many traits used to define teacher leadership are valuable, these are the manifestations of a mature profession. They prefer to see teacher leadership in terms of a framework “to achieve whole school success...applying the distinctive power of teaching to shape meaning for children, youth and adults and contribute to long-term enhanced quality of community life” (Crowther et al., 2002 p.10). This supports Yoder’s (1994) caveat that teacher leadership has never been clearly defined.

These views reinforce the need mentioned in Chapter One to differentiate between formal and informal teacher leaders. For this thesis, informal teacher leaders are likely to be:

- Intrinsically motivated in their dealings with the school’s stakeholders;
- Active and successful in their classroom teaching activities;
- Held in esteem by their colleagues because of their good classroom achievements and practices;
- Concerned about improving student learning and achievement;

- In the forefront of pedagogy, personal and staff development thus influencing the learning process in the school;
- Initiators and achievers of programmes or projects in school within the constraints of their school or educational system, and,
- Not beneficiaries of an official appointment neither do they serve as an alternative to the administration.

This definition captures the essence of informal teacher leadership. Unlike the past when teachers who want to play a leadership role have to surrender their classroom practice and be promoted for a leadership role for which they might not have been properly trained or desire, the informal teacher leaders continue to break new grounds with their classroom teaching - their forte and the basis of their recognition by their colleagues. Their track record as good classroom teachers reinforces their leadership role and explains the support given to them by their colleagues. “They share their expertise, volunteering for new projects and bringing new ideas to the school” (Leithwood et al., 1999c p.187). Informal teacher leadership emphasises the importance of collegiality and the contribution of every teacher to the achievement of their common mission, centred on improving student learning. In different ways, these teacher leaders contribute and sustain school improvement and give a better understanding of how school leadership can be reconfigured. It should be stated at this juncture that such a leadership role takes time, determination and support to grow and develop.

Being a dynamic concept varying from time and place, researchers have tried to classify the characteristics of informal teacher leaders through the nature of their work. This review focuses on studies conducted over the last decade. The literature review

shows that researchers have differed in their perception of teacher leadership, from the simple to the more complex. Gehrke et al. (1997) representing one of the earlier comprehensive studies on teacher leadership used small-scale free standing case studies, while the latest framework on teacher leadership presented by Crowther et al. (2002) represented years of longitudinal studies and spread over two continents. Two other studies, Katzenmeyer et al. (1996) and Harris et al. (2002a) complete this selection. These four groups of authors represent the stages in the development of teacher leadership over time, sophistication and complexity.

Gehrke et al. (1997) *Teacher leaders: making a difference in schools*, was commissioned by Kappa Delta Pi “to explore critical issues in education in ways that develop new knowledge and new understandings”(Gehrke et al., 1997 p.ii). Gehrke and her co-author Romerdahl in sharing their observations gathered over the years, initially at the University of Washington and subsequently at professional development centres and with teachers in schools wrote that teacher leaders are:

- Innovators: as in their willingness to learn and introduce new approaches in their classroom and sharing it with other teachers;
- Action directors: as in their willingness to be involved in planning, keeping track and parcelling out tasks fairly that ultimately would affect the performance of the school;
- Logical leaders: as in their willingness to spend time listening, discussing and analysing the situation before selecting the best approach for the school, and,
- Caring leaders: as in their willingness to engage in gentle persuasion using care and concern to guide other teachers.

In their book *Awakening the sleeping giant*, Katzenmeyer and Moller(1996) both staff developers in the Broward County Public Schools (Ft. Lauderdale, Florida) for the past decades, focused on leadership training programmes for teachers. They concluded that teacher leaders are likely to exhibit:

- A leadership role over students and teachers. As teacher leaders they exercise a leadership role over their students in the classroom and in the school when they mentor or coach, introduce or share new methodology or approaches to teaching with their colleagues. Other researchers have noted this aspect of their leadership. Leogrande (1995) wrote that teacher leaders strove beyond the acquisition of mere content knowledge while Wilson (1993) and Smylie et al. (1990) observed that they sought challenges, changes and growth for themselves and their students. They regard themselves as part of a big family in the school and are ever willing to be a resource or an advocate.
- An involvement in the organisation of events or functions. Teacher leaders are engaged often in this activity. Gehrke et al. (1997 p.44) commented on teacher leaders who led by “organising, supervising, and mentoring, some by inquiry and some by throwing a party.”
- Participation in decision making. Often teacher leaders are invited by the school administration, members of the staff and even the community to deliberate and share in this function. More recently teacher leaders are involved in school improvement teams. They are keen on promoting participatory decision making, and collectively exercise greater control over the initiation and implementation of changes and sharing leadership with work apportioned among the members. They do not want to be set apart from their colleagues nor be considered an administrator or a leader (Fay, 1992b; Smylie et al., 1990).

Mackenzie (1995) in her journal recalled how a teacher leader resolved the issue of discipline in the school. By writing to the principal it helped the teacher leader to articulate her vision of the school and in submitting the proposal as a team effort; it represented their combined vision and beliefs. The teachers became part of the solution. Fullan (1992 p.19) wrote that systems which placed “too much store in the leader as solution compared to the leader as enabler of solutions lead to short-term gains (and) superficial solutions.”

In conducting the literature search for their paper *Teacher leadership: a review of research*, Alma Harris and her co-author Daniel Muijs (2002a) used an earlier publication by Harris (2002c) which established the four roles of teacher leaders. The four roles are best seen through interpersonal lenses as when they are involved in brokering, participative, mediating and relationship building activities.

- In the brokering role, they translate the principles of school improvement to fit classroom practice. Katzenmeyer et al. (1996) referred to this as the leadership of students and teachers. Wilson (1993) felt that teacher leaders failed to develop visions. While they could articulate personal goals they were uncertain about school-wide goals. Later studies by Aiken (1998) and Gehrke et al. (1997) showed that as teacher leaders worked with a wider audience including board members and the community, they acquired skills and experience to help shape the vision for their school. Cole, a teacher leader in Paula Harter’s (1995) study, mentioned by Gehrke et al. (1997) not only performed the visionary function but sustained it in her school.

- When exercising participative leadership teacher leaders rally their colleagues around a development and foster more collaborative ways of working. They use peer coaching to encourage teachers to try out new approaches (Knight, 1990), but refrain from one-to-one helping unless it is accepted or expected (Smylie et al., 1990). The caring leader (Gehrke et al., 1997) is a most reassuring figure here.
- The mediating role allows them to exercise their expertise and information to either help their colleagues to improve on their professional practices or bring their expertise to bear on projects for student development. Aiken (1998) mentioned that when teachers are responsible for self directed inquiry about their own teaching practices they create a strong learning environment for themselves and their students. Silins et al. (2001) reached a similar finding. Romerdahl (1991b) explained that while teacher leaders work silently and unseen, they are not averse to the use of their training as a basis for legitimacy.
- They forge close relationship with their colleagues. Teacher leaders use the impact of their classroom teaching and experience to negotiate collegial relations with their peers (Leogrande, 1995). They are alert to opportunities for improvement and are willing to guide their colleagues to meet school objectives and vision. While they do not condone the behaviour of colleagues with low commitment to their students, professional norms do not allow them to express any form of disapproval (Wilson, 1993).

A comprehensive study by Crowther et al. (2002) led to the development of a framework to better understand teacher leadership. They assert that:

- Teacher leadership is grounded in a vision of a better world for their disadvantaged students and they intend to make a difference in the lives of their students. This places teacher leadership on a moral and personal level, similar to that of the principals. Leithwood & Riehl (2003) observed that increasingly teacher leaders work with more diverse and disadvantaged group of students with different degrees of success. The more successful teacher leaders tend to create strong communities in school to engage the students in learning and through positive relationship with the students and their families expand their students' social capital and nurture the development of the families' educational culture.
- They work for authentic teaching which would link all aspects of the students' learning to their future. This expands on Harris et al. (2002a) brokering role. Leithwood et al. (2003) explained that when teacher leaders create high performance expectations they help both students and teachers see the nature of the goals being pursued and through monitoring, they encourage both teachers' and students' progress.
- The teacher leaders are for school-wide approach to learning and they facilitate such activities while respecting the individual. It is similar to Harris et al. (2002a) mediating role. They make use of collegiality to form alliances and groupings to make this approach a reality. Aiken's (1998) *Teachers as Leaders* group expressed their need to be teacher leaders so as to counter the existing school culture which they felt could impede the progress that they have

contributed independently. As teacher leaders they could shift and re-sculpture the school culture to support and improve student learning.

- Teacher leaders improve the lot of marginalised students by working with the administration as allies rather than opponents. This seems to reflect the feeling of many teacher leaders that as they lack formal authority they need to recruit the administration as their partner in their quest. To complement that development, Leogrande (1995) pointed out that teacher leaders are continuously aware of the parallel need to foster student responsibility in the learning process and to look for creative ways to motivate students from different backgrounds and abilities. Thus they are willing to expend substantial amount of time and energy on their students (Wilson, 1993).
- Teacher leaders are good at organising complex tasks and maintaining networks among colleagues, characteristics also noted by Katzenmeyer et al. (1996). Teacher leaders serve as leaders in a variety of ways, formally and informally, traditionally or in newer functions ranging from supervising and peer coaching of teachers (Ash & Persall, 2000), to less complex roles as in recognising the success of others. Others act as site supervisors for student teachers in collaboration with the local education colleges or as chairmen of councils, making decisions on issues affecting the school, curriculum and even allocation of resources (Harris et al., 2002a) which formerly used to be the domain of the administrators. Katzenmeyer et al. (1996) and Gehrke et al. (1997) have alluded to this too.
- Teacher leaders are not satisfied with the status quo and instead seek opportunities for teachers and students to gain and experience success and recognition, generating pride and sense of achievement within the community

without taking the credit. This dimension seems to be absent in the observations of the other writers but is of great importance especially when dealing with informal teacher leaders.

There are other researchers who have stressed on singular aspects of teacher leadership. Ash et al. (2000) and Childs-Bowen (2000) have espoused the importance of teacher leaders being involved in action research as the basis for improvement and development. Leogrande (1995) among other factors studied the role associated with one's personality. Smylie et al. (1990) study of the district-wide teacher enhancement programme based on the *Lead Teacher* concept confirmed the variety of roles played by teacher leaders to meet specific school and local leadership needs. These aspects of teacher leadership, gathered over the last decade, have been regrouped under four generic headings for greater clarity and should be seen as part of a continuum in our understanding of teacher leadership.

Table 1: The main dimensions of teacher leadership based on literature review

Dimensions of teacher leadership as described by						
	Description	Gehrke et al. (1997).	Katzenmeyer et al. (1996).	Harris et al. (2002a).	Crowther et al. (2002).	Others
1	Innovative leadership with students.					
1.1	Authentic classroom teaching for high performance.			× Brokering	×	O'Hair et al. (1997).
1.2	Motivation of students to achieve high performance.	×	×	×	×	
1.3	Nurturing a culture of success.				×	
1.4	Being a role model to students and teachers.	×	×	×	×	Lieberman, (1992b), Sanders et al. (1994).
2	Innovative reforms on curriculum matters.					
2.1	Encouraging teachers to achieve and maintain high standards of professionalism.	×	×	×	×	
2.2	Acquiring and sharing of new approaches to teaching for improved performance.	×	×	× Brokering /mediating	×	
2.3	Rallying teachers around new development.	×	×	× Participative	×	

Dimensions of teacher leadership as described by						
	Description	Gehrke et al. (1997).	Katzenmeyer et al. (1996).	Harris et al. (2002a).	Crowther et al. (2002).	Others
2.4	Maintenance of network and collegiality to promote school vision and objectives.	×	×	× Relationship/ Participative	×	
3	Involvement in school development.					
3.1	Work towards acceptance by the administration as part of the decision-making process.		×	×	×	
3.2	Share decision making with teachers through distributed leadership.	×	×	×	×	
3.3	Willing to listen, discuss and analyse situations to produce results/ideas or in planning action research.	×	×	× Participative	×	× Ash et al. (2000).
3.4	Collaborating with, rather than confronting the administration in solving problems.	×	×	×	×	
4	A conglomerate of factors relating to the individual.					
4.1	Personal beliefs like respecting individual differences in students and colleagues.		×	× Relationship	×	Wilson (1993), Lashway et al. (1996).
4.2	Promotion of a better world for students and their need to experience success and recognition.			× Brokering	×	Leogrande (1995).
4.3	Importance of self development to benefit school.	×	×	× Mediating	×	Lieberman (1992), Silins et al. (2001).
4.4	Be a role model on citizenship.	×	×	×	×	Lieberman (1992b), Sanders et al. (1994).
4.5	Effective interpersonal skills with students and colleagues.	×	×		×	Leogrande (1995).
4.6	Ability to plan, organise and effectively monitor and complete tasks (with passion and energy).	×	×	×	×	Leogrande (1995), Lashway (1996).

This framework categorises the four areas deemed to have embodied the essence of teacher leadership. In their first role, teacher leaders found that they could no longer draw on the authority of the school as in the past. Their classroom stability has changed due to the character of students and their sub-cultures. Teacher leaders realized that “students arrive at school poorly prepared to succeed with little or no parental support and these students represent an increasingly diverse collection of races, ethnicities, cultures, languages and social classes” (Greenfield, 1995 p.66). To remain effective in their

classroom teaching, teacher leaders began to depend more on influence than on authority associated with their office or position. They have to find new ways to motivate their students and give them a sense of success and achievement.

In dealing with curriculum and pedagogy improvement, the teacher leaders have learned that in the absence of formal authority they had to rely on other soft skills and networking developed over time and even role modelling. Being effective classroom teachers, they possess expertise power which they can share and build up their collegiality with others in the school community. Their willingness to be involved in staff development and new training gave them access to new sources of influence. Working in a school environment of equality, privacy and autonomy they have to be accepted in their leadership role. As part of the teaching confraternity they are less threatening to their colleagues and the use of distributed leadership allows all to share in the decision-making process. This in turn gains them greater support from their colleagues. This collaboration with the staff demands time, patience and perseverance.

Teacher leaders have found that even within the classroom, they have limited authority over curriculum and teaching methods which are the products of the school culture and the peculiarities of the educational system. To introduce new approaches and methodology they need the support of the school administrators and more so when these require investment in terms of time and money by the school. While teacher leaders are willing to try out on a small scale within their classroom and where successful use it to win over the support of their colleagues and their administrators, the sanction of the school administrators can hasten the process and multiply the gains. Collaboration and not

confrontation remains the best way in dealing with the school administration and other bodies in the school and the community.

Finally teacher leaders cannot be effective unless they possess some basic skills and attitudes. This conglomerate of factors as discussed by Lashway, Mazzarella & Grundy (1996) include character, personality and personal beliefs, sense of security, communication, interpersonal skills, and involvement. While no one trait can be used to explain everything about leaders, there is growing evidence that effective leaders do have a combination of these factors including high levels of energy. Character and personal beliefs guide the leaders in what they intend to accomplish. Personality is often neglected and includes being sociable, having good psychological health and even charisma. Security explains the person's willingness to take risks and be able to articulate ideas and persuasively. These additional aids are important to teacher leaders.

This framework explains the impact of teacher leaders on their colleagues, students, administrators and even the community. Crowther et al. (2002) noted that a framework represents an ideal image of how teacher leaders can influence their school community but no one has met all the elements. Most teacher leaders are likely to have some of the requirements. Mackenzie (1995) concluded that there would be many types of teacher leaders. Boyd-Dimock & McGree (1995) in reporting on *The Leadership for Change* project at Southwest Educational Development Laboratory (SEDL) has noted its success with schools in promoting teacher leadership and change. In the words of one of the teachers, "we're probably 56 years ahead of schools around us. We have been on that leading edge because of the attitude of the administration that we should be leaders" (Boyd-Dimock et al., 1995 p.4).

4. Obstacles to teacher leadership

While teacher leaders remain a potent force capable of sustaining reforms due to the variety of roles they play in the schools, they face many obstacles which can hamper their usefulness as teacher leaders. Harris et al. (2002a) have categorised these into two main groups viz. organisational and professional barriers. There is yet a third group of influences originating outside the educational context and within the individual corresponding to the factors mentioned by Lashway et al. (1996). This third group termed personal considerations “can both support and impede teacher leadership”(Zinn, 1997 p.17).

In many organisations, information technology and changing demands have required quick responses from the management causing the vertical hierarchy to be progressively replaced by networking and collective decision making (IEL, 2001). The management tends to become leaner to survive. Although schools try to emulate many of the management changes taking place in the business world, schools continue to be hierarchically managed (Blandford, 2000; Rogus, 1988) with a top down leadership model (Katzenmeyer et al., 1996). A rigid structure is not only an anachronism but also a great impediment to the development of teacher leadership. Teacher leadership emphasises the importance of close relationship with the principal, colleagues and even confidantes. Where this central element is lacking, the role of the teacher leader diminishes (Smylie & Brownlee-Conyers, 1992). Bascia (1996) reported an incident where the supervisor did not respect the expertise and authority of a Black teacher leader and this discouraged his attempt at broader organisational roles.

The organisational structure of the school obliges many teacher leaders to play multiple roles. Teacher leaders normally carry a regular teaching load with the leadership role being added on (Ovando, 1994). Other teacher leaders take on professional development activities (Lord et al., 2000) like conducting workshops in school or at other agencies or in follow-up activities with their colleagues. Mozella Carroll, a reading teacher from Louisiana when interviewed by Moller (1999 p.14) reported that “teaching, communicating with parents, networking with teachers and working with students is no easy task. At a minute’s notice, I have to be ready to take on any one of the responsibilities.” This was similarly reported by Lord et al. (2000) that the teachers in his survey had to respond to crisis situations, take on teacher evaluation responsibilities that a principal is unable to do or deal with disciplinary matters. The broad range of activities have caused them to voice their concern about the time factor or rather the lack of time (Boyd-Dimock et al., 1995) in doing both roles as teacher and leader. Thus many teacher leaders have to perform a variety of non-teaching duties and new tasks which they were not previously responsible for (Weiss, Cambone & Wyeth, 1992). LeBlanc et al. (1997) reporting on the earlier findings of Carter & Powell (1992) wrote that teacher leaders faced with this arrangement, had to reduce the time with their class in order to perform their leadership role. Where they tried to minimise the time lost with students they had to extend their working time to after school hours (Ovando, 1994). It would seem to suggest that the more successful the teacher leaders, the greater their range of responsibilities. This is stressful and causes anxiety to many of the teacher leaders (Wilson, 1993) as well as reducing their time with their colleagues.

In an earlier study Fay (1992a) noted that there were teacher leaders who wanted to avoid the dedicated work syndrome. They did not want to spend many hours on non-teaching responsibilities after a full day resulting in burnout, inefficiency and futility. The exact time required by teacher leaders for their leadership role had never been determined. Inherent in this problem is the need for time to perform leadership roles and yet able to engage in their teaching mission which is at the core of their authority. While Gehrke et al. (1997) reported instances where teacher leaders were allocated time during the day for leadership responsibilities this administrative overload remains an area of concern and can have an impact on their personal lives (Ovando, 1994).

A perennial problem faced by teacher leaders is their lack of leadership training (Buckner & McDowelle, 2000; OERI, 1999; Boyd-Dimock et al., 1995). Pre-service training concentrated on content and skills of beginning teachers, as teachers were not expected to exercise leadership functions till much later. The IEL report (2001 p.11), recommends that “more institutions need to think about exposing future teachers to discussions on the larger policy issues of education...the professional, cultural and political world they are to inhabit.” This lack of training, clearly manifested not only in lack of leadership skills but also in related areas like consensus seeking, shared decision making, and communication (Weiss et al., 1992) has caused initial conflicts with administrators and peers from which they found it difficult to extract themselves. Instead of interacting with colleagues in a collegial way, they tended to be bureaucratic leaders giving instructions thus becoming the target of teachers who are jealous of their autonomy and administrators who are alarmed at this infringement of their authority (LeBlanc et al., 1997). However for teachers who have worked in the service, their perspective is different as shown by Knight’s (1990) study of teacher leaders who were in the Peer Assistance and Review

(PAR) consultant teacher leader programme. Although the majority of the consultants felt that they were inadequately prepared to take on the role, they believed that their on-going training was adequate due to their years of teaching experience and leadership roles they had undertaken in the past. They even perceived the right and responsibility to do peer evaluation.

In the past the professional roles in schools were well defined with teachers being responsible for the performance of the students, and the principal the well-being of the school (Troen & Boles, 1994). The many changes in the educational system have caused new demands to be made on teachers, and many teachers resent the idea of being caught in the middle. Teacher leaders might find it necessary sometimes to require their colleagues to do what they might not otherwise do. The imposition of specific instructional methods on colleagues appears an intrusion to the norms of equality, privacy and autonomy and can cause teacher leaders to hesitate (Buckner et al., 2000). Their unwillingness to face such conflicts can once again confine the teacher leaders to the safety of the classroom (LeBlanc et al., 1997). So unless clear boundaries are set demarcating responsibilities and decision making for teacher leaders, problems result (Boyd-Dimock et al., 1995). Interrelated with this role confusion is the need for teacher leaders to learn how to handle sensitive information about their colleagues. Very often teacher leaders are caught in conflicting loyalties between students and their colleagues. Some training in ethical analysis can help teacher leaders make the decision and move forward.

Associated with role confusion is the issue of their perception. LeBlanc et al. (1997) stated that teacher leaders did not see themselves as leaders and this made it difficult for other teachers to perceive them as leaders. This perception could have arisen

from the realisation that they do not have the trappings of authority and they need to preserve their credibility and trust by developing relationship with their colleagues and work through persuasion rather than confrontation (Wilson, 1993; Romerdahl, 1991b). They are unlikely to do anything which will separate or alienate them from their colleagues (Smylie et al., 1990). Their preference for terminology like mentor, facilitator belie the fact that they have their own conceptualisation. As they are ambivalent as to how they perceive themselves and how others perceive them they tend to be reluctant leaders curtailed by school culture, professional norms and self-imposed limits (Wilson, 1993). They failed to understand that role modelling is a powerful form of leadership. However, Smylie et al. (1990) found that teachers viewed the role of teacher leaders as important and beneficial. Aiken's (1998) study showed that though teacher leaders initially might not want to lead, they eventually accepted what they had all along believed in that "teachers are leaders" (p.32). Mooney (1994 p.2) expressed the same sentiments when he wrote "whether we care to admit or not, we, as teachers, are leaders."

Teacher leaders face scepticism and resistance from fellow teachers. This could have arisen because their colleagues felt that one of their own had moved up above his/her station and could result in ostracism. Teachers have voiced their opinion against creating an elitist organisation, which pitched teacher against teacher for positions (Boyd-Dimock et al., 1995; Smylie et al., 1990). Teachers have echoed the feeling that the imposition of a hierarchy among teachers was counter productive and that the role of a classroom teacher and an administrator were incompatible. Insufficient support from their colleagues or insufficient involvement from their colleagues will add a new dimension to the problem. In support of these sentiments Scherer (1992), quoted three instances. He noted that a teacher leader nationally renowned for his project-based teaching is rarely emulated by

teachers in his home district; Gwen, an Instructional Support Teacher who counsels co-workers in the Madeline Hunter approach to teaching, suspects her efforts are merely tolerated, and Mary, who models innovative strategies while applauded by university colleagues is rarely visited by those in her own building. Resistance came mainly from veteran teachers who resent being taught new things. Scherer (1992) and Knight (1990) have reported that it is common for teacher leaders to feel a sense of loneliness in their work.

As for obstacles originating from outside the teaching context, the most common is the public perception that teaching and leadership roles are not compatible (Kowalski, 1995). In practice many good classroom teachers are promoted and forced to leave the classroom for positions in administration or supervision (Fessler, 1990). Where teacher leaders do not perceive themselves as leaders it is unlikely that they will take the initiative associated with a leader or work in a fully committed way. On the other hand, where they are not perceived as leaders by their colleagues or the community, they might not receive the support and the co-operation that they badly need to perform their role, thus complicating an already difficult situation. This has convinced many teacher leaders to forgo their leadership role and the stress that is associated with it (Zinn, 1997).

Teacher leaders are aware that they have taken on this informal leadership for personal reasons too (Stone et al., 1997). Personal factors can limit or expand the extent and duration of their leadership. Zinn (1997) enumerated a series of factors including the influence of family and friends, family responsibilities, culture and religious values, personal health and their own convictions. The study by Bascia (1996) showed that teacher leaders are not necessarily popular when they champion issues that are contentious,

potentially threatening or not generally perceived as significant. Citing the work of earlier researchers like Ball (1987) and Siskin (1994), Bascia (1996 pg.164-65) wrote that “teacher leaders identified with presumably less able or less desirable students receive less administrative support, have less influence on school policies and less credibility and status among colleagues.” Ultimately teacher leaders have to balance what they want for themselves and what is available from the system. The decision to be a teacher leader is a very personal choice.

5. Conclusion

This review of literature has provided a structure which highlights the promises of teacher leadership together with its own unique brand of expertise. “The special qualities that the excellent ones possess (are) – knowledge of children and subject matter, empathy, dedication, technique, sensitivity to communities and families, readiness to help, team spirit, ability to communicate and many more” (IEL, 2001 p.10). These qualities are valuable and properly utilised will allow teacher leaders to form the centrepiece of our “emerging knowledge society (to help) create schools that are dynamic sources of inspiration” (Crowther et al., 2002 p.xvi). The review has also exposed a host of related problems. While some of the problems can be solved at the ground level through better understanding among all the parties concerned including the school administrators, the teacher leaders and their colleagues, others require structural changes at either the district or national level. Until there is a concerted effort to resolve these problems, the full value of teacher leadership will continue to remain untapped.

It is to be expected that no one model of teacher leadership will encompass all the dimensions surfaced in the literature. Even in the Western world each model of teacher leadership must take into consideration the context of the school, the district and the community which gives it its tradition (Barnett et al., 1990) values, culture and educational purpose (Ovando, 1994). In turn it will be tempered by the teachers' personal values and beliefs with respect to their interaction with their students and colleagues, and the school administrators. The result is a unique brand of teacher leaders sharing some of the more common strands with their counterparts but with significant differences reflective of their own school and educational needs of their country.

If the development of teacher leadership can be so different among the countries in the Anglo-American world, it will definitely emerge differently when the study is conducted in Singapore. As the countries in the East and the West have different approaches to the role of education and their societal culture has been developed in diametrically opposite direction, it is only to be expected that the local model of teacher leadership will bear features that are uniquely Singaporean. The uniqueness of the model will emerge after the studies and will be recorded from Chapter Four onwards.

Chapter Three

Research design and methodology

1. Introduction

As in the Western world where the principal plays a crucial role in the management of the school (Grace, 1993; Hallinger, 1992) it is more so in Asian countries like Singapore where the principal is “both the school manager and the professional head” (Yip, 1993 p. 17). The growing impact of globalisation and the need to build a second wing for the Singapore economy signalled the need for change in the educational system. The Prime Minister Goh Chok Tong in his National Day Rally in 1996, reiterated the need to continue with decentralisation so that “principals and teachers (have) more say in the way schools are run and more leeway to innovate” (Goh, 1996 p.6). Principals need to work closely with teachers to produce effective schools (Yip, 1993).

While the Singapore Ministry of Education seek ways to recognise the contribution of teachers, there is a pressing need to understand how teacher leaders function in Singapore schools. As stated in Chapter One, this being the first study on the role of teacher leadership in Singapore, the researcher has to find an approach which will help to “clarify and understand phenomena and situations when operative variables cannot be identified ahead of time or to understand how participants perceive their roles or tasks in an organisation” (Merriam, 2005 p.1). The selected methodology must contribute to a “better understand(ing of a) phenomenon about which little is yet known” (Hoepfl, 1997 pp.48-49).

2. Research aims and questions

The Singapore educational system depends heavily on the school leader appointed and trained by the Ministry of Education to function as an “administrator and a professional” (Ministry of Education, 1999b p. 1) assisted by a team of key personnel like the Vice-principal, Heads of Department, Subject and Level Heads. This study seeks to establish whether a group of unofficial teacher leaders, similar to those in the Western world, can exist within such a highly structured system. The unofficial teacher leaders have been designated as the *informal teacher leaders* to distinguish them from those officially appointed by the Ministry of Education. Of interest to the researcher is the status of the informal teacher leaders vis-à-vis the official teacher leaders and the role the former can play in a centralised educational system. Will the development of informal teacher leaders be self-defeating for the Ministry of Education as they have invested heavily on the leadership hierarchy in schools and at the Ministry? Where the informal teacher leaders exert a true influence on the school, they would represent an indigenous development in the evolution of school leadership in Singapore and deserve more than just a cursory look. The final task is to understand how this group of informal teacher leaders can be encouraged and promoted to further school improvement. Should their contributions be significant, then any study of school leadership in Singapore must include both the formal and the informal leadership structure.

In Chapter One five research questions were posed. These questions were formulated to help unfold patterns and answers in a progressive manner throughout the study. It is pertinent at this juncture to review and discuss how each research question has or can contribute to this study of teacher leadership.

At the commencement of this study, there is a need for a model of teacher leadership to anchor this study. Research Question 1 requires that reputable international literature be reviewed to establish a theory-based model. The search conducted in Chapter Two established this theory-based model which is Western in origin. Since this study is centred on Singapore schools, Research Question 2 guides the researcher to examine the educational system in Singapore paying attention to features in the educational system and the broader societal circumstances likely to affect the Western theory-based model. The real impact of the Western model of teacher leadership on Singapore schools can be ascertained only on completion of the study. Thus Chapter Two answered two of the research questions.

The preliminary study showed the existence of informal teacher leaders in Singapore schools and allowed the researcher to build a prototype model of teacher leadership which would be presented in the first half of Chapter Four. This development has been guided by the requirement of Research Question 3. With the inclusion of more data from the final study, it became possible to explain the significance of this framework especially the influence of local conditions in shaping this model. The qualitative approach while allowing the researcher to add his years of experience and knowledge of the Singapore education service to the interpretation of the data also demanded “theoretical sensitivity” (Hoepfl, 1997 p.50). Thus Research Question 4 opened up a new vista of understanding of the local teacher leadership model and would be presented in the second half of Chapter Four.

Research Question 5 required the researcher to present the type of teacher leadership developed in Singapore schools. To reinforce this model, the researcher conducted an additional set of in-depth interviews with the teacher leaders using the earlier model. It is expected that there will be some shift in emphasis in the dimensions of teacher leadership. The study is likely to show that apart from the existence of the officially appointed leaders accountable to the Ministry of Education, there exists another strata of leadership that of the informal teacher leaders working with their colleagues and the students in the school and accountable to them. The distinction between the two groups is not in the nature of two opposing forces but rather two forces working together to achieve common objectives each in their own way. This pattern can be threatened by the numerous incentives offered by the Ministry of Education to integrate those willing to take on higher responsibility in the service and the school culture influenced by the attitude of the principal who can either encourage or sound the death knell of the informal teacher leaders. In all, the five research questions will move the research in a systematic way permitting answers to be given chapter by chapter. The research questions tie the study together giving it form and unity and eventually bringing it to a conclusion.

3. Paradigm choice and justification

In educational research the more traditional and established approach– the rationalistic or the quantitative approach – has been challenged by the more recent naturalistic researchers who “seek to understand phenomenon in context-specific settings” (Hoepfl, 1997 p.1). They rely on “tape-recorded interviews...collection of documents...not of the scale favoured by conventional ethnographers”(Vulliamy, 1990 p.14) and greater openness in the evaluation process allowing respondents to comment

upon and edit the reports of evaluators thus becoming collaborative researchers themselves (Vulliamy, 1990).

This has led to the emergence of another group of eclectic researchers (Miles & Huberman, 1994) who advocate a combination of both the qualitative and the quantitative approach with the main purpose of increasing the options available rather than to place limits on each approach. Typical of the new approach is the comment by Guba (1981) that even when one paradigm has been selected over another, compromises on postures are not only possible but well advised. What is important is that both the quantitative and the qualitative researchers must be able “to test and demonstrate that their studies are credible” (Golafshani, 2003 p.600).

This study will employ methodologies belonging to both the qualitative and the quantitative world in what Creswell (1994 p.177) called the “dominant – less dominant approach” except that it will be in a reverse order. The less dominant approach uses the rationalistic survey to identify the teacher leaders in the school while the dominant approach uses the naturalistic in-depth interviews with the interviewer becoming the instrument. This can lead to the “emergence of theory from the data themselves” (Guba, 1981 p.78) giving meaning and shared experiences with the readers (Hoepfl, 1997). Further as schools are growing dynamic organisations, the choice of the naturalistic approach as the dominant paradigm allows inquiries to be conducted in its natural setting. Vulliamy (1990 p.25) advised that the qualitative approach has “considerable potential for contributing to educational theory, policy and practice in developing countries” mainly because of its suitability to the study of processes in the school and the evaluation of innovation.

As the dominant paradigm is that of the naturalist, the four parameters of Miles and Huberman (1984) described by Creswell(1994) as *setting* (where the research will take place), *actors* (who will be interviewed), *events* (what the interview would be about), and lastly the *process* (the nature of events undertaken by the actors within the setting), were used in the planning process. The research would be conducted in school and the researcher had to factor in the troughs and peaks in the school and the workload pattern of the teacher leaders. The teacher leaders would be interviewed mainly on their work, their contribution to school improvement, their views on informal teacher leadership and finally their motivation. The process would include in-depth interviews, verification of interview transcripts, clarification meetings, phone calls and other means including email. The teacher leaders would be informed in advance and given the interview schedule. All these meant coordination with the teacher leaders and with the school authorities.

3.1 Sample

The target population for this study are the government managed schools but as there are 241 government managed schools in Singapore, it is beyond the means of the researcher to study all of them. Since approximately half (47%) of the government managed schools are primary schools and the other half (53%) are secondary schools, the sample size for the final study will be based on one primary and one secondary school. In addition there is a need to select another primary or secondary school for the preliminary study. Each sample school should be sited within the Housing Board precinct with a student racial mix of 75% or more of Chinese origin, 15% of Malay stock and 10% of Indians and other races generally reflective of the racial composition of Singapore. Participating schools should not be too overly involved in other research studies and the principal and the teachers must be willing to give of their time and effort. With these

guidelines and with the consent of the Ministry of Education to conduct this study, four principals were approached. Hoepfl's (1997) suggestion to make use of contacts to remove barriers to entrance was used in the selection of the four schools. Even then only three principals decided to participate in the study.

Having selected the target population (Weisberg, Krosnick & Bowen, 1986) the next decision was to determine the size of the population needed to identify the teacher leaders (Creswell, 1994). As the researcher had no knowledge of the teacher leaders in the school it was decided to depend on either the staff or the school administration to identify them. Researchers on teacher leadership had shown different preferences in identifying teacher leaders. Brown-Provost (1995) in her doctoral thesis used a nomination process by inviting the principal and some key staff members like vice-principal and curriculum specialists to identify teacher leaders. Zinn (1997) on the other hand, invited peer nominated teachers to identify teacher leaders in the school, based on their judgment regarding the characteristics of the target population (Fink, 1995b). While this approach (for quantitative study) has selection biases, it is convenient (Fink, 1995b) and has the advantage of providing in-depth knowledge of those being identified (Yarger et al., 1994). Vandiver (1996) and Corallo (1995) in their doctoral thesis preferred to use the entire staff to identify the teacher leaders. The use of the entire population seems more democratic (Fink, 1995b) but it assumes that the members of the staff know each other well enough to make a choice. The inclusion of the school administrators carries additional weight in that it demonstrates their support for the study. The researcher decided on this approach.

The next step was to determine the actual sample size for data collection. Unlike quantitative research which depends on probability sampling, qualitative research seeks

purposeful sampling also called *judgmental* or *selective* as the researcher uses judgment in selecting individuals who will be instrumental in providing data (Books, 1997). Purposeful sampling helps “to increase the depth of data exposed and to illuminate the questions under study” (Books, 1997 p.143). It avoids one of the greatest dangers to random sampling which is “a profusion of extreme cases” (Books, 1997p.143). Patton’s (2002) examples of purposeful sampling included maximum variation sampling, deviant case sampling, typical case sampling, confirming and disconfirming case sampling, convenience samplings and even politically important case sampling. While researchers have a choice concerning the type of samples Hoepfl (1997) has warned researchers that sampling errors can arise due to insufficient breadth, distortion due to changes over time and distortion caused by lack of depth in data collection at each site.

Members of the staff were asked to identify and rank not more than four informal teacher leaders but this could easily result in more teacher leaders than could be handled by one researcher. Reflecting the comment of Hoepfl (1997 p.50) that “there are no strict criteria for sample size” the number per school was capped at four and selected in ranked order and by categories. They would have to be identified by at least two categories of staff of which the Principal and the Vice-principal each form a separate category, the Heads of Department the third category and the teacher body the fourth category. This will give a representative view of how teacher leaders are perceived in the school setting. However with purposeful sampling the researcher has the added option of choosing “information rich cases which can be studied in depth” (Creswell, 1994 p.51). This approach gave the study the widest variation of people possible and avoided the sampling pitfalls mentioned by Hoepfl (1997) and the insufficiency of numbers mentioned by Seidman (1998). However, the total number of teacher leaders to be interviewed would

remain at 12. (i.e. 4 for the preliminary study and another 8 equally divided between the primary and the secondary school for the final study)

3.2 Method of data collection

Having secured the consent of the schools for the preliminary and the final study, the next step was to conduct the survey to identify the teacher leaders. This survey reflected the staff's perception of their teacher leaders and "gathered data at a particular point in time with the intention of describing the nature of existing conditions and determining the relationships that exist between specific events" (Cohen & Manion, 1998 p.83).

The main data collection activity was that of the in-depth interview. This was the *events* mentioned by Creswell (1994). The interviews conducted in the school setting provided the most comfortable and favourable environment for them. Apart from the compendium recommended by Creswell (1994) the researcher held informal discussions with principals and vice-principals and used bio-data and documents provided by the school or available publicly. The "use of documents is to corroborate and augment evidence from other sources" (Yin, 1984 p. 80) and allow triangulation to take place (Adelman, Jenkins & Kemmis, 1984; Nisbert & Watt, 1984; Yin, 1984). However triangulation in this context depended on the quality and type of documents available to the researcher.

The next crucial step was the interpretation of the data, and the verification of the interpretation using the steps described in the trustworthiness section to ensure the vigour of the study. Some of these steps were part of the procedure while others were introduced

at a later stage. From this a model of teacher leadership in Singapore schools was developed. This method of combining two paradigms “dominant – less dominant approach” (Creswell, 1994 p.177) is suitable for the study of a relatively unexplored topic and can pave the way for quantitative research to be carried out later (Thomas, 2000).

3.3 Instruments

The quantitative survey even when functioning as the less dominant approach has important contributions to make (Scheuren, 2004; Cohen et al., 1998). Through standardised procedures, the information collected can give a composite profile of a population, is relatively inexpensive and can be most effective when directed at particular groups like members of a professional organisation. Further, surveys can be used to check for opinions and attitudes from the simplest to the most complex, collect factual information, and even provide ratings according to some form of scale or even rank alternatives.

When using the survey, the researcher noted its many shortcomings (Doyle, 2005; Scheuren, 2004; Cohen et al., 1998). Basically it is unable to establish causal relationship between two variables. While a survey can represent the opinions and judgment of a population, these might not be correct and would have to be supplemented by the use of expert judgment and analysis (Doyle, 2005). The highly structured nature of a survey requires time and expertise to prepare at the initial stage and more so when making modifications at a later stage. The survey though seemingly easy to use requires “competent planning and very careful execution at virtually every step in the process (with) one person tak(ing) individual responsibility for the survey” (Alreck & Settle, 1985 p.8). It thus requires the researcher to have a clear idea of the entire process and be able to

anticipate some of the later phases to prevent ending up in a dead-end situation. A survey is never perfect and “minor errors and inadequacies should not be allowed to throw a shadow of doubt over the entire range of survey results. (These) things may require some modification in the interpretation” (Alreck et al., 1985 p.8).

In a survey there is a need to use a common terminology or at least to come to a common understanding with the respondents on the terms used. Converse et al. (1986 p.18) noted “what the researcher offers the respondent as a frame of reference may not be the one that the respondent commonly uses.” As the term *teacher leaders* is not commonly used in Singapore schools there is a need to arrive at a clear and unambiguous understanding of the term. On the day of the survey, every teacher was given a covering letter explaining the purpose of the survey (Appendix A) reinforced by a briefing conducted by the researcher and the principal of the school on the objective of the survey (Wragg, 1994) and an explanation of the main terms used together with a list of the characteristics of informal teacher leaders as gleaned from the literature study in Chapter Two (Appendix B). It was followed by a question and answer session. The respondents were asked then to identify and rank their four teacher leaders.

Those identified as teacher leaders were asked to complete a personal particulars form (Appendix C). Cohen et al. (1998) quoting Davidson (1970) stated that self completed questionnaires should be “clear, unambiguous and uniformly workable... minimise potential errors from respondents and coders (and able to) engage their interest and elicit answers as close as possible to the truth” (Cohen et al., 1998 pp.92-93). The guide provided by Selltiz, Wrightsman and Cook (1976) and recommended by Cohen et al.

(1998) proved practical in the construction of the self-completed personal particulars form. These helped to minimise item non response (Fink, 1995b).

The research by Corallo (1995) and Palmer (1982) showed the value of bio-data in understanding the attitude of teacher leaders. The personal particulars form allowed the teacher leaders time and opportunity to check and verify dates and qualifications at their own convenience and without experiencing the interviewer effect. However, there remained the possibility that respondents might not be willing to commit their answers in writing and the researcher had no control over whoever completed the form. While this could be a form of bias (Weisberg et al., 1986) in practice, the data could be verified at the interview. Like the interview schedule, the personal particulars form had to be “clear and straightforward in four important respects: simple language, common concepts, manageable tasks, and wide spread information” (Converse et al., 1986 p.10).

Many of the principles involved in the construction of the self completed personal particulars form also applied to the construction of the interview schedule (Hoepfl, 1997; Creswell, 1994). The format of the interview schedule included many of the components recommended by Creswell (1994) like headings, instructions to the interviewer in the form of an opening statement, key research questions to be asked and probes. The interview schedule (Appendix D) constructed within a framework of twelve questions set by Miles et al. (1984) were open-ended (Cohen et al., 1998; Weisberg, Krosnick & Bowen, 1986) with each question dealing with an area of study which would later form the core areas for analysis (Weiss, 1994) but with leeway for the interviewer to pursue areas of importance raised by the respondents or to exclude questions that the researcher had found to be unproductive (Hoepfl, 1997). The areas of study in the interview schedule covered the

achievements and leadership role of the teacher leaders in school and the community, their views on motivation and self esteem, the conditions for the development of teacher leadership in their school, and the problems they faced as teacher leaders. These concerns “relate to the whole system, as in a classroom, school or school district” (Janesick, 1994 p.210) and allowed the complete picture to emerge.

The interview in quantitative research seeks to validate an explanation or test a hypothesis but in qualitative research it has a diametrically opposed function which is to “describe and explain...(and in the process) uncover unexpected results” (Books, 1997 p.139). Though qualitative interviews are often known by other names, the pattern is that “one participant takes responsibility for providing direction, the other for providing content” (Weiss, 1994 p.207). The basic assumption governing in-depth interviewing research is that “the meaning people make of their experience affects the way they carry on that experience” (Seidman, 1998 p.4) and its objective is to obtain “from respondents a field report on their external and internal experiences” (Weiss, 1994 p.73). An additional function is to “reveal a relationship between the differing views of the interviewee and the interviewer” (Books, 1997 p.140).

Weiss (1994) explained that while interviews are common to both quantitative and qualitative studies, the main difference is that in qualitative studies it seeks “to achieve fuller development of information” (Weiss, 1994 p.3) and is likely to rely on a smaller sample than survey studies. Further in qualitative studies the great amount of information which is not easily categorised, is more likely to be analysed “on the basis of interpretation, summary and integration (supported) by quotations and case descriptions than by tables or statistical measures” (Weiss, 1994 p.3).

Books (1997) explained that interviews in qualitative research apart from being able to obtain large amount of data in a relatively short period of time, has the added advantage of being as close to a natural process as possible with freedom in the choice of questions, in its structure and its setting, all of which facilitate co-operation (Books, 1997). It allows the interviewer “to explore the topic jointly with the interviewees because of the unstructured way in which the participants express their own thoughts...(thus allowing) immediate follow-up questioning for expansion, omissions, clarifications and contextualisation” (Books, 1997 p.141). These features allow the interview process to develop positively.

In qualitative studies, interviewing is both a research methodology and a social relationship which “must be nurtured, sustained and then ended gracefully”(Seidman, 1998 p.79). While interviewers and the respondents can decide on the appropriate boundaries for the interview, interviewers need to distinguish “among public, personal and private aspects of a participant’s life” (Seidman, 1998 p.90) and not confuse the interviewers’ role with that of the therapists. Weiss (1994) argued that while many studies seek to match interviewers with the respondents in terms of race, language, sex, age and social background to promote greater acceptance by the respondents and better understanding by the interviewees, respondents are often affected by observable characteristics of the interviewers and more so whether the interviewers are insiders or outsiders to the world of the respondents. From his experience Weiss (1994 p.138) concluded that in spite of all these factors, “reasonably proficient qualitative interviewers can establish effective research partnership with a very wide range of respondents.” Considering that the researcher for this study has extensive contacts with personnel in the education service for many years, he is unlikely to face insurmountable problems.

However qualitative interviews have weaknesses too, the chief of which is the amount of time taken to plan and execute the interviews, the transcription of the tape recordings and the data analysis (Seidman, 1998; Weiss, 1994). The tape recorder is both a blessing (Seidman, 1998) and a “deterrent to free speech” (Books, 1997 p.142). There are errors of commission and omission (Books, 1997). In the former case, the errors arise from the inability to assure that what is related by an interviewee is accurate, the fear or unwillingness on the part of respondents to speak freely and the likely influence that the interviewer might have on the respondents. Errors of omission are likely to occur in that some people are unable to verbalise their thoughts or experiences or purposely withhold incriminating evidence which will put them in an unfavourable light. Further the interviewer’s failure to question participants in a meaningful manner can result in non-meaningful replies.

The interview schedule consisted of semi-structured and standardised open-ended questions (Seidman, 1998; Hoepfl, 1997). These allowed “participant(s) to reconstruct (their) experience within the topic under study” (Seidman, 1998 p.9). There was a focused element at the interview as the respondents were asked to substantiate certain views on teacher leadership. Every attempt was made at the interview to build rapport with the teacher leaders (Weisberg et al., 1986) and to encourage them to “share everything, warts and all” (Janesick, p.211) and to speak their mind with little interruption from the researcher (Weiss, 1994; Adelman et al., 1984; Nisbert et al., 1984). The setting in the school “avoid(ed) interruptions and foster(ed) reflection” (Books, 1997 p.145) and made them feel as active partners in the research (Leogrande, 1995; Yin, 1984).

While quantitative researchers take steps to prevent bias arising from the interviewers, the respondents and the substantive content of the questions (Cohen et al., 1998), interpretative research work is expected to contain the “biases, values and judgement of the researcher” (Creswell, 1994 p.147). The interpretative paradigm implies that researchers have to “observe and interact with the subjects of their research” (Vulliamy, 1990 p.8). “There is no value-free or bias-free design” (Janesick, 1994 p.212). Although interviewers tend to credit meanings made at the interviews as a product of the respondents’ opinions and reflection, it is as much the result of the respondents’ interaction with the interviewer. Thus the interviewers can use this skill to minimise the distortion arising from their role (Seidman, 1998). Finally there remains an inherent paradox in that researchers choose topics that engage their interest and their passion but they need to remain open to the “process of listening and careful exploration that is crucial in an interviewing study” (Seidman, 1998 p.26).

As researchers contribute to the success of an in-depth interview, it is good at the onset to realize that researchers must have “the level of skill appropriate for human instruments”(Hoepfl, 1997 p.50). Strauss and Corbin (1990 p.42) refer to this skill as “an awareness of the subtleties of meaning of data (i.e.) able to give meaning to data and the capacity to separate the pertinent from that which isn’t.” Apart from being sensitive and creative, the researchers must “be willing to relinquish ideas that are poorly supported regardless...of the excitement they first appear to provide” (Morse, Barrett, Mayan, Olson & Spiers, 2002 p.9). In addition it is appropriate to state the background and the possible biases of the researcher (Creswell, 1994).

In this context the researcher is from the education confraternity having in his early years taught in a secondary school and a Junior College, before being posted to the Ministry of Education where he planned and implemented in-service programmes for teachers and school administrators and was a member of professional organisations pertaining to education. As a founding principal of a Junior College he was able to introduce practices which shaped the academic and administrative nature of the college. His later years at the Ministry of Education and his subsequent secondment to the National Institute of Education as a Senior Fellow, gave him new insight into the pre-service training of teachers and other related programmes. He has observed over the years that there seem to be a nucleus of teachers in every school who somehow or other managed to get the support of the majority of the staff and moved them in a certain direction. A principal able to win the support of this group of teachers can gain the backing of the entire school. Other teachers not in this category can be encouraged and motivated to perform the same role too. Thus there are some teachers with a natural flair for leadership and others who need to be persuaded to take on this role. This observation motivated the researcher to undertake this study and is the basis for the selection and design of the instruments, and more so in the analysis and interpretation of the data.

The in-depth interviews were supplemented by other data sources. An analysis of documents can give an additional source of information (Hoepfl, 1997). This is a technique for “drawing inferences from existing records or documents in a systematic and unbiased way” (Doyle, 2005 p.3). The documents can be public in nature like minutes of meetings, newspapers or of a private nature like journals or other written communication. Public documents “reflect(ing) the language and words of the informants (and serving) as written evidence” (Creswell, 1994 pp.150-1), are invaluable to researchers and more so

when these are available at convenient locations. Private documents offer an in-depth look at philosophies and rationale but are often protected information and not readily available to researchers. Where available, documents form a good source for the triangulation process “to seek concordance” (Heyrman & Goedhuys, 2005 p.3) but this process is subject to “biases of interpretation and the researcher cannot control the collection of data” (Doyle, 2005 p.3). In many Singapore schools researchers have found it difficult to access private documents. The documents they are likely to use are those available for general consumption like school magazines, newsletters, newspaper reports and published reports or statistical digest of the Ministry of Education. Very often the public documents do not offer much depth and are not extensively used in this study for triangulation purpose.

3.4 Administration of the study

The Singapore Ministry of Education require all researchers to get the approval of the gatekeepers at the Ministry of Education Headquarters and at schools when conducting educational research. In reality, gatekeepers ranged from the absolutely legitimate to the self-declared (Seidman, 1998). Having secured the consent of the legitimate gatekeepers it was felt prudent to also win over informal gatekeepers, often present in the school environment. Thus the researcher and the principals at the onset took the opportunity to explain to the entire staff the purpose of the study and asked for their consent. While there were questions raised by the staff, no one objected and the study commenced.

A standard procedure was adopted for all the schools. The identification of teacher leaders was to be conducted at a convenient time like a staff meeting or staff seminar (Vandiver, 1996; Brown-Provost, 1995; Corallo, 1995). Each teacher was given a sealed package containing the covering letter and a list of the characteristics of teacher leaders.

The briefing by the researcher and the principal reinforced the contents of the letter and elaborated on some of the terms to arrive at a basic understanding with the respondents. The respondents were given the opportunity to express their perceptions. Each teacher was asked to identify four teacher leaders in ranked order. They were allowed to identify fewer leaders or even to give a *Nil* return if they feel justified (Converse et al., 1986). Teachers wanting to mull over their choice of teacher teachers were allowed to complete it at their own leisure and return it to a box placed in the General Office (Babbie, 2004) within the week. The principals helped maximise the returns by sending reminders of the deadline, a technique highly recommended by Converse et al. (1986) and Weisberg et al. (1986).

The teacher leaders were informed of the interview through their Principal. Arrangements were made to interview them at a convenient time and place. The standard practice was to send the interview schedule to them in advance. On the interview day, the researcher again asked for their formal consent to be interviewed and have the proceedings recorded. They were assured of the confidentiality of the data gathered (Cohen et al., 1998; Seidman, 1998). The researcher gave additional information concerning the survey results and initiated the respondents into the flow of the interview. The data were audio recorded and each recording was tested at the beginning of the session.

At the interview, the researcher used a number of non-verbal signs to motivate and encourage the respondents like '*nodding*' and promptings like '*and*', '*then*', '*what else*' (Seidman, 1998 Ch. 6; Weiss, 1994 Ch. 4 & 5). The willingness to use the pause button when necessary helped to build confidence. Books (1997 p.145) commented that the interviewers should come "prepared to be surprised and...have their preconceived notions

overturned.” The interviewer’s attitude that the respondents’ contributions were valuable and useful helped to increase their motivation and the quality of the data collected.

Transcripts were based on the verbatim replies though edited to exclude the ‘*uhs*’, ‘*ers*’ and other characteristics of oral speech (Seidman, 1998) so as to present “write ups... which can be read or edited for accuracy” (Miles et al., 1994 p.51) yet “maintaining the dignity of the participants in presenting their oral speech in writing” (Seidman, 1998 p.104). As “transcripts often erase the context with some crucial nonverbal data” (Miles et al., 1994 p.56) making them selective, these were returned to the respondents for verification and amendment if necessary. The few amendments that were suggested by the respondents were more editorial rather than of substance. The personal particulars forms were collected after the interview and processed in tandem with the interview data. Pseudonyms were carefully chosen to “reflect the issues of ethnicity, age and the context of the participant’s life” (Seidman, 1998 p.104) as with the names of the schools. A summary of the activities is presented in Table 2.

Table 2: Dates of interviews and transcripts

No	Pseudonyms	Interviews			Transcripts of first interview		
		First	Second	Venue	Returned	Verified	Coded
Preliminary study conducted at Midlands Primary School							
1.	Ann	5 th March 2001	25 th May 2001	School AVA Room	5 th May 2001	12 th May2001	√
2.	Elias	5 th March 2001	25 th May 2001		5 th May 2001	12 th May2001	√
3.	Judy	5 th March 2001	28 th May 2001		5 th May 2001	12 th May2001	√
4.	Charlotte	8 th March 2001	28 th May 2001		5 th May 2001	12 th May2001	√
Final study conducted at Princeson Secondary							
1.	Hoying S1	2 nd Nov2001	8 th Feb 2002	School Library	8 th Feb 2002	26 Feb 2002	√
2.	Meichoo S2	2 nd Nov 2001	8 th Feb 2002		8 th Feb 2002	26 Feb 2002	√
3.	Sonny S3	5 th Nov 2001	8 th Feb 2002		8 th Feb 2002	26 Feb 2002	√
4.	Audrey S4	5 th Nov 2001	8 th Feb 2002		8 th Feb 2002	26 Feb 2002	√
Final study conducted at Farrell Primary School							
5.	Kohmei P1	5 th April 2002*	Maternity Leave	Home*	29 th July 2002	7 th Aug 2002	√
6.	Vanessa P2	13 th April 2002	26 th July 2002	School	26 th July 2002	7 th Aug 2002	√
7.	Suling P3	13 th April 2002	29 th July 2002	Sick	29 th July 2002	7 th Aug 2002	√
8.	Puyi P4	18 th April 2002	Out of country	Bay	29 th July 2002	7 th Aug 2002	√

*On pre-maternity leave

4. Data analysis

The data for the preliminary study came from three sources – the self administered personal particulars form, data supplied by the administration or available publicly and from the in-depth interviews. The personal particulars forms provided basic information on the teacher leaders like the gender, age, status, years of experience and the educational background of the teachers. The information provided by the school included the socio-economic status of the students and some additional details on the teachers including their substantive grade and years of experience. These data when matched against those available from the Ministry of Education’s Education Statistics Digest (2001a) confirmed the meritocracy policy of the Ministry of Education as these teacher leaders were young in service and of promotional grade. The school also supplied information on the socio-economic status of the students but as the data were not used in the preliminary study, these were no longer collected from the schools in the final study.

The first two sources of data were straightforward and easy to analyse but not so the data from the interviews. The researcher had to use inductive analysis to search for categories, themes and patterns (Janesick, 1994). The codification of the data started simultaneously with the interviews and the narrative report writing (Marshall & Rossman, 1999). Since the interview schedule was arranged along thematic lines (Miles et al., 1994) the coding process followed accordingly. When a theme had to be subdivided because of the data collection there was the danger of missing the wood from the trees and the researcher had to constantly read the voluminous amount of data carefully to maintain a sense of the whole (Marshall et al., 1999; Creswell, 1994). The search to classify the “significant classes of things, persons and events...and its links with another” (Marshall et

al., 1999 p.152) to form a consolidated picture (Marshall et al., 1999; Creswell, 1994) proved to be challenging.

Each category was coded using “a single summarising notation”(Miles et al., 1994 p.57) rather than a numerical number for easy association and recall and these were collated in a matrix form (Marshall et al., 1999) resulting in 24 items of interest as shown in Table 3. Each item reflects the peculiar culture of the school and gives an indication of the type of relationship between the teacher leaders and their colleagues on one hand and their relationship with the school administration on the other. The data is not presented in strict chronological order and the problem of data overlap will be dealt with at the next stage of data analysis.

Table 3: Stage One: Analysis of raw data (preliminary study)

Item No.	Notation/Descriptor	Elias (PPS1)	Judy (PPS2)	Charlotte (PPS3)	Ann (PPS4)
1.	LEADERTR Leader/role model for teachers	P3 No.1 & 2.	P1 No.2; P2 No.3; P3 No. 1; P6 No.6 & 8.	P2 No.1.	P2 No.3; P3 No.1 & 2.
2.	CONCERNTRS Concern for teachers.	P6 No.4.	P6 No.7.	P7 No.4.	P2 No.3; P3 No.1; P7 No.6.
3.	CM Good classroom management.	P2 No.1.	P2 No.1.		
4.	LEADERSTU Leader/role model for students.		P2 No.3.	P2 No.3 & 4.	P2 No.2; P3 No.3.
5.	SKILLSOTHERS Other skills.	P2 No.2.			
6.	PERSONALITY Personality.		P2 No.2.	P2 No.1 & 2.	
7.	SKILLSORG Organisational skills.		P2 No.7.	P6 No.1 & 11.	
8.	SKILLSLEADER Leadership roles.	P3 No.1.	P3 No.2.		P3 No.1.
9.	ROLESOTHERS Willingness to take other roles.	P3 No.1.	P3 No.2; P6 No.1.		
10.	TRADITIONAL Traditional roles.	P3 No.1 & 2.	P3 No.3.		
11.	COMMUNITY Involvement in community.	P.3 No.1; P5 No.1.	P3 No.1 Comments; P5 No.1.	P5 No.1.	P5 No.1.
12.	CONCERNSTU Concern for students.	P6 No.5.		P3 No.4; P6 No.5.	P6 No.2 & 3.
13.	DEVTRL Development of teacher leaders.				P7 No.1-8.
14.	ADMIN Support from the administration.	P7 No.4.			P7 No.2 & 7.
15.	COLLEGIAL Collegiality.	P7 No.1.		P7 No.3.	P7 No.3.
16.	RISK Willing to take risks.	P7 No.3.			

Item No.	Notation/Descriptor	Elias (PPS1)	Judy (PPS2)	Charlotte (PPS3)	Ann (PPS4)
17.	MULTI Multi-tasks/time.		P7 No.3; P9 No.2.		
18.	MENTOR Mentoring of other teachers.	P7 No.3; P8 No.1 & 2.	P8 No.1 & 2.	P7 No.4.	P8 No.1.
19.	INCENTIVES Incentives.	P9 No.3 (adjust present system).	P9 No.1 (intrinsic).	P9 No.1 (intrinsic & extrinsic).	P9 No.1 (extrinsic helps).
20	IDENTIFICATION Identification of teacher leaders.	P9 No.1 & 3 (teachers & administration).	P9 No.1 (staff).	P9 No.1 (staff).	
21	TIME Lack of time.	P2 No.2; P8 No.1 & 2.	P5 No.1; P8 No.1, 2 & 3.	P8 No.1 & 2.	P8 No.1.
22	OVERLOAD Too many tasks.	P10 No.4 & 5.	P5 No.1 & 4; P7 No.3; P10 No.3.		P5 No.1; P9 No.1, 2 & 3.
23	FORMALAUTH Lacks formal authority.	P11 No.11.	P3 No.3; P10 No.3 & 11.	P10 No.5 & 9.	P10 No.9 & 11.
24	SUPPORTSTAFFADMIN Support by staff & administration.	P7 No.2, 3 & 4; P11 No.11.	P3 No.2; P6 No.6; P10 No.7 & 9.	P2 No.1 & 2; P10 No.11 & 3.	P3 Informally 1; P7 No.2, 6 & 7.

Note: The P refers to the page while the No. refers to the paragraph in the respective transcript.

The next step was to regroup the 24 items to form an interim structure (Miles et al., 1994) reflecting the main aspects of teacher leadership. Where data overlap, these were used once only under the most appropriate heading. This interim structure is found in Table 4.

Table 4: Stage Two: Re-grouping of data by dimensions (preliminary study)

No.	Dimensions	Item No (from Table 3)
1.	Leadership over students in class and in school	No.3, 4, 7, & 12.
2.	Leadership over colleagues	No.1, 2, 8, 9, 10, 15, 16, 17, 18, 19 & 24.
3.	Working with the administration & community	No.11, 14, & 23.
4.	Personality	No.6 & 5.
5.	Identification of teacher leaders	No.13 & 20.
6	Time and overload	No 21 & 22.

The first four dimensions were complementary and were grouped to form the model of teacher leadership. Dimension No. 5 and No. 6 while likely to affect the performance of the teacher leaders were treated as external factors and were presented separately – one as *Development of* and the other as *Obstacles to* teacher leadership. The findings from the preliminary study can be found at the start of Chapter Four partly for completeness as well as to test the proposed presentation style for effectiveness. It is not intended to be exhaustive.

Further analysis of the voluminous data collected at the final study showed that all the dimensions were likely to have subgroups. As such the names of the dimensions were modified to denote the new inclusions. Appropriate headings were given for the subgroups. The two categories dealing with the *Development of* and *Obstacles to* teacher leadership were grouped together as *Obstacles and support to teacher leadership*, since factors supporting teacher leadership could under different circumstances act as obstacles (Zinn, 1997). The descriptors used by Harris et al. (2002a) and Lashway et al. (1996) as reported in Chapter Two have been adopted for this section on *Obstacles and support to teacher leadership*. Thus the model of teacher leadership emerging from the final study took on the following pattern.

Table 5: Stage Three: Improvement to the teacher leadership model (final study)

No.	Dimensions of teacher leadership (Preliminary study)	Re-named Dimensions & sub groups of teacher leadership (Final study)	Presented in Chapter
1.	The leadership over students in class and in school.	Leadership over students <ul style="list-style-type: none"> • Effective classroom teachers. • Concern for student learning. • Role model for the school. 	Four
2.	The leadership over teachers.	Leadership over teachers & the learning process <ul style="list-style-type: none"> • Desire for continuous self improvement. • Mentor beginning/new teachers. • Working with colleagues. • Preference for distributed leadership. 	Four
3.	Working with the administration & community.	Their role in school development <ul style="list-style-type: none"> • Working with the administration. • Working with parents and the community. 	Four
4.	Personality.	Personal characteristics <ul style="list-style-type: none"> • Individual qualities. • Motivation and beliefs. 	Four
5.	Development of teacher leadership.	Obstacles & support <ul style="list-style-type: none"> • Organisational structure. • Professional practices. • Personal considerations. 	Five
6.	Obstacles to teacher leadership.		

Incidental data gained from the survey and from discussions with the principals and the vice-principals were incorporated into the leadership or the personality dimension. Table 6 showed how the data were processed for the first dimension. This process was repeated for the other dimensions.

Table 6: Final Stage: Codification of data using improved framework (final study)

Dimension One: Leadership over students					
No.	Pseudonyms	Effective classroom leaders	Concern for student learning	Role model for the school	
1.	Kohmei, P1	P.1, No.2; P.2, No.3; P.5, No.5; P.11, No.9.1.	P.5, No.5; P.11, No.8.	P.12, No.11.4.	
2.	Vanessa, P2	P.1, No.2 &.3.	P.1, No.2.2 & 2.3; P.2, No.3; P.6, No.5 & 5.1; P.7, No.5.6; P.9, No.5.23.	P.4, No.3.6-3.8.	
3.	Suling, P3	P.4, No.3. & 4; PBD P.1.	P.3, No.3.1; P.5, No.5; P.6, No.5.2; P.10, No.8.2.	P.14, No.11.15.	
4.	Puyi, P4	P.4, No.5.1; P.8, No.7.1.	P.3, No.2.1; P.5, No.5.1; P.12, No.11.19.	P.10, No.11.9.	
5.	Hoying, S1	P.1, No.2; P.4, No.5.4; P.6, No. 11.1.	P.1, No.2, & 2.2; P.3, No.5; P.4, No.5.1.	P.1, No.2.	
6.	Meichoo, S2	P.1, No.2; P.4, No.5.2; P.7, No.11.3 & 11.4.	P.1, No.2; 2.1;& 2.4; P.2, No.3.3, 3.7; P.3, No.5.	P.8, No.11.10.	
7.	Sonny, S3	P.1, No.2.2; P.3, No.2.2.	P.3, No.5.1; P.4, No.5.1, & 5.4.	P.2-3, No.4.	
8.	Audrey, S4	P.1, No.2; P.8, No.11.2.	P.1, No.3; P.3, No.5.2 & 5.6; P.4, No.5.7, 5.9, 5.10, & 5.11.	P.3, No.5.6.	
NOTE: This compilation was then repeated for each of the dimensions of teacher leadership as indicated below.					
Dimension Two: Leadership over teachers and the learning process					
	Pseudonyms	Continuous self improvement	Mentor beginning/new teachers	Working with colleagues	Distributed leadership
Dimension Three: Role as intermediaries.					
	Pseudonyms	Working with administration	Working with parents & community		
Dimension Four: Personal considerations					
	Pseudonyms	Individual qualities	Motivation & beliefs		
Obstacles and support for teacher leadership					
	Pseudonyms	Organisational structure	Professional practices	Personal considerations	

Note: The P. refers to the page while the No. refers to the paragraph in the respective interview transcript.

With this framework in place, the four dimensions of teacher leadership were elaborated on in the second half of Chapter Four while the *Obstacles and support for teacher leadership* formed part of Chapter Five. This arrangement was intended to give clarity to the findings and maintain the links with the reader.

5. Trustworthiness

Morse et al. (2002 p.1) commented that “without rigour, research is useless...hence...the attention to reliability and validity.” While reliability and validity are well established and grounded in quantitative research, these are not appropriate to qualitative research which must be addressed from the perspective of the paradigm in which the study had been conducted (Merriam, 2005; Golafshani, 2003). Qualitative writers like Guba & Lincoln (1989) have suggested parallel or quasi-foundational criteria also termed as trustworthiness criteria which would include credibility, transferability, dependability and confirmability. These stances led to a plethora of labels or criteria “for variations and situations in which rigour could be applied” (Morse et al., 2002 p.4).

In qualitative studies internal validity or trustworthiness is based on a “systematic collection of data, using acceptable research procedures and allowing the procedures and findings to be open to systematic critical analysis from others” (Thomas, 2000 p.4). “Trustworthiness of a research report lies at the heart of issues conventionally discussed as validity and reliability” (Golafshani, 2003 p.601). A synthesis of the strategies for discerning trustworthiness listed by Merriam (2005), Guba et al. (1989), and Patton (2002), include:

1. Triangulation – the use of multiple investigators, multiple sources of data or multiple methods.
2. Member checks – taking data and the tentative interpretations of these data back to the people to check for accuracy and plausibility.
3. Long term observation at the research site or repeated observations of the same phenomena.

4. Peer examination – asking colleagues to comment on the findings as they emerge.
5. A statement of the researcher’s experience, assumptions and biases at the start of the study to enable the reader to better understand how the data might have been interpreted in the manner they were.

In this study trustworthiness is established in the triangulation of different sources of data, member check and a statement on the researcher’s experience and biases. The data gathered from the teacher leaders were from two schools with different student population in terms of age and racial composition, located in different parts of Singapore and each having its own culture, practice and management style. The primary school is sited in the north-western part of Singapore while the secondary school is in the east. In addition, the secondary school had a higher proportion of one of the minority races in their student enrolment when compared with the average percentage in other Government managed schools. This factor could have heightened the concern of teacher leaders for disadvantaged students. The management style of the primary school was more paternalistic while that of the secondary school was more towards delegated responsibility.

There was limited use of documents for triangulation purpose as the documents collected varied in value and extent. The primary school gave access to school reports of a confidential nature while those from the secondary school were more of extracts and public documents taken mainly from the school magazine and newsletter. This disparity made document analysis difficult if not impossible. Also the public documents of the Ministry of Education which were mainly reports at a macro level were not significant to a micro

level study and were not used by the researcher. Thus the documents collected have limited value for triangulation purpose.

Member checks were more effective in establishing trustworthiness. The interview transcripts were returned to the respondents for their comments and verification of accuracy. There were other forms of interaction as when clarifications were sought at different stages of the study including a second interview, and correspondence through email and the phone. This is in line with Guba et al. (1989) suggestion to be in continual contact with the respondents throughout the study and the SAFARI principles quoted by Adelman et al. (1984 p.100) “to allow informants the right to ‘edit’ the researcher’s accounts of their views and actions.” Thus rigorous ‘member check’ has been considered by Heyrman et al. (2005 p.3) as “the first method to safeguard the validity of qualitative data.” Peer examination by their colleagues was not used as this could breach the confidentiality promised to the teacher leaders. Further the researcher’s experience and knowledge which had been stated explicitly at the beginning to help readers understand his assumptions and biases, contributed to the interpretation of the data.

The concept of external validity has troubled qualitative researchers most as generalisability implies the extrapolation from a sample to a population. Qualitative researchers do not use random sampling (Weiss, 1994) and therefore cannot generalise. Qualitative researchers seek “to understand the particular in depth rather than...what is generally true of the many” (Merriam, 2005 p.5). Guba et al. (1989) refer to it as transferability which has been interpreted as “a working hypothesis, concrete universals or user generalisability” (Merriam, 2005 p.5). Certain strategies can be used to strengthen rigour including:

1. The maintenance of a thick description which would provide information or description of the phenomenon under study. This allows readers to determine how closely their situations match the research situation and hence whether findings can be transferred.
2. Multi-site designs involving the use of several sites, cases, situations especially those representing some variations.
3. Modal comparison involving a description of how typical the programme is when compared to the other programmes.
4. Sampling within wherein the various components can be randomly sampled for inclusion in the study.

Thus external validation in qualitative research must reflect the assumptions unique to qualitative studies and not be confined to the statistical interpretation of quantitative research.

The researcher maintained careful notes of discussion with principals, a verbatim copy of the final interviews and a detailed protocol for data collection as suggested by Yin (1984). The carefully maintained documents allow readers to follow and understand the situation leading to certain conclusions and even to attempt a replication in another setting. Although this study involved only two sites nevertheless, the researcher was able to record the different experiences of teacher leaders from a primary and a secondary school.

In quantitative studies reliability is seen in the number of times the findings of a study can be duplicated. In qualitative studies, this poses a problem in that human behaviour and more so the classroom dynamics is never static. Qualitative researchers seek to “understand the world from the perspective of those around it” (Merriam, 2005 p.4)

and it becomes evident that replication of a qualitative research will not give the same results. Thus there can be no benchmark for repeated measures to establish reliability in the conventional way (Merriam, 2005).

Guba et al. (1989) replaced reliability with dependability or consistency. The objective is not whether the results are replicated in other studies but whether the results “are consistent with the data collected” (Merriam, 2005 p.4). As with internal validity, reliability can be checked by the use of strategies like:

1. Triangulation,
2. Peer examination, and,
3. Audit trail which leaves behind details thus permitting other researchers to use the original report to duplicate the study.

This study depended on the second and third approach. Peer examination is slightly different from that used in trustworthiness in that the checking is conducted after the completion of the analysis (Guba, 1981). In this instance the findings were given to three HODs from different schools to verify. Two of them were from secondary schools and one from a primary school. In addition the findings were also read by an experienced primary school teacher who has since retired. Their comments have been positive and support the final findings as presented in Chapters Four and Five. The researcher left a clear trail for others to track and assess, mainly in the form of documentation of the events throughout the study.

6. Ethics

Just as validity and reliability are important to research, so is the issue of ethics (Cohen et al., 1998; Creswell, 1994; Janesick, 1994; Weiss, 1994). Since qualitative researchers are like guests in the private world of the respondents (Merriam, 1988) they should exercise good manners and observe a strict code of ethics which includes “protecting the anonymity of the participants” (Seidman, 1998 p.56) and taking responsibility for what the interviewer-researcher writes.

In-depth interviews even with structured or open-ended questions can cause both “risks and benefits to the informants” (Merriam, 1988 p.214). Respondents might give information which they do not intend to give or be embarrassed by difficult questions or even feel that their privacy had been invaded. On the other hand some respondents might increase their self-esteem through recounting their achievements and refrain from being their normal self. A more compelling issue is that of intervention during observation. Are interviewers justified in handing over information “to prevent harm to the respondents and to others” (Weiss, 1994 p.133). The literature on fieldwork seems to support a non-intervention policy but there is also growing support that “failure to act” is an ethical and political choice (Weiss, 1994; Merriam, 1988). Researchers could be equipped with a list of referrals for use at the appropriate time. Another serious concern is the use of data provided for a specific purpose being used for another purpose (Seidman, 1998; Weiss, 1994; Merriam, 1988). The researcher took appropriate steps to observe these injunctions. None of the information given warranted any form of intervention or referral. On the matter of confidentiality, the researcher favoured inviting HODs from similarly structured schools rather than peers from the same school to check the content for accuracy and interpretation. Pseudonyms were used to prevent identification of schools or teachers. The

tapes and transcripts were kept by the researcher and the information used specifically for this study alone.

7. Conclusion

The assumptions and rationale for selecting a qualitative approach to this subject, the method and procedure for conducting this study, the development of the instruments, the data collection and its analysis including the role of the researcher, the trustworthiness of the experiment and the ethics have been recorded in this chapter. For clarity, the main stages, research areas, sources, means and outcome of this study from Chapter One to Three, have been summarised in a matrix form.

Table 7: A matrix on key stages, research areas, paradigms, sources, means and outcome

Area of inquiry	Paradigm	Source	Means	Outcome
Establishment of a theory-based model				
Stage One				
Research Question 1: The type of teacher leadership structure from literature study.		Authoritative international literature.	Literature review.	1. Developed a theory-based model of teacher leadership. Reported in Chapter Two.
Research Question 2: Influence of Singapore educational system on concept of informal teacher leadership.		Documents on local educational system.	Literature review.	2. The local educational system is centralised and likely to impact the theory-based model which is largely Western in nature. Reported in Chapter Two.
Preliminary study				
Stage Two				
Research Question 3: Framework of teacher leadership from the preliminary study.	Use of mix paradigms - quantitative and qualitative.	Study conducted in one Government managed primary school.	Through a dominant - less dominated approach (Creswell, 1994) but in reverse order.	
To conduct a survey to identify the teacher leaders.	The less dominant approach. - quantitative in nature.	Entire teaching staff of the school including principal and vice-principal.	Survey conducted in school. Staff given written instructions and additional briefing by researcher and principal immediately before the survey. Principal's reminders improved the return rate.	3. Identified a list of local teacher leaders.
Discussion with principal and vice-principal.	Qualitative.	Principal and vice-principal of school.	Informal notes of discussion.	4. School contextual information. 5. Administration's views on teacher leaders helped researcher to finalise

Area of inquiry	Paradigm	Source	Means	Outcome
				the selection and include deviant cases.
Selection of teacher leaders.	Quantitative & qualitative.	From those identified by the staff.	Applied criteria to select four teacher leaders from the school with allowance for deviant cases.	6. Four teacher leaders selected for in-depth interviews.
Conduct in-depth interviews to gather data on teacher leadership.	The dominant approach: - qualitative in nature.	Four teacher leaders.	The in-depth interview was conducted using the interview schedule with leeway to pursue interesting or new areas. Transcripts of interviews were verified by teacher leaders. Observed the SAFARI principles	7. Four sets of verbatim transcripts (amended by respondents) for analysis.
Clarifications with the teacher leaders.	Qualitative.	Four teacher leaders.	Used a second interview to clarify specific areas or comments. Also used email and the telephone as additional means of communication with teacher leaders.	8. Continuous input from respondents.
Gather bio-data on the teacher leaders.	Quantitative.	Four teacher leaders.	Self completed personal particulars forms.	9. Integrated with interview data to form the framework of teacher leadership based on the preliminary study.
School documents, publications and reports.	Qualitative.	School administration, school magazines and newsletters.	Documentary analysis.	10. School contextual information of limited value for triangulation purpose.
Official publications.	Qualitative.	Ministry of Education, The Straits Times Publication.	Documentary analysis.	11. Contextual information of limited value for triangulation
Data analysis.	Qualitative.	Interview transcripts, personal particulars forms, discussions with principal and vice-principal, & documents supplied by schools and those available publicly.	Inductive analysis to search for categories, themes and patterns. Collated twenty four items of interest which were regrouped to form six distinct areas.	12. Established a model of teacher leadership with four dimensions. Presented in Chapter Four. 13. The remaining two areas on <i>Development of and Obstacles to teacher leadership</i> were discussed separately in the same Chapter.
Final study				
Stage Three				
Research Question 4: Implications emerging from the revised framework of teacher leadership based on the final study.	Qualitative.	Study conducted in one Government managed primary and one secondary school in different parts of Singapore and with different student racial input.	Through a dominant - less dominated approach (Creswell, 1994) but in reverse order.	
The eight steps used in the preliminary findings and documented above, were repeated in the final study.				
Data analysis.	Qualitative.	Interview transcripts, personal particulars forms, discussions with principal and vice-principal, & documents supplied	Reanalysed the content of the preliminary study in view of the increase in data. The analysis was checked by three HODs and a	14. A modified framework of teacher leadership was produced. The four dimensions were renamed to include

Area of inquiry	Paradigm	Source	Means	Outcome
		by schools and those available publicly.	retired primary school teacher. Their comments were incorporated in the modified framework of teacher leadership.	the additional data while the sections on <i>Development of and Obstacles to teacher leadership</i> were combined and presented as <i>Obstacles and Support to teacher leadership</i> . 15. This model explained the many implications of teacher leadership as seen in Singapore schools. This is presented in Chapter Four.
Additional input				
Stage Four				
Research Question 5: The developed model of informal teacher leadership in Singapore schools.	Qualitative.	Conducted additional fieldwork to reaffirm the model of teacher leadership derived from the final study. Only five teacher leaders were available for this fieldwork.	Data from in-depth interviews were analysed. The transcripts were verified by the teacher leaders.	16. The developed model was influenced strongly by local conditions like school culture and environment. Thus teacher leaders were prominent in their leadership role over their students. This is discussed in Chapter Five and revisited in Chapter Six.

This matrix links the development of the first three chapters beginning with the local educational system and its impact on the theory-based model of teacher leadership, to the findings in the subsequent chapters. In analysing and interpreting the data on teacher leadership gathered from the preliminary and the final study, a framework of teacher leadership emerged at each stage. To finalise the developed framework of teacher leadership and to conclude this study, an additional fieldwork was undertaken with the same sample teacher leaders. However due to the time lapse between the final study and the additional fieldwork, it is anticipated that some of the teacher leaders will not be available due either to retirement or staff movement but this is not expected to adversely affect the data. This developed model of informal teacher leadership is expected to generate great interest and awareness of the dichotomy nature of leadership in Singapore schools and contribute to future studies on school improvement.

Chapter Four

Analysis of characteristics of teacher leadership in Singapore

1. Introduction

Of the five research questions posed in Chapter One the first two have been answered in Chapter Two. The response to the third and fourth research questions on the revised framework for teacher leadership emerging from the preliminary study and the implications arising from the final study can be found in this chapter. The developed model of teacher leadership which corresponds to the last research question can be found in Chapter Five.

The prototype model of teacher leadership is presented in a style which allowed the researcher to use “the participants’ perspective and their worldviews (to) form the structural framework for the report” (Marshall et al., 1999 p.158) and “narrate part of the account in their own words” (Hoepfl, 1997; Walcott, 1990 p.19). In keeping with the qualitative nature of this study, the researcher interpreted the data to “lend shape, form and meaning to the raw data” (Marshall et al., 1999 pp.157-158). Being a preliminary study, this report has inherent shortcomings including limitation of data and interpretation but these will be rectified in the final study.

2. The process (preliminary study)

Midlands Primary School, the site for the preliminary study, was a typically government managed primary school situated in the midst of a HDB precinct where most of the students reside. The majority of the students were of Chinese origin (87%) with those of Malay origin forming 9% and those of Indian and other races forming the

remaining 4%. This percentage reflects the national racial composition pattern. The school's location in the south of the island gave easy access to the researcher who also enjoyed the active support of the principal for this study (Nisbert et al., 1984).

On 27 September 2000, the survey was conducted in the school and with reminders from the principal a return of 87% was achieved. The staff identified 13 teacher leaders. The four informal teacher leaders selected for the interviews met the criteria of being ranked within the top four, supported by at least two categories of staff and do not hold an official appointment. With the agreement of the teacher leaders, arrangements were made with the school to conduct the interviews in a dignified and private manner, and at a time convenient to the teacher leaders (Wragg, 1994). This approach added importance to the whole process and ensured the co-operation of the informal teacher leaders. However the interviews had to be delayed due to the impending school examination and were resumed on 5 and 8 March 2001.

At the start of the interview each teacher leader was given an interview file containing an official letter explaining the purpose of the interview, the interview schedule (Appendix D) and the personal particulars form (Appendix C). The researcher explained to the teacher leaders individually the purpose of the documents, sought their consent once again to be interviewed (Babbie, 2004) and to have the interview audio taped. Each interview lasted 30 minutes (Converse et al., 1986). The teacher leaders agreed to supply additional details if required at a later stage. The interview tapes were transcribed and each of the teacher leaders was given a typed copy on 5 May 2001 for their verification. The few amendments were mainly of a factual nature. The verified typed copies were collected on 12 May 2001 and the interview notes amended. This allowed respondents to 'edit' the

researcher's accounts of their views and actions and "share in the controlled release of data to audiences within and outside the research situation" (Adelman et al., 1984 p.100). A second series of interviews was conducted on 25 May 2001 and 28 May 2001 to allow the respondents to clarify and amplify on their achievements. The process followed the recommendations of Tuckman (1972) as cited by Cohen et al. (1998) including the sending of letters and tokens of appreciation to the respondents. The ethical code outlined in Chapter Three was observed by the researcher.

3. Model of teacher leadership (preliminary study)

3.1 Dimension One: The leadership over students in class and in school

The interviews revealed that all the teacher leaders were competent classroom teachers well grounded in pedagogy, concerned about the success of their students and willing to spend time with them to help them achieve success. Elias (PPS1, 2001) kept his pupils focussed on their academic work by spot checking on them in the evening. His pupils did not consider this intrusive but rather as expressing concern for their well-being. Judy (PPS2, 2001) remained in school in the afternoons so that her past pupils can contact her. Ann (PPS4, 2001) used her break time to discuss problems which her pupils might have encountered during the day and made home visits to speak with parents. Charlotte (PPS3, 2001) spent more time with the parents to provide them with feedback on their children's performance and development.

In exercising leadership over the pupils their main consideration has always been:

The welfare of the pupils (PPS4, 2001 p.3).

As Ann (PPS4, 2001) pointed out, the effort to achieve success has not always been successful:

In terms of marks (PPS4, 2001 p.6).

In spite of this the pupils are appreciative of their care and concern. Judy (PPS2, 2001) mentioned that many of the pupils look to her as a role model. She has been identified:

As a leader not only in her class but also by all the pupils in her school (PPS2, 2001 p.2).

Ann (PPS4, 2001) reported that in her conversations with her pupils, some said that:

They want to grow up like me (PPS4, 2001 p2).

All the teacher leaders acknowledged their deep involvement and commitment to their pupils in their own ways. Judy (PPS2, 2001) was concerned about her pupils when she leaves for higher studies. As Charlotte summed it up:

The work of teaching especially children is to touch the hearts of the children (PPS3, 2001 p.10).

Each of them has touched the lives of the students under their care.

3.2 Dimension Two: The leadership over teachers

In their leadership over the teachers, they emphasised the importance of collegiality in their school which they explained in terms of purely social context like the use of interpersonal skills in dealing with teachers. Judy (PPS2, 2001) and Elias (PPS1, 2001) mentioned that they offered and provided assistance to other teachers even when this was not required of them. Care and concern for teachers featured prominently. Ann (PPS4, 2001) mentioned that:

There should be concern for each other (PPS4, 2001 p.7) (and she) makes it a point to look after the teachers too (PPS4, 2001 p.3).

Judy (PPS2, 2001) is willing:

To be the spokesperson for the teachers if the cause is justifiable (PPS2, 2001 p.3).

The teacher leaders have mentioned mentoring of beginning or new teachers through the School-National Institute of Education mentoring partnership programme. For example, in spite of their limited experience, Elias (PPS1, 2001) and Ann (PPS4, 2001) have mentored graduate teacher trainees even though they are non-graduate teachers. Elias (PPS1, 2001) and Charlotte (PPS3, 2001) have both reported being approached by younger teachers or those new in service for assistance in the teaching of academic subjects. They were willing to share teaching strategies with their colleagues. Charlotte, for example conducted sharing sessions after attending the Science workshop (PPS3, 2001) while Elias offered an innovative solution for calculating test marks using the EXCEL programme (PPS1, 2001).

As informal teacher leaders they were aware that their leadership depended on:

Strong human relations (PPS4, 2001 p.7).

In the face of resistance they would approach their colleagues differently.

(For) strongly task oriented (colleagues) you deliver the results. This would help to avoid conflicts (PPS3, 2001 p.2).

Alternatively, they should be aware that there:

Is a time for everything. Be willing to wait for the appropriate time. When others see the advantage in the project, they will want to participate (PPS1, 2001 p.7).

Above all, they earned the respect of both teachers and students through conducting:

Good lessons and getting involved in their lives (PPS3, 2001 p.4).

Elias concluded that:

Team work is evident in this school. Teachers volunteer on a personal basis and chip in to help when needed (PPS1, 2001 p.3).

Even where disagreement arose as at the Teachers' Day dinner:

Quite a number came to volunteer their services (PPS3, 2001 p.7).

This collegiality was clearly reflected in the survey when the staff reported that the characteristic they associated closely with informal teacher leadership was *assistance to colleagues*.

3.3 Dimension Three: Working with the administration and community

The teacher leaders found that they also enjoyed the support of the school administration when they assumed leadership roles like being the school's representative to the Singapore Teachers Union (STU) as in the case of Elias (PPS1, 2001), or like Ann being given a very specific assignment to improve the school's physical fitness performance from Band D (the lowest) to Band A (the highest) and sustaining it over the years (PPS4, 2001). They were involved in planning and implementing activities, sometimes routine but at other times innovative and creative to benefit the students as in the introduction of Elias' *Mathematics Problem Solving Approach* which successfully improved the Mathematics scores of the students (PPS1, 2001) or Charlotte's investigative project at the Science Fair meant to hone the skills of the pupils (PPS3, 2001).

Judy was the only teacher leader invited by the school administration to represent the teachers in the School Steering Committee (PPS2, 2001).

For the first time I participated in important decision making and knew what was happening (in the school)(PPS2, 2001 p.3) and became the voice of the teachers (PPS2, 2001 p.6).

Her willingness to speak up has encouraged other teachers to give feedback to the administration thus:

Start(ing) a trend in the school (PPS2, 2001 p.6).

She noted that increasingly this has become part of the school culture (PPS2, 2001). This involvement in the governance of the school has been cited as one of the rewards of teacher leadership (Lecos, Cassella, Evans, Leahy, Liess & Lucas, 2000).

The teacher leaders (PPS1, 2001; PPS3, 2001; PPS4, 2001) agreed that their involvement with the community ultimately benefited their students.

Work outside the school enhances the teacher's work within the school. Being a tutor at CDAC has helped me to reflect and to find new ways and strategies to meet different situations (PPS1, 2001 p.5).

In addition:

I have learned new skills in handling people and these can be applied when dealing with my school colleagues (PPS3, 2001 p.5).

Only one of the teacher leaders Judy was not involved as she lacked the qualification to be a counsellor (PPS2, 2001). In spite of that Judy asserted that:

Being a teacher is a form of community work (PPS2, 2001 p.5).

Of significance was the attempt by Ann to tap the resources of the parents (PPS4, 2001). She intended to:

Get parents together to help in school activities...end of the year concert...and be part of the Library buddy system (PPS4, 2001 p.3).

This demonstrated a growing realisation among teacher leaders of the importance of the community and the need to tap the community and parents to further contribute to the well-being of the school.

3.4 Dimension Four: Personality

The teacher leaders realized that certain skills can facilitate their work as teacher leaders (Boles, 1992; Devaney, 1987). They mentioned:

The ability to mix with people (PPS3, 2001 p.2).

Personality...I am skilful in getting things together, planning things and making everybody participate and be involved (PPS2, 2001 p.2).

(Possessing) management skills allow me to balance administrative work with my marking load (PPS1, 2001 p.2).

People relations...I am the *welfare kind of person* (PPS4, 2001 p.2).

In addition, Judy through involving everyone in the staff was able to build the:

Togetherness of the morning session...I hold them together (PPS2, 2001 p.6).

These personal qualities have enhanced their work and their ability to get on well with their pupils and their colleagues.

Personal beliefs also helped them to remain as teacher leaders. In the case of Elias and Charlotte both were involved in conducting tuition classes outside of the school. Elias has been a tutor with CDAC since 1996 (PPS1, 2001) while Charlotte gave tuition and taught Buddhism to the youth in her temple (PPS3, 2001). All these contributed to the effort to better themselves as teachers. Elias mentioned that this:

Enabled him to work beyond the type of students in school (PPS3, 2001 p.5).

For Charlotte this:

Led to the development of new skills in handling people and can be applied in the school (PPS3, 2001 p.5).

Thus teacher leaders are moved not only by their concern for their students or their personality but also by personal beliefs or motivation.

4. Development of teacher leadership

The prototype framework shows the work currently undertaken by teacher leaders in Singapore schools. Where this framework can be improved and made more relevant, then teacher leadership will be of great value to the school. In this respect two areas require further investigation, – the development of teacher leadership and improving their effectiveness by removing or reducing the obstacles and increasing the supports.

The teacher leaders differed on how teacher leaders could be identified. Two of them, Judy (PPS2, 2001) and Charlotte (PPS3, 2001) preferred this to be a staff prerogative while Elias (PPS1, 2001) and Ann (PPS4, 2001) saw advantages in some form of joint identification and development with the administration. This seems to support Barrick's (1988) view that teacher leaders should be part of the school leadership structure. There was implied agreement among the four teacher leaders that identification and development of teacher leaders should be a slow and steady process with adequate time given to the teacher leaders to make their decision.

The respondents acknowledged that a positive environment:

Allows new or young teachers to display their strength (PPS3, 2001 p.7).

Encourages closeness of staff (with the staff acting) like a family and teachers are willing to help others unofficially (PPS4, 2001 p.7).

Offers a good mix of personality (introverts and extroverts) (PPS4, 2001 p.7), and

Minimum backbiting, (with) the staff (being) open, co-operative and receptive (PPS1, 2001 p.7).

Each teacher could contribute to the development of this environment.

Senior teachers must guide and be ready to help new teachers. The Principal and HODs must be ready to tackle problems posed by the teachers and teachers must be willing to offer help all the time (PPS1, 2001 p.7).

Charlotte aware of the impact the school administration could have on the development of teacher leaders suggested that it should:

Find out which areas the teachers are good at and develop their talents and skills (PPS3, 2001).

This approach was supported by Judy who felt:

The need to match needs of teachers with needs of school (results) in willingness to go the extra mile, and this role (must be) on a voluntary basis (PPS2, 2001 p.8).

Charlotte mentioned that as a teacher leader:

She was encouraged by the principal (PPS3, 2001 p.8).

Both Charlotte (PPS3, 2001) and Ann (PPS4, 2001) were aware that a mismatch could lead to:

A personality clash between teacher leader and the administration (where) the teacher leader is considered a rebel (PPS4, 2001 p.10).

Further:

There should be no abuse of this (by the teacher leaders) (PPS3, 2001 p.7).

What emerged was the realisation that an informal teacher leader not acceptable to the school administration could result in a division school wide. A related problem was the attitude of the Ministry of Education toward the identification and nurturing of informal teacher leaders in schools. The Ministry has its own agenda in seeking to develop, emplace and promote them to posts of responsibility in the hierarchy. This issue of informal teacher leaders vis-à-vis the formal teacher leaders has to be resolved before the concept of informal teacher leaders can be promoted or advanced in the school.

5. Obstacles to teacher leadership

If teacher leadership is able to promote the mission of the school, it becomes necessary to find ways to overcome the obstacles and promote the supports. Some of the obstacles are situational but those embedded in the system require a good understanding of the environmental and cultural factors present in Singapore schools. This section looks at how some of the constraints can be overcome.

One area of agreement among the teacher leaders was the many tasks expected and assigned to them resulting in insufficient time to perform both teaching and leadership roles.

Activities like concerts take the teacher away from lesson time (PPS4, 2001 p.8).

Teachers have to be in class and to lead. There is a need to make allowance for teacher leaders (PPS1, 2001 p.8).

The classroom function suffers when the teacher leader is away on leadership functions (PPS2, 2001 p.8).

Not all teachers can handle both at the same time – be in class and perform leadership role outside class (PPS3, 2001 p.8).

They were in favour of time being set aside for them to perform their leadership functions. In addition Judy (PPS2, 2001) would like to see distributed leadership being practised in the school.

The tasks...spread out to other teachers (PPS2, 2001 p.7).

As distributed leadership is not a natural phenomenon (Clift, 1992), it has to be cultivated and the process depends on the educational system, the school climate, the maturity of the school principal and the personality of the teacher leaders (Gehrke et al., 1997).

On the need for training, the teacher leaders acknowledged that:

Those identified with potential are given courses and asked to go for training. (PPS4, 2001 p.9).

Elias (PPS1, 2001) felt that while training is good:

Right now it has gone overboard (PPS1, 2001 p.7).

They preferred:

Exposure outside the school context like serving in MOE and other schools (PPS2, 2001 p.7).

They could learn on-the-job to check for personal interest. Charlotte mentioned that:

Teachers could be given duties and responsibility. If they can do well then they have the interest (PPS3, 2001 p.7).

This preliminary study with its limited data showed that the prototype framework of teacher leadership is relevant to our understanding of this phenomenon. It can be expected that as more data are gathered from the final study, this prototype framework will be modified and expanded to accommodate more views from a broader range of teachers. With the revised model, conclusions can be made regarding the practice of teacher leadership in Singapore schools.

6. Comments on the preliminary study

The study showed that in spite of the covering letter and the briefing by the Principal and the researcher, a number of teachers continued to identify Heads of Department as informal teacher leaders. To overcome this discrepancy a clarification sheet (Appendix E) using the Frequently Asked Questions (FAQ) format will be included in the identification pack to serve as a constant reminder to the teachers. For the Chinese Language teachers Mandarin can be used to explain the more technical terms at the briefing. Questions 9 and 10 of the interview schedule (Appendix D) would be rephrased

to avoid repetition and a new Question No 11 added to Appendix F. Overall the revision added “interest and clarity (to the schedule) contribut(ing) to a coherent flow” (Converse et al., 1986 p.60). In the Personal Particulars Form the answers to *Staff development* and *Into the future* lacked depth and could not be interpreted usefully until clarified. All these have been reformatted for better data collection (Appendix G).

The interviews should be extended to an hour so that teacher leaders would have the opportunity to speak their mind but not long enough to “worry about respondent fatigue, interview break-off and initial refusal if respondents know the expected length” (Converse et al., 1986 p.62). It would continue to be audio taped and the services of a professional stenographer engaged to transcribe the text. This would enable every teacher leader to have a voice in the discussion and “when recorded in the actual words used...is more persuasive than an (edited) version” (Nisbert et al., 1984 p.80). The clarification interviews were valuable as these allowed the teacher leaders to set straight many details and would be retained. All these recommended were implemented in the final study.

The Principal went to great length to supply sets of data on the school’s history, on-going school programmes and areas for improvement, the teaching staff and the pupils. These data were useful in that it helped the researcher understand the school and its culture, the attitude of the staff in general and teacher leaders in particular. However the school documents were of limited value in verifying the work of the informal teacher leaders as there were no specific references to them.

The preliminary findings showed that the local informal teacher leaders performed many of the functions as their counterparts in other parts of the world though with a number of important differences. In the first instance, the impact of their innovations remained localised within the school. Its influence did not extend to the school cluster or the district and these innovations were not in the forefront of educational change. Secondly, the Singapore teacher leaders were involved in peer coaching as when they mentored new and beginning teachers but not peer evaluation. This can be explained in terms of the Singapore educational system which remains centralised and does not permit major innovations to take place without the concurrence of the Ministry of Education. The Ministry has its own procedure on staff evaluation and promotion which are implemented annually by the schools and submitted to the Ministry for ratification.

Another difference was in their age and experience. The self administered questionnaire showed that local teacher leaders were younger and newer in service. The average age of the four teacher leaders was 27 years as compared to the average age of 41.5 years for the rest of the staff as computed by the Vice-principal. The working experience of the teacher leaders was short averaging 3.75 years acquired mainly as classroom teachers. Only Judy (PPS2, 2001) and Charlotte (PPS3, 2001) had been level coordinators before. While this did not tally with the teacher leadership pattern of having years of teaching experience and in their mid-career (Stone et al., 1997; Troen et al., 1992; Hatfield, 1986) it is in line with the local practice where recognition is based on ability and not seniority and reflective of the local leadership culture.

This preliminary study indicated that the topic is worth pursuing being of value to schools and the Ministry of Education. This preliminary study has also shown the need to understand the emerging differences. Finally, this focus on informal teacher leaders could pave the way for more innovative ways to manage leadership changes in Singapore schools to meet the demands of the global and knowledge economy.

7. Model of teacher leadership (final study)

Two government managed schools – Farrell Primary and Princeson Secondary participated in the final study. Both schools enhanced the final study in different ways. Princeson Secondary had a higher ratio of one of the minority races than that found in other government managed schools. This could affect the type of teacher leaders and their motivation. Both schools identified one deviant case each which did not meet the set criteria. These two events improved the range criterion (Rubin & Rubin, 2005) and increased the sufficiency of information (Seidman, 1998) thus reinforcing the sampling decision taken in Chapter Three. It is expected that the analysis of the perceptions of the teacher leaders will yield significant meaning to the whole study.

In Farrell Primary the teachers identified fifteen informal teacher leaders. The names and ranking of the first six teacher leaders are given in Table 8. The first three teacher leaders, Suling, Vanessa, and Puyi, being clear cases were selected for the study. The fourth teacher also met the criteria, but was omitted on the advice of the principal, being a mother tongue teacher and likely to encounter difficulty with the English language. The fifth was omitted as she was a Head of Department leaving Kohmei as the fourth teacher leader. The Vice-principal (Principal, 2002) had mentioned that Kohmei though

new to the service had adapted well and had shown leadership qualities giving another reason for her inclusion.

Table 8: Truncated list of teacher leaders and their ranked order (Farrell Primary School)

No.	Name	Identified by				Total number of teachers	Teacher leaders' scores on characteristics
		PR	VP	HOD	TRS		
1	P3, Suling		1	7	28	36	679
2	P2, Vanessa	1		6	17	24	406
3	P4, Puyi			2	17	19	353
4	Teacher leader 4*			2	10	12	197
5	Teacher leader 5**		1	1	5	7	128
6	P1, Kohmei	1		1	4	6	119

* Omitted from study due to difficulty with the English Language.
 **Omitted as she was a HOD.

Note: The prefix before the pseudonym denotes the interview transcript number and the order of interview. (n=63)

In the case of Princeson Secondary, nine teacher leaders were surfaced. The first three on the list, Audrey, Hoying and Meichoo were clear cut cases in terms of categories and ranking. The fourth teacher leader onwards had scores of 90 or less. Sonny on the other hand though not supported by the school administrators had the support of many teachers and his scores were way above everyone. Sonny thus was selected as the fourth teacher leader. The principal had commented on Sonny being “an interesting case study on informal teacher leaders” (Principal, 2001 p.2). A summary is given in Table 9.

Table 9: Truncated list of teacher leaders and their ranked order (Princeson Secondary School)

Sn	Name	Identified by				Total number of teachers	Teacher leaders' scores on characteristics
		PRN	VP	HOD	TRS		
1	S4, Audrey			2	10	12	137
2	S1, Hoying	1	1	1	3	6	111
3	S2, Meichoo	1		1	5	7	106
4	Teacher leader 4*			1	6	7	90
5	S3, Sonny**				10	10	152

*Teacher leader 4 and onwards were not selected for the interviews.
 **Sonny was selected as the fourth teacher leader.

Note: The prefix before the pseudonym denotes the interview transcript number and the order of interview. (n=50)

To better appreciate the background of the eight teacher leaders, as they are from two different settings, a pen picture of each teacher leader has been prepared. Kohmei, Vanessa, Suling and Puyi from Farrell Primary are grouped together in Appendix H while Hoying, Meichoo, Sonny and Audrey from Princeson Secondary are in Appendix I.

Using the modified framework proposed in Chapter Three (Table 5), the findings of the final study have been grouped accordingly.

Dimension One: The leadership over students.

Dimension Two: The leadership over teachers and the learning process.

Dimension Three: Their role in school development.

Dimension Four: Personal characteristics.

Dimension One is centred on the well-being of the students in and out of school and includes Gehrke et al. (1997) *innovative* and *logical leaders* performing Harris et al. (2002a) *broker* role. There is an appeal in championing students who do not seem to be performing well, those unable to fit into the system. Teacher leaders work for the disadvantaged students and feel the need for them to experience success (Leithwood et al., 2003; Crowther et al., 2002) though some teachers consider this as being impractical and unrealistic. Teacher leaders try the *pull and the push* approach, pushing students to be responsible for their own progress through constant monitoring of their performance and pulling them through modelling the learning process, their innovative pedagogical approaches in the classroom and their attempts to win their trust and confidence.

Dimension Two comprises the bulk of the work performed by teacher leaders, not for its own sake, but in support of Dimension One. The teacher leaders realize that by themselves, they have limited impact on the students in school but with the support of their colleagues they can extend it school-wide and change the whole learning mission of the school. This dimension is broad and includes both professional and administrative leadership including that gained through innovative programmes. This parallels the *brokering*, *the participative*, *the mediating* and the *networking* roles mentioned by Harris et al. (2002a) and the *caring leaders* of Gehrke et al. (1997). While collegiality seems to be the linchpin which allows these to be played out teacher leaders are not averse to the use of authority or gaining the support of the school administration to achieve this. The *maintenance* work performed by them (Harris et al., 2002a) with other teachers and the use of skills they have acquired over the years in the service or elsewhere, are part of this dimension.

Dimension Three is linked to their role in school development. Through their organisation of events or functions (Gehrke et al., 1997; Katzenmeyer et al., 1996), performance of traditional or new activities (Harris et al., 2002a; Ash et al., 2000), they have acquired organisational skills and successes which have led to their acceptance by their colleagues. They take on the *buffer and bridge* role (Bennett, Newton, Wise, Woods & Economou, 2003) a delicate balancing act as various groups seek different objectives and teacher leaders are hemmed in on all sides. Their preference to work with the school administration as allies has made them invaluable and over time they even share in decision making (Katzenmeyer et al., 1996) which used to be the domain of the school administrators.

The last dimension deals with a broad range of personal characteristics including their commitments, their beliefs and their energy level. This dimension is likely to yield a wide range of information as to their rationale for being teacher leaders. Some basic characteristics can be discerned. Their personal philosophy (Leogrande, 1995), motivation and personality form the key to an understanding of their willingness to take risks and put in the extra mile to make a difference in the lives of the students. Collectively these factors contribute to the frame of mind which will affect the teacher leaders' decision to either persist in their role or revert back to the status of classroom teachers.

7.1 Dimension One: The leadership over students

This aspect of leadership in the class and school is clearly evident in their work. One of the core components of teacher leadership is their commitment to good classroom teaching (Aiken, 1998; Leogrande, 1995; Yarger et al., 1994) through constant reflection on their experiences and expertise (Leogrande, 1995). They motivate, monitor and help their students to experience success. This concern can occasionally result in a backlash from students who perceive this as unwelcome and intrusive. Teacher leaders therefore try to win them over in different ways, build their self confidence, and allow them to achieve success and recognition. This dimension of leadership over the students is a demanding task and can be seen primarily in three areas of their work viz. as effective classroom teachers; their concern for student learning; and the need to be a role model to their students.

- Effective classroom teachers

The teacher leaders of both schools by their own admission were effective classroom teachers. This was also the consensus of their colleagues at the identification process. At Farrell Primary, Kohmei (P1, 2002) has:

Good classroom management and the ability to control her pupils. The pupils look forward to my lessons (P1, 2002 p.1).

Suling (P3, 2002) established rapport with her Primary One children and used routine to help them adjust to the classroom.

Once they are organised and rapport established, they are not difficult to handle (P3, 2002 p.3).

Such was the confidence of the school in her classroom management that she had been deployed in a Primary One class for the greater part of the last twelve years that she spent at Farrell. Vanessa (P2, 2002) explained that an:

Effective teacher does more than convey a lesson to the pupils. (She) builds a relationship with her pupils (P2, 2002 p.1).

Puyi (P4, 2002) reflecting on his ability as an effective classroom teacher mentioned that while his:

Class seems to be the dumping ground for problematic children they turned out okay (P4, 2002 p.5).

At Princeson Secondary, Audrey's (S4, 2001) forte was that of a Mathematics teacher while Sonny's (S3, 2001) strength was in:

Mastery of content, communication with pupils and transmission of ideas (S3, 2001 p.1).

Hoying (S1, 2001) said that she:

Control(s her) class pretty well. Classroom management is never a problem. Only when you are able to get the class to be disciplined then learning can take place (S1, 2001 p.1).

Meichoo (S2, 2001) did not make a specific reference to her classroom effectiveness but implied that being the form teacher of a Normal Technical class was a great challenge and of a different order. She looked for ways to motivate her students to perform well in their academic studies.

The Normal Technical students don't understand the importance of academic performance. They don't care how well they perform. They need the motivation when it comes to academic performance (S2, 2001 p.4).

All agreed with Sonny that:

With good classroom management the content can be taught well (S3, 2001 p.1).

Their good classroom skills had not gone unnoticed by the school administration.

Hoying gave her impression that:

Normally, the school gives the graduating classes to the better (i.e. capable) teachers (S1, 2001 p.4).

A check with the teacher leaders indicated that at Farrell Primary, Kohmei (P1, 2002) and Vanessa (P2, 2002) had been given the Primary three and four classes. These classes constituted the first critical stage as primary school pupils were streamed at the end of their fourth year. Primary schools normally deployed their better teachers for classes at this level. Furthermore both were graduate teachers and suitable for such deployment. The four teacher leaders in Princeson Secondary had been teaching graduating classes most of the time. Sonny observed that:

Classroom management and mastery of subject contribute to the respect accorded to teacher leaders (P3, 2002 p.1).

This supported Yarger et al. (1994) finding that success in the classroom gained them the respect of other teachers and that of the administration.

Surprisingly, classroom competency of the teacher leaders was reflected differently by the staff of the two schools during the survey. At Farrell Primary the teacher leaders were given high scores by their colleagues on two items relating to curricular instructions – *mastery in the classroom* and *depth and understanding of the curriculum*. However the teacher leaders of Princeson Secondary did not score as well. This difference in perception could be traced to the culture of the school. In Farrell Primary, sharing sessions with teachers were common and conducted regularly (P1, 2002; P4, 2002) while the teacher leaders at Princeson Secondary were uncomfortable with sharing and observations (S1, 2001; S2, 2001) and they were thus less aware of the strength of their teacher leaders in the classroom. This does not detract from their classroom skills.

- Concern for student learning

Teacher leaders exercise a very powerful influence over their students. As professional educators and more so as teacher leaders they are “dedicated to help students realize and develop their identities and potentials as humans and offer additional assistance to help the pupils over their difficulties both personal and academic” (Tanck, 1994 p.87). Their concern that their students achieve the academic and social outcome from education (Aiken, 1998; Elliott, 1996; Ramsey & Oliver, 1995), their dedication and commitment (Townsend, 1997; Leogrande, 1995; Wilson, 1993) have caused the teacher leaders to spend inordinate amount of time with their students to achieve success and to monitor the students’ performance at their own personal expense.

The teacher leaders at Farrell Primary mentioned that apart from shouldering a full load of 39 teaching periods or 18½ hours per week and logging in the required co-curricular activities (CCA) time like the other teachers in the school, they spent additional

time in school during the week looking after the students' well-being. Vanessa's (P2, 2002) remedial classes occurred as frequently as twice or three times per week lasting for an hour each. In addition she conducted the *Enablers* programme once a week (one hour's duration) throughout the year, having volunteered for it and trained specifically by the Ministry of Education for it. This programme was initiated by the Ministry of Education for lower primary school pupils who have not reached their potential in their class. These activities occupied her till 5 or 6 pm every day. Suling (P3, 2002), being a Primary One teacher was not required to conduct remedial lessons but spent time everyday coaching her weaker pupils before the start of the day. In addition she would be involved in the *Enablers Programme* in academic year 2003. Thus the normal daily pattern for teacher leaders is early arrival in the morning and late departure of around five or six in the evening.

The pattern of spending extra time with the pupils was repeated at Princeson Secondary. Hoying (S1, 2001) conducted extra theory and practical lessons in Physics three to four times a week since the beginning of the year to improve her students' performance.

The students lacked fundamental knowledge of their content subjects. Frequently they come to me for assistance outside classroom time and I am more than happy to set aside time to coach them (S1, 2001 p.4).

Outside of class she:

Builds rapport with her students so as to function as a mentor, counsellor or as a friend to them (S1, 2001 p.1).

Audrey (S4, 2001) conducted remedial lessons for her graduating classes as:

They needed it since they are taking a major examination (S4, 2001 p.4).

For students in non-graduating classes remedial could be on a one-to-one basis.

I have told them that they could come to me after school for one-to-one coaching (S4, 2001 p.4).

Together with her involvement in CCA, Audrey remained in school till 3 or 4 p.m. every day of the week.

Meichoo wanted her Normal Technical students to:

Be more focused in whatever they do (S2, 2001 p.1).

She guided them so that:

They come out top or champs in whatever they do (S2, 2001 p.1).

In addition, she (S2, 2001) conducted remedial classes for her students or engaged in CCA activities in the afternoons, followed by marking, clearing of email and preparation of teaching notes. For three days a week she remained in school till 9.00 p.m.

It's a very tough life (S2, 2001 p.2).

In spite of all her effort, she admitted that not all students liked her approach as:

They do not like to be told what to do (S2, 2001 p.1).

Teacher leaders also introduced innovative approaches on a school-wide basis to stimulate their pupils' interest in learning. Vanessa (P2, 2002) conducted Mathematics Assembly talks using:

Tables, patterns and models thus making Mathematics problem solving more interesting and enjoyable (P2, 2002 p.2).

She used her Mathematics Club to boost her students' interest in Mathematics. Dealing with pupils from four levels and of different abilities, she introduced Literature in Mathematics, Creativity and Multiple Intelligence approaches with the appropriate hands-on activities to whet their appetite. Although she was unable to measure empirically their performance, she said that:

The pupils have really gained an interest in Mathematics and in creative thinking (P2, 2002 pp.6-7).

In these ways, she reached out to pupils not taught by her and gave them the benefit of her experience. Like wise Puyi (P4, 2002) adapted programmes from other organisations to meet the needs of the school.

I discovered that the activities organised by the Botanic Gardens were very useful for the school and have incorporated such activities in our future science programme (though modified) (P4, 2002 p.3).

As they developed their relationship with the pupils, they make known their high expectations (Barth, 1990) and move their students towards academic and personal achievements (Rogus, 1988). At Farrell, Kohmei (P1, 2002) extracted the best from her pupils. In academic year 2001, she emplaced 25% of her Primary Three cohort into the best Primary Four class the following year. Her Primary Three class performed well in school-organised activities like Science Fair and English Enrichment Programmes.

Vanessa (P2, 2002) mentioned that her very weak pupils have passed their examinations and even the mediocre ones have performed very well in their studies. She concluded that she:

Is doing what (she) is supposed to do as a good teacher (P2, 2002 p.6).

Suling (P3, 2002) took pains to explain to her Primary One class the rationale for the various competitions and her Primary One class was first in the Choral Reading Competition in 2002 while her previous class in 2001 performed beyond her expectation in the Poetry Recitation Contest. Puyi (P4, 2002) confided that though his classes were not top in academic performance, he is proud of his pupils' achievements.

All the pupils I taught passed their Primary School Leaving Examination (PSLE) including those who gave problems in other classes. To me that is a sense of achievement (P4, 2002 p.5).

At Princeson Secondary the teacher leaders reported similar successes. Meichoo (S2, 2001) encouraged her students in the Express stream to participate in an essay writing competition depicting *Hero of the Century* and her students bagged the first and third prize. Her other students from the Normal Technical stream participated in activities organised by the school and the community centres and success:

Has made the Normal Technical students feel good (S2, 2001 p.1).

Sonny (S3, 2001) confided that while grades and marks remained the overt signs of success, he has helped his students to understand the broader issues.

The positive (value) of history (as a subject) and beyond history (the subject) to the country as well as to an understanding of world events, society and people in general. I am able to achieve this objective (S3, 2001 p.3).

Audrey (S4, 2001) admitted that although her Normal Technical class did not meet the targets set by the school:

They seemed to have enjoyed my classes (S4, 2001 p.3).

She was convinced that:

Learning has taken place but when it comes to the examination, they are not performing to my standard (S4, 2001 p.3).

She recalled how a former student confided in her about his success in scoring a B3 grade in Mathematics in his final year at school when he had never achieved a pass grade in Mathematics throughout his secondary school life. He attributed this to her teaching and the way she inspired his class.

Apart from academic performance, the teacher leaders were interested in the well-being of their pupils. Suling (P3, 2002) being a pupil welfare coordinator was responsible for the material, social, emotional and corrective development of all the pupils in the school. She organised workshops for her Primary Six pupils on social etiquette and boy-girl relationship (BGR). The feedback from her colleagues was that:

They noticed an improvement in the behaviour of the pupils after the workshops (P3, 2002 p.3).

She recalled instances where the pupils having lost or misplaced their belongings would come to her for assistance.

I know I have won the confidence of quite a lot of pupils because I treat them well (P3, 2002 p.6).

She treated the pupils as her own children or grandchildren offering them motivation and guidance. Vanessa's (P2, 2002) concern for the well-being of a pupil who came from China and could not speak the English Language at all, led her to coach this pupil for the whole term on a voluntary basis. By the end of the term, the pupil could integrate well with his classmates.

Vanessa (P2, 2002) stated that a good relationship with the pupils could offer the pupils from dysfunctional families the emotional support that they need.

To me this is a very important aspect of my work. I find that when the pupils like the teacher, they tend to be able to focus more on the lesson because they want to perform to please a teacher in one way or another (P2, 2002 p.1).

She felt the need at times to be a surrogate mother. Puyi (P4, 2002) recalled how because of the interest shown to a pupil from a broken home by the school and the neighbourhood Police Boys Club, the pupil eventually made good both academically and emotionally.

By providing him with some kind of care and support, he could concentrate on his studies and not worry about his next meal or whether he would see his father again and so on (P4, 2002 p.12).

Audrey (S4, 2001) reported similar practices at Princeson Secondary. As the Pastoral Care co-ordinator she took charge of discipline and helped graduating students in their career planning. All students who discontinued their schooling had to consult her and

she took this opportunity to discuss their decision with both parents and students. This role was far-ranging.

My role is not defined clearly. Anything to do with students and especially those who have problems and need counselling, I am involved (S4, 2001 p.1).

Sonny (S3, 2001) helped his students in their academic and personal problems.

I am able to relate extremely well with them as a teacher but also as a friend and help them along with their character and their personality development in their adolescent age (S3, 2001 p.4).

He downplayed the time he spent with his students.

I don't find it a burden. I never really thought of it that way (S3, 2001 p.4).

In fostering these activities without taking the credit, the teacher leaders were fulfilling the culture of success mentioned by Crowther et al. (2002).

Teacher leaders' skill in the classroom, their mastery of content and pedagogy, their concern for student learning and their setting of high expectations for their mixed ability students have enabled both the teacher leaders and their students to experience levels of success. Success breeds confidence within the class and the school, giving the teacher leaders the mantle of instructional leadership. All these efforts by the teacher leaders enabled the school and ultimately the students to achieve their target and share in the achievements of a learning community. To sustain this success the teachers continued to look for innovative ways to motivate their pupils from different cultural background and abilities (Wilson, 1993) even to the extent of influencing and cooperating with other teachers in order to create learning options for other pupils (Leogrande, 1995).

- Role model for the school

Rutter et al. (1979) study on school effectiveness made a direct reference upholding the need for teachers to be role models to their pupils. Their concern for the pupils

extended beyond mere academic learning to embrace their personal growth and well-being. Howey (1988) and Leogrande (1995) arrived at similar conclusions regarding teacher leaders. As good role models teacher leaders go beyond the content knowledge of the curriculum and seek challenges and growth for their pupils and incidentally for themselves (Lieberman, 1992b). Only when there is self development, can they help their students to progress.

The teacher leaders from Farrell Primary emphasised the importance of role modelling. Suling mentioned that:

Teacher leaders must be an example and a role model for others (P3, 2002 p.14).

Kohmei added that:

Being a teacher you are a role model not just within the school but also outside the school; not just to the pupils but the parents as well (P1, 2002 p.12).

The teacher leaders from Princeson Secondary agreed with the need to be role models.

Meichoo said that:

We must be a role model to others, to the teachers, to the students to anybody in the school. We must be able to guide, understand and be diplomatic in handling people and students (S2, 2001 p.8).

The teacher leaders were in agreement with Reynolds (1992) that where “teachers serve as role models, (they) tie the pupils into the value system of the adult society” (Reynolds, 1992 p.11). In their own way Sonny (S3, 2001) and Vanessa (P2, 2002) as leaders in their respective churches served as role models to a wider audience. Role modelling is also a declared objective of the Singapore Ministry of Education (Teo, 2001d, 2000d, 1998a).

Teacher leaders measure up to Troen et al. (1992) observation that as role models they facilitate the development of those around them and exert influence in domains outside the classroom. As change models they lead teachers through the change process

(Stone et al., 1997). Sanders et al. (1994) felt that modelling offers an alternative to teachers seeking for ways to improve their own operational style and has a carry-over effect on the whole school.

7.2 Dimension Two: The leadership over teachers and the learning process

This can be considered the supporting role to enable teacher leaders to achieve the first dimension. Writers have viewed the rise of teacher leadership as an attempt by teachers to improve and sustain school effectiveness and make the school a better place for students (Frost, Durrant, Head & Holden, 2000b; Stone et al., 1997; Mooney, 1994). As teacher leaders experienced success in improving student learning (Moller et al., 1996) they felt the need to extend this success to other students on a school-wide basis and so needed the help and support of their colleagues. Thus they were ever willing to share their success with their colleagues and even coached them when needed. The mentoring of new and beginning teachers represented one of the most effective ways for teacher leaders to transmit their tried and success formula as well as the school culture to others. These activities in turn demanded that teacher leaders find all avenues for continuous professional development (Lord et al., 2000) in both pedagogical and leadership roles (Harris et al., 2002a). The empowerment and professionalism of the teaching service would in turn attract more talented people to remain committed to the service.

- Desire for continuous self improvement

All the teacher leaders agreed on the importance of maintaining a high level of professionalism through continuous reflection and personal cultivation of a life-long learning process. Their individual growth as “adult learners would complement the school’s development as an organisation” (Aiken, 1998 p.25). At Farrell Primary, the

teacher leaders felt that professionalism could be developed with the sharing of experiences with one another. Kohmei felt that professionalism also involved:

The way you judge things and the way you behave (P1, 2002 p.12).

Vanessa (P2, 2002) mentioned that as teacher leaders they needed to understand both the macro and the micro aspects of education and possibly adapt some of the best features to local conditions. Puyi (P4, 2002) was convinced that over time all teachers would acquire a certain mindset and adopt useful ideas and information wherever and whenever available for use in their class.

For example when we go on a holiday and see something which you feel is good for your lesson; you will want to bring it back to school (P4, 2002 p.10).

In these ways, teacher leaders and their colleagues applied their experience for student development (Harris et al., 2002a).

Similar sentiments were expressed by the teacher leaders from Princeson Secondary. Sonny (S3, 2001) explained that professionalism would require the teacher leaders to continuously improve themselves.

We need to develop ourselves beyond what we are trained in the content area to embrace new concepts of education, of working in partnership with others (S3, 2001 p.7).

The need for professional development (Lieberman, 1992b) becomes urgent as they change from being transmitters of knowledge to facilitators of learning. Meichoo realised a higher order need.

Sometimes people do it for a greater need, which is to develop ourselves so that the school and society can benefit (S2, 2001 p.7).

Audrey said that:

With all these new initiatives you are constantly learning and I find it good (S4, 2001 p.8).

In their personal life, the need for development came across strongly. Both Hoying and Meichoo started their career as non-graduate teachers and through self improvement eventually were emplaced as graduate teachers (S1a, 2001; S2a, 2001). Hoying has gone on to postgraduate studies. Sonny has explored the possibilities of enrolling in a Doctorate programme but has not committed himself to it yet (S3a, 2001). Their attempt to improve themselves is not lost on their colleagues. When complemented by expert knowledge in other aspects of education and leadership, this combination earned them additional respect and reinforced their expert power to influence decision making and curriculum development in the school.

- Mentoring of beginning/new teachers

In the *mediating* role, teacher leaders worked closely with other members of the staff. Mentoring of beginning teachers has been described as one of the hallmarks of teacher leadership (Sherrill, 1999; Gehrke et al., 1997; Duke, 1994; King, 1986). As mentors, teacher leaders provided their trainee and beginning teachers with scaffolding to access much needed help in the school and eased them into the culture and ethos of the school (Sherrill, 1999). Feaster (2002) observed that those who provided mentoring assistance also reported substantial improvement to their practice. Mentors in turn became better teachers through improving their communication skills (King, 1986). Rosenbach (1993) explained that “mentoring is essential for personal and organisational growth and development” (Rosenbach, 1993 p.141).

In Singapore, the School-National Institute of Education Mentoring Partnership Programme requires the school to appoint senior teachers and co-operating teachers to serve as mentors to National Institute of Education (NIE) trainee teachers (Moo, undated).

In normal circumstances, an experienced teacher acts as a co-operating teacher to an NIE trainee teacher once every two or three years. Except for Hoying who was just posted to the school at the time of the interview, all the others have served as co-operating teachers. Although the terms *mentoring* and *co-operating teacher* were used synonymously in schools, Suling felt that there should be a distinction between the two terms.

Co-operating teachers deal more with the NIE teachers in their areas of need (especially) in classroom management. *Mentoring* teachers are slightly different. The emphasis is on (helping) professional development, in addition to classroom teaching. Mentoring is only for beginning teachers, contract teachers and even colleagues who need help (P3, 2002 p.2).

Both Vanessa and Suling have worked as mentoring and co-operating teachers. Vanessa (P2, 2002) had been a co-operating teacher to NIE trainee teachers and a mentor to contract teachers since 2001. She admitted that she was selected for this role as the school felt that:

I am able and willing to share certain things (like knowledge and pedagogical skills) in which I am stronger (P2, 2002 p.15).

Suling (P3, 2002) not only served as a co-operating teacher but also mentored colleagues needing assistance. She spent two periods (one hour) with each beginning and/or contract teacher per week for the whole year not counting pre-meeting discussions and post-meeting monitoring sessions. Interestingly, this mentoring role was built into her timetable by the school. The teacher leaders thus acted as on-site supervisors for beginning teachers (Gehrke et al., 1997) similar to the role played by consultant teacher leaders in the Peer Assistance and Review (PAR) in the Columbus Ohio Public School system (Knight, 1990).

Teacher leaders have found this task important and valuable for their self development. Meichoo commented:

Mentoring teaches me and makes me aware of what I'm doing. (It) provides good guidance for the new teachers (and) allows the co-operating teacher to be updated on what's happening at NIE (S2, 2001 p.2).

Some writers like Manthei (1992) have suggested that the prime reason for mentoring was for professional growth and stimulation; helping novice teachers was a secondary motivating factor. However, this view was not raised at the interviews. The teacher leaders maintained that at the end of the mentoring period, mentor and mentored were able to integrate with ease, thus negating the fear of Walling (1994a) that mentoring of teachers tended to lead to a teacher-student role with the new teachers and prevented collegiality from developing in the community of teachers. In an Asian context, should the mentored teachers be re-posted to the same school where they were mentored, there was the possibility of this mentor-mentored, teacher-student relationship lingering on to affect collegiality. Where the mentored teachers were posted to another school, the mentored teachers start anew without any awkwardness and soon were integrated into the community. One has to take into account the context, the personality of the mentors and the mentored teachers too.

- Working with colleagues

Successful schools are characterised by faculty collegiality, collaboration and a sense of community (Barth, 1990; Rogus, 1988). Both Harris et al. (2002a) and Crowther et al. (2002) observed that teacher leaders tend to forge close relationship with colleagues and maintain their network. Many teachers associated collegiality with the ability to get along with each other. Walling (1994a) explained that collegiality was more than being sociable or able to get along with others. In a professional sense, collegiality implied

mutual support, peer coaching and embodied the notion of shared power and authority. Timperley et al. (1998 p.608) drawing on the views of several authors, defined collegiality as “groups of teachers working together in a cohesive school culture, being empowered to take greater control of their work through consensus decision making.”

The teacher leaders in both schools used social and interpersonal skills in dealing with teachers but realized that when dealing in professional areas they had to use their classroom skills to negotiate collegiality with the staff (Leogrande, 1995). Collegiality remained a key to school improvement (Stone et al., 1997). Initially it could start of with “hallway talk but eventually it moves to *Come to my classroom to see what I’m doing*” (Richardson, 1997 p.1).

Suling mentioned that collegiality helped in creating teacher support.

We must always work as a team (P3, 2002 p.14).

Vanessa regarded collegiality as a tool to build a good relationship with her colleagues, gain their respect and:

Get them to follow you. A leader needs to have people who want to be led by them (P2, 2002 p.14).

Kohmei pointed out the importance of collegiality to informal teacher leaders who:

Must establish rapport with their colleagues. Only then can they support the leaders. It is no use being a good leader but without followers. (Where collegiality exists) you can get things done and be assured of the quality too (P1, 2002 p.12).

When collegiality led to classroom observations, the teacher leaders from Farrell Primary were more open to it. Vanessa and Suling were quite comfortable when observed by others. Vanessa (P2, 2002) explained that this could be due to the NIE trainee teachers

attached to her for training but admitted that it did produce a certain amount of stress.

Nevertheless:

If I am able to be of help by sharing what I am doing, it is definitely fine with me
(P2, 2002 p.14).

Suling would welcome anyone wanting to observe her in the classroom.

A third party or an outsider can see and may ask questions which are good for their
development. Treat it as a sharing session with peers...as a form of self-reflection
(P3, 2002 p.12).

In addition, sharing sessions:

Have an influence on the other colleagues (P3, 2002 p.13).

The observations and other forms of sharing conducted on a frequent basis
increased their knowledge of craft. Vandiver (1996) noted an uneasiness among her
teacher leaders when they had to conduct sharing after attending a new training programme
(Vandiver, 1996) as they lacked content knowledge in the new area (Little, 1984). At
Farrell Primary, Saturdays were for:

Workshops, sharing sessions and other school activities like National Physical
Fitness Award (NAPFA) tests, Primary School Leaving Examination (PSLE) Oral
Listening Comprehension sessions (P1, 2002 p.11).

This was corroborated by Puyi (P4, 2002) who referred to Saturdays as being reserved for
workshops and courses. Vanessa had conducted Mathematics and Library workshops
while Kohmei, music. Both expressed confidence and competence in conducting these
workshops. Only Puyi (P4, 2002) despite his years of teaching experience expressed a lack
of confidence in this area. This could be a personal perception.

At Princeson Secondary, collegiality was perceived differently. Sonny (S3, 2001) felt that collegiality was a complex issue as:

You don't work with all the colleagues all the time...perhaps (those from) your own department or your own small group of teachers with whom you share subject or community work (S3, 2001 p.6).

This substantiated an earlier study on *Teacher collegiality in Singapore* conducted by Teo and Tay-Koay (1998 p.4) in which teachers “spent slightly more time with teachers of the same department (than with those from other departments).” Even then, teacher leaders from Princeson felt uncomfortable or inhibited when observed by others. Meichoo said:

I don't like people to observe me (but) I would love to sit in their (colleagues') class and see how they do it (S2, 2001 p.7).

Hoying made the same point but felt that peer observation would:

Benefit me in the long run....help me to correct the things which I have been doing incorrectly or which can be perfected (S1, 2001 p.7).

Audrey (S4, 2001) having been a Head of Department, did not mind teachers observing her in class provided that she was informed in advance. Where special preparation was needed like incorporating Information Technology into a specific topic, then:

You will have to wait until I am free to do it (S4, 2001 p.8).

Meichoo (S2, 2001) suggested that to overcome the discomforts of classroom observation by colleagues, they could meet outside class to discuss what they have experimented in the class. This reflected the opinion expressed by Singapore secondary schools' and Junior Colleges' teachers (Teo et al., 1998) that the preferred location for collegial conversation is the canteen. When comparing the practice of classroom observation, both set of teacher leaders were agreed on the benefits though they differed in their personal responses. This could be a reflection of the culture in the primary and the secondary school.

Gehrke et al. (1997) highlighted peer coaching as one of the roles of the teacher leaders. Unlike the Professional Development Schools in the United States where peer coaching has become increasingly common, teachers in Singapore schools have yet to reach this level of professionalism. At Farrell Primary, Suling openly shared her suggestions with her teachers.

When I sense their problem, sometimes even during conversations, I would say *'Use this strategy. It worked with my class. Try this and see how'* (P3, 2002 p.13).

When her colleagues told her:

'Oh, it works' (P3, 2002 p.13).

She would keep the other teachers informed about it. In this way the teachers were given the option:

To try it first (rather than) make a blunder of the whole thing (P3, 2002 p.13).

Suling (P3, 2002) mentioned that teachers consulted her even when it involved non academic areas like participation in competitions.

Teachers going for competitions or activities normally come to me for advice, suggestions and ideas (P3, 2002 p.4).

Suling (P3, 2002) explained that an additional reason for helping teachers was to shape the quality of the next generation of teachers. This succession planning ensured that:

When we leave we have a group of teachers to continue with the work. We leave the pupils in good hands (P3, 2002 p.14).

This addressed a concern of Fullan et al. (1991) that teacher leaders have to prepare the next generation of teachers to succeed them.

Puyi (P4, 2002) recalled how at his previous school he had an informal arrangement with a Mathematics teacher who had difficulty in explaining certain concepts in the English Language as she had been trained previously as a Chinese Language teacher. Puyi

would explain the concepts e.g. *rate and speed* to the class and the Mathematics teacher would continue with the rest of the lesson. This arrangement lasted for one term.

We shared lessons meaning, I helped in the explanation but she carried on with the teaching (P4, 2002 p.2).

However this informal arrangement was not repeated at Farrell as there were no *converted* teachers. Possibly the difference in school environment led him to comment that at Farrell Primary, the teachers would ask for assistance only if they needed it.

(Farrell Primary) has not reached the stage where a teacher feels *I have a good idea and I would like to share it with you* (P4, 2002 p.9).

Although this view differed from those of Suling, the teacher leaders in the primary school continued to act as catalysts in improving the teachers' classroom practice (Smylie et al., 1990).

At Princeson Secondary, the teacher leaders made no reference to peer coaching and even the sharing of pedagogy, knowledge and expertise is less pronounced. All the four teacher leaders mentioned assistance to pupils and only two; Sonny (S3, 2001) and Audrey (S4, 2001) made direct reference to assisting other teachers. Audrey admitted that teachers would approach her when:

They needed advice (S4, 2001 p.2).

Both Sonny (S3a, 2001) and Meichoo (S2a, 2001) have conducted courses for other teachers but Meichoo (S2a, 2001) like Puyi (P4, 2002) have expressed reservations on this. Generally the secondary school teacher leaders indicated a reluctance to intrude into the professional domains of their colleagues especially when they were equally qualified and experienced.

In her book, Gehrke et al. (1997) repeated the view that when teacher leaders acted as resource and support for other teachers they create a learning process and open up

opportunities for professional development (Stone et al., 1997; Smylie et al., 1990; Hatfield, 1986) and ultimately that of empowerment for the teachers. Their sharing of knowledge and skills enhanced collegiality, broadened their knowledge and eventually improved their performance in the classroom. As Knight (1990) observed, this was one area which gave teacher leaders great satisfaction, the others being the opportunity to help other teachers and opportunities for self development (Stone et al., 1997). Suling echoed these sentiments when she said that:

The more we share, the more we would be able to enjoy our job (P3, 2002 p.12).

- Preference for distributed leadership

Teacher leaders focused on participatory leadership (Harris, 2002b) partly because of the nature of their informal leadership and partly because this represented one safe way to involve their colleagues in their projects and programmes. Through distributed leadership they shared information and work with other teachers as a team. As a concept it has not been fully understood by the teachers in Singapore but there are signs of distributed leadership being practised.

Vanessa (P2, 2002) adopted a team approach when she was the stand-in for the Library coordinator who was away on a full-time course. During that one year, the team under her leadership improved the library in terms of books and readership. Although:

It was a trying period it was a sort of achievement (P2, 2002 p.6).

Implicit in this episode was that success arose due to the use of distributed leadership where every teacher in the team was assigned or volunteered to be responsible for an area of work. When all the teachers tackled the problems collectively, the team was able to bring about overall improvement to the school library.

When Kohmei (P1, 2002) organised the Total Defence Day as part of the National Education programme for the school, she used the same approach. Every teacher in the committee and even the class monitors were allocated fixed duties for the event.

In this way, the children experienced (the effects of) food and water rationing (P1, 2002 p.7).

She further explained her preference for working in a committee where the general approach was agreed upon and tasks:

Allocated to (individuals) to take charge. In this case the rest of the members would know that this person is in charge and would help when requested (P1, 2002 p.8).

While Kohmei's approach seemed more in the nature of allocation of duties, it was a form of distributed leadership. It implied that teacher leaders were having an impact on their colleagues and were getting some form of support from them. Symlie et al. (1990) confirmed that terms like *facilitator*, *helper*, supported their form of distributed leadership thus softening the traditional leadership approach (Gehrke et al., 1997). In its current form, it remained weak but with greater understanding it could lead to improvement in professional practices (Stone et al., 1997) and the emergence of a reliable and workable model in school leadership. When distributed leadership increases in density, it means that the teachers in the school are learning to manage increasingly complex needs (Hess, 1998) and augurs well for the future.

7.3 Dimension Three: Their role in school development

This dimension is of special significance to Singapore schools as the educational system is centralised (Zhang, 1999). Even when principals are given the autonomy to manage their schools to meet the needs and ability of their students, formal authority ultimately rests with the Ministry of Education. Unlike the educational system in the United States, which allows proactive teacher leaders to launch new syllabus, or use

different curriculum materials, a central system controls all such initiatives. Any major change to the system, syllabus or curriculum must have the approval of the Ministry of Education. Thus proactive teacher leaders in Singapore schools confine their effort to within the school. Any change or improvement would need the support of the principal, parents and the community. To this end teacher leaders must act as an intermediary between the staff and the administration and between the school and the parents, educational authorities and the community at large.

- Working with the administration

Teacher leaders learned that where they informed their principals of their activities (Smylie et al., 1990) they were likely to win their support and that of the administration. Thus Suling's (P3, 2002) proposal to extend the library hours during the examination period so that pupils could have a quiet place to study was implemented without a hitch. Kohmei (P1, 2002) used the same approach when her committee launched a Total Defence Day activity for the whole school including the canteen vendors:

With the school's support, it was not that difficult (P1, 2002 p.7).

At Princeson Secondary, Meichoo's (S2, 2001) two Work Improvement Team (WITs) projects (*Magihall in 2000* and *Magiweek in 1999*) involved the whole school, and since these had the support of the principal, many teachers gave their support. Teacher leaders were fully aware as pointed out by Audrey that in the:

Absence of formal authority, colleagues view working with an informal teacher leader as a favour (S4, 2001 p.10).

As such she would prefer some support from the administration.

The administration can come in. They can put it in black and white that you are the leader in the project. People must help you and that gives you some authority (S4, 2001 p.7).

When the projects achieved the desired results, teacher leaders earned the respect of the administration (Smylie et al., 1990) and in turn were often assigned important tasks relating to school planning and curriculum development (Rogus, 1988). Teacher leaders in both schools were involved in the preparation of their *School Excellence Model (SEM) Report*. This report formed part of the school's validation exercise. Kohmei (P1, 2002), was the criterion owner on *Leadership*. The work involved the collation of information from the HODs regarding leadership and she benefited from it. Sonny (S3, 2001) on the other hand being the chairman of the Staff Welfare Committee was asked to work on *Staff Results* which was incorporated in the final report. These were important aspects of the Model and successful validation meant a good appraisal report.

Some teacher leaders were involved in curriculum development (Stone et al., 1997) in the school. Vanessa (P2, 2002) was selected for initial training and implementation of a sexuality education programme *Growing Years Series*, organised by the Ministry of Education for pupils of the upper primary. With the introduction of the Ministry's music programme, Kohmei (P1, 2002) had to resolve the logistics problems for the school. Puyi (P4, 2002) planned and organised learning journeys for his school's Science Department. Sonny (S3, 2001) because of his rapport with the students had been involved in the development and implementation of the *Character Development and Growth as Adolescence* programme unique to his school.

The teacher leaders were co-opted as members of other planning committees and contributed professionally to the development of their own subject areas. Sonny (S3, 2001) served as the Chairman of the Staff Welfare Committee, National Education co-ordinator and Project Head of History. In this role he was the:

Link between (the) administration (or) the management (and) the teachers.

Sometimes teachers express their views over certain programmes, the chairman has to receive it and relay it to the principal and the management and often vice-versa (S3, 2001 p.2).

Meichoo (S2, 2001) apart from taking charge of the Art and Craft Club also dealt with student discipline being a member of the Disciplinary Committee. Hoying (S1, 2001) was in charge of St John Ambulance Brigade and leader of a Work Improvement Team (WITs). Audrey (S4, 2001) remained the Pastoral Care Co-ordinator.

Being co-opted into curriculum development committees and self improvement groups, the teacher leaders were given the exposure and the opportunity to assume authority and leadership over the other staff. Representative of the feelings of the teacher leaders was the comment by Kohmei:

I learned a lot from it. I became aware of the big picture of how the department and the school functioned (P1, 2002 p.9).

Thus as change agents, they led teachers through the change process (Stone et al., 1997), engaged in staff development and acquired new skills to execute and plan curriculum development more efficiently (Sherrill, 1999). They developed “strategies aimed at satisfying prevailing requirements while meeting the needs of their personal ideals of education” (Chew, 1999 p.156).

The administration is ever on the search for teachers willing to take on tasks that others were not keen on (Stone et al., 1997). At Farrell Primary, Vanessa (P2, 2002) took on the task of being the Mathematics co-ordinator, which was an internal appointment:

A stopgap measure, as no one else is available for it (P2, 2002 p.2).

She coordinated the work of eleven to thirteen Mathematics teachers in the school from Primary One to Primary Six. Although she was not trained in WITs techniques she was

made a sub-team leader and the objective of the WITs project was to make Mathematics resources easily available to the teachers. With the implementation of the project, the teachers in her school had easy access to a range of Mathematical resources. Having completed her first WITs project she was appointed a facilitator for another WITs team dealing with Total Defence. Kohmei (P1, 2002) was given the responsibility of starting a school choir and although she had no experience in this area, she agreed and the choir eventually won a silver award at the Singapore Youth Festival Competition (Primary Schools) 2002.

The same pattern was seen at Princeson Secondary. Sonny mentioned that he:

Was given many official roles and duties (S3, 2001 p.1).

As the National Education co-ordinator he even had to conduct the *News Teach* session which was normally a task reserved for the Principal. Audrey's willingness to cover the many grey areas in Pastoral Care and act as the special liaison for other activities in the school made her invaluable to the administration. This willingness and ability to work with the administration gained them the tacit support of their colleagues which in turn enhanced their standing as informal teacher leaders.

- Working with parents and the community

Mortimore et al. (1988a) stressed the importance of involving parents for school effectiveness. O'Hair et al. (1997) noted that teacher leaders were the liaison between the community and the school and Gehrke et al. (1997) called on teacher leaders to be community-volunteer co-ordinators to "provide the energy and school knowledge to bring the gifts of these volunteers into support of the teaching and learning activities of the school" (Gehrke et al., 1997 p.72).

In the 1980s, community involvement formed one component of the Singapore's school appraisal system. The intermediary between the community and the school remained the principal. The more prominent parents could be recruited to volunteer their services to the school in areas of mutual benefit or serve on the school management board but always guided by the school administration.

The teacher leaders supported the view that parents be recruited to help in areas needed by the school. Parents should remain a support group for school excursions and other special occasions. Suling (P3, 2002) felt that in this capacity the parents had rendered great service to Farrell Primary.

They help us in our enrichment programmes, organise activities like Teachers Day celebration, and chaperon pupils for excursions. They are aware of our activities and we work quite closely with them. They are very supportive and are always there for us and for the school (P3, 2002 p.14).

While the school appreciated the support given by the parents, there was no indication that parents worked as equal partners with the school in the education of the children.

Nonetheless the need to win the parents' support remained paramount. Puyi said that:

If you do not have their support then you would not be able to carry out your duty as effectively as you would want it to be. Every now and then you will have to argue with the parents. It is also bad for the pupils (P4, 2002 p.11).

This could bog down good school programmes and eventually affect pupils' performance.

While parents assumed different roles in primary and secondary schools, Meichoo (S2, 2001) from Princeson Secondary was concerned about the interference of parents in professional matters and especially being overly protective of their own children.

Parents hamper my work. They forget that (engaging the teacher all the time) is not helping the teachers to do what they are supposed to do. They are actually putting obstacles in our way and (this is) very frustrating (S2, 2001 p.4).

Most teacher leaders in Singapore schools while realising the importance of winning the parents were not keen to engage the parents in school decisions or professional matters.

Only Hoying felt otherwise. She mentioned that in view of COMPASS:

They (parents) assume a more important role and have more say in policy matters of the school and the community. We need to build a very good rapport with everyone from teachers to students all the way to the community and the parents (S1, 2001 p.8).

COMPASS was a new initiative set up by the Ministry of Education to involve the community and the parents in a more proactive approach to partnership with the schools (Teo, 1998b). It sought to:

Recapture the spirit of community support for schools and the sense of bonding and mutual responsibility among schools, parents and community (Teo, 2000f p.1).

While implemented in varying degrees in all the schools, it remained an area handled mainly by the school administration and it would take some time before teacher leaders could utilise the resources of the community in support of the school (Gehrke et al., 1997) in a more productive manner.

Meanwhile teacher leaders continued to be involved in some form of service to the community as part of the civic education of their students. A typical example of a secondary school's involvement in providing services to the community was seen in Meichoo's (S2, 2001) responses to the many requests for help made through the Community Involvement Programme (CIP).

We are really involved in community work like National Kidney Foundation fund-raising activities, donation drives for people in disaster areas like India, collection of old newspaper to raise money for the needy students of our school, clean the beach, and sell flags. Our kids are involved and we are there to guide them and help them along (S2, 2001p.3).

Audrey (S4, 2001) took every opportunity to instil in her students the rationale and the need to be involved in the Community Involvement Programme (CIP).

When students are involved (in community service) you are involved automatically (S4, 2001 p.1).

Although Community Involvement Programme was not part of the activities in primary schools, Puyi (P4, 2002) felt that teacher leaders would gain from such involvement. It gave them the opportunity to meet:

People whom you don't normally meet...as a teacher. You get a wider perspective of what is happening outside the school. This experience can be very useful when handling problematic students and parents. You deal with them in a more effective way (P4, 2002 p.5).

Suling concurred that teacher leaders:

Could provide the link between the school and the community (P3, 2002 p.5).

In spite of her personal involvement, Vanessa felt that teacher leaders did not have:

Much of a relationship with the community (P2, 2002 p.16).

She concluded that the influence of teacher leaders hardly extended to the community.

Meichoo explained the interest aspect in community service.

(It is) up to the individual. If they have the time and the interest, then why not? (S2, 2001 p.3).

Hoying (S1, 2001) gave the example of her journey to a remote village in China at her own expense with her students to restore a dilapidated schoolhouse as part of her students' Community Involvement Programme.

We found it a very meaningful project because it allowed me an opportunity to work with the students outside the classroom. Personally I found it an eye opener (S1, 2001 p.3).

Where:

Teachers are involved in community work they will be able to instil that kind of enthusiasm among their students. It will benefit both the teacher leaders and their students (S1, 2001 p.4).

Audrey (S4, 2001) felt the need to balance personal involvement in community work with the demands of her school and her family. Because of her young family she would not want to commit her time to any one organisation but would help on an ad hoc basis as when Mendaki and MUIS approached her to provide coaching for students preparing for the Singapore-Cambridge Ordinary Level Examination.

I don't attach myself to any one organisation because I am afraid of not being able to give that amount of time in honouring my commitment (S4, 2001 p.2).

On the other hand Vanessa and Sonny were heavily involved in the activities of their respective churches. Vanessa (P2, 2002) as the leader of two groups in her church was responsible for ministering to the spiritual and material needs of more than 40 people ranging from 20-80 years of age, while Sonny (S3, 2001) served as a deacon and leader to a group of 60-80 young people in his church. Apart from the physical presence required at weekends, they were involved in planning activities during the week. This was their major contribution to their community and would be reviewed again when looking at the fourth dimension of teacher leadership.

7.4 Dimension Four: Personal characteristics

As the exercise of the informal teacher leadership role can lead to conflicts, create status differences with their colleagues, (Smylie et al., 1992) and has few material rewards or prestige, it becomes important to understand what sustains them in this role. The situation becomes more complex as the Singapore educational system offers many pull factors for those willing to embrace official leadership appointments. This dimension

explores a host of factors relating to individual qualities, motivation and beliefs, and the demands of their personal/social life.

- Individual qualities

The teacher leaders reaffirmed the need to possess basic individual attributes which included being:

Magnanimous, sincere and mature to understand issues (P3, 2002 p.11).

(Able to) maintain confidentiality and good interpersonal relationship (P4, 2002 p.9).

Reliable and trusted by both the students and the staff (S1, 2001 p.7).

Dynamic, diplomatic, confident, willing to listen and give advice, and have the commitment (S2, 2001 p.6).

Approachable, handy, exercises care and concern (S3, 2001 p.6).

While such individual qualities would be useful to any teacher aspiring to leadership position, these remain crucial to teacher leaders who had no formal authority or the appointment to sway the sceptics. The need to be accepted by the teacher body is so important.

They elaborated on other attributes like:

(Being) enthusiastic and passionate about teaching and about their pupils (P1, 2002 p.12).

(Being) able to perform, to share and work with their colleagues (P2, 2002 p.12).

Integrity and being able to synergise and work with others, good time management, the ability to adapt, improvise and accept constructive criticism.

A conscience that does not allow the wrong things to go ahead (i.e. continue) (S2, 2001 p.7), and,

If nobody is doing anything, the teacher leaders will just take over (S4, 2001 p.7).

These views were very similar to those discussed by Zinn (1997), Lashway et al. (1996), and Hatfield (1986). Sonny explained that these characteristics could be considered as part of the pre-emptive moves, but would have to be complemented by:

Tact and sensitivity (S3, 2001 p.7).

The Institute for Educational Leadership (2001) added other qualities like “empathy, dedication, sensitivity to communities and families” (IEL, 2001 p.10). They would need persistence and organisational ability (Puget Sound Educational Consortium of The University Of Washington, 1988).

The emphasis among the teacher leaders seemed to be that while they needed certain attributes, they too had to be prepared and be able to do the job, an issue raised by Bredeson (1989). In this respect, Fay’s (1992a) study with the five teacher leaders led her to observe that their experience as teacher leaders had led them to acquire “a good understanding of...change and leadership...differences between influence and power, voluntary followership, (and that) their authority comes from their classrooms and their colleagues, their students and their work” (Fay, 1992a pp.11-12).

Leogrande (1995) mentioned that teacher leaders were aware of their own self worth. Kohmei mentioned that being identified as a teacher leader:

Is not really a surprise because internally I am already holding an unofficial post in the school. I have been doing things similar to a subject head (P1, 2002 p.1).

Vanessa’s response was one of being:

Quite pleased and happy about it...as I have been functioning as a teacher leader (P2, 2002 p.1).

Hoying echoed similar sentiments.

When I am identified as a teacher leader it would mean that I have something extra and outstanding as compared to my counterparts (S1, 2001 p.1).

Audrey reminisced that:

On hindsight I am pretty visible in school because of the nature of what I am doing. I am always out there giving announcements and telling teachers what to do. It does not come as a surprise at all (S4, 2001 p.1).

Sonny felt that some of the characteristics of a teacher leader were:

Part of my character or personality. Others are acquired through experience and the benefit of work (S3, 2001 p.1).

On the other hand, Puyi downplayed this role as he:

Does not deserve such an honour as I have done nothing unusual or exceptional (P4, 2002 p.1).

Meichoo expressed similar feelings.

I think there is something wrong. This is because I feel there are others who should be here instead of me (for the interview) (S2, 2001 p.1).

While these two hardly consider themselves as leaders (LeBlanc et al., 1997; Puget Sound Educational Consortium of The University Of Washington, 1988) their work defined them as leaders and were best seen as Wilson's (1993 p.27) "reluctant leaders with incomplete leadership." Gehrke et al. (1997) advocated the use of servant leadership as a more appropriate way to describe them. This attitude could have arisen partly from Asian modesty. In the Asian culture, it is not polite to play up one's strength but rather reflect on one's shortcomings.

Hoying (S1, 2001) summed up the role of teacher leaders when she said that:

All teachers are leaders because we will be developing the future leaders of the nation. So we need to have that bit of leadership within us. Most teachers are leaders of the school and of their students (S1, 2001 p.1).

These reinforced the earlier contention that teacher leaders had to continuously develop themselves in all aspects including their familiarity with the concept and power of leadership, the constraints of school improvement, and strive for general acceptance of their role in the school.

- Motivation and beliefs

All the teacher leaders were agreed on the value of external motivation.

Incentives, or promotion or even that kind of formal recognition of one's work (S1, 2001 p.8),

They were fully aware of the limitations of extrinsic motivation. Sonny mentioned:

A teacher leader who is too dependent on a pat on the back, the commendation or the praise will not be sufficiently motivated to press on to the extra mile. These extrinsic compliments are not always forthcoming. Sometime they are quite neglected (S3, 2001 p.8).

It was intrinsic motivation “psychic rewards derived from relations and successes with students” (Greenfield, 1995 p.65) that kept them going. Puyi explained this psychic reward as:

A feeling of wanting to help other teachers. When a colleague has any problem I will help if it is within my ability. This willingness extends to the pupils too (P4, 2002 p.11).

This tallied with the findings of Chew (1999) that for effective teachers “altruism was a major motivation for entry to the profession with the related love of teaching and concern for human development being other strong motivations” (Chew, 1999 p.156).

Vanessa (P2, 2002) was motivated by the desire to help others including the senior staff and the pupils. The older teachers approached her mainly on matters relating to information technology skills like the use of PowerPoint for presentation, Microsoft WORD for setting examination question papers, and the making of *i* movies. She shared her teaching resources with them and helped them even in some of their administrative work. She felt that this form of assistance has brought them closer.

When we help them and they appreciate what we are doing, you feel loved by them. To me being able to work well with the senior colleagues is a form of satisfaction because they become like a mother to me (P2, 2002 p.17).

Audrey's (S4, 2001) motivation was bolstered by the presence of a group of like-minded teachers in the staff.

When you have this group of people that you work with in any organisation...the bigger this group, the stronger is the organisation. We are doing it out of friendship (S4, 2001 p.9).

However Sonny explained this differently.

It is an internal value, originating in a religious motivation transforming itself into social action (S3, 2001 p.8).

One great motivator was the satisfaction teacher leaders derived from the contact with their students both past and present (O'Hair et al., 1997). Vanessa said that:

I love kids and teaching is the only option which allows me to work with kids (P2, 2002 p.17).

Suling also reflected on this when she mentioned that many of her former pupils kept in touch with her even during their adult life.

They come back to me for advice especially in their career in the teaching profession (P3, 2002 p.8).

Having established this rapport with past cohorts of pupils, she intended to start an alumnus for the primary school before she retires.

Like-wise, Sonny is contacted often by his past students.

I receive emails on feedback and sometimes they seek advice on further education (S3, 2001 p.4).

Audrey's (S4, 2001) past students would visit her especially on Teachers' Day. This substantiated Gay's (1995) study quoted by Bogler (2001) which revealed that effective teachers put great importance on this student-teacher relationship. Watching their students grow and develop became a source of satisfaction. This was summed up by Meichoo:

We are here to teach them, to guide them, to mother them and counsel them (now and in years to come) (S2, 2001 p.9).

The impact of core beliefs could be humanistic or religious in origin. Meichoo (S2, 2001) showed the humanistic side when she unfolded her passion for her work, her strong conviction about giving her students a better deal and her preference to remain:

A teacher. My job is to help them, to guide them (S2, 2001 p.1). I feel very frustrated and angry when I don't have time for my kids (S2, 2001 p.5).

Her place is with her students. Two teacher leaders seemed to draw inspiration from their religious beliefs. Vanessa and Sonny were deeply immersed in the work of their respective churches. Vanessa spent:

At least three nights during the weekdays and on Sundays and at weekends I serve from morning to evening (P2 p.5).

This heavy schedule has led her to comment on the necessity to draw a line somewhere.

I have to be very clear in draw(ing) a line as to how much I want to commit in the teaching area and the church because both areas are very demanding (P2, 2002 p.18).

Sonny (S3, 2001) was equally involved at weekends. During the week he performed counselling and pastoral work, visitations, and planned camps for the youth. These activities gave him much satisfaction causing Sonny to mention that there were:

Teachers who are happy playing their role as informal teacher leaders without being officially Heads of Department. I am one of them (S3, 2001 p.6).

The motivational factor is the key to their work as teacher leaders. These altruistic considerations sustained them in their role as teacher leaders tampered by their immediate family concerns. They showed passion in the work and progressively moved on to higher levels of interest. Sonny and Vanessa's involvement in their church ministries caused them to view teaching as an extension of this service to their fellow men. This dimension explains the basic personal and altruistic considerations that contribute to the making of teacher leaders.

8. The meaning of teacher leadership

The final study illustrated the many perceptions teacher leaders have given to their work. These perceptions give meaning to their work and provide the answer to the fourth research question which is centred on the meaning of teacher leadership. This will be examined against the background of the educational system in Singapore.

The first dimension carries the greatest meaning to teacher leaders. They have assumed the role of informal teacher leaders partly because of their personality but more so because of their conviction that the students deserve a better deal and that they are in a position to better the lives of the students placed under their charge. This involvement with their students is not just in the academic world alone but also in their students' growth and development as individuals. It is highly demanding in terms of their time, emotions and their social life and for which they are willing to sacrifice. The concern for student learning could have its origin in the premium Asian value places on a good education. However where teacher leaders work in schools with a higher proportion of minority races, they are confronted by the cultural values of the minority races which might not be in sync with that of the general Asian value. Thus they face an additional problem generated by other racial culture. However with the positive intervention by the Government through community self-help groups like SINDA and MENDAKI, such non-positive cultural influences are slowly being eroded in an egalitarian Singapore.

As informal teacher leaders they are on par with their colleagues in terms of authority within the school. Over time they can acquire informal authority over students and colleagues by being successful classroom teachers. This explains their willingness to learn, improvise and improve on their professional development. They model innovative

and creative approaches which helped their students achieve success not only academically but other areas not normally considered in mainstream schools.

The teacher leaders are aware that physical limitations do not permit them to reach as many students as they would like. However this is possible with the help of proxies in the form of their colleagues. So they influence their colleagues in every possible way including the use of mentoring and coaching techniques so as to transmit the school culture and their own experiences to benefit their students. While sharing sessions with colleagues are time-consuming and sometimes assertive, they consciously pace this approach as not all colleagues share the same ideals. There are other venues open to the informal teacher leaders mainly in the form of maintenance of goodwill and relations with their colleagues. With collegiality the staff can influence their students and move them on to other levels of growth and development. True to their role as informal teacher leaders, they prefer to use distributed leadership which not only softens the traditional approach to leadership but empowers all to be teacher leaders in their own way. This approach allows the teachers to remain creative and entrepreneurial in the classroom – a response greatly needed in Singapore schools to meet the world of changing technology.

Teacher leaders have their moments of frustration when working with their colleagues. They recognise that in a centralised system the support of the administration goes a long way. A less traumatic way is to keep the school administration informed in advance. The support of their head of department allows them the safety of trying new approaches in their department before implementing on a school-wide basis. The support of the principal overrides the objections or at least the resistance of teachers who do not share their view of things and who are likely to obstruct or impede school-wide

programmes. The support of the administration can in turn have an adverse effect on their collegiality.

Another meaning derived from this analysis is the importance of a positive personality being the first step to teacher leadership. Their personality, apart from having the drive to succeed in their undertakings, must have a strong care and concern component which can arise from either their humanism or even from their religious beliefs supplemented by their own philosophy of education. Personal drive characterised all the teacher leaders. The teacher leaders have shown that in spite of their personality, they can be influenced by environmental factors like health and the demands of their immediate and extended family.

One meaning that emerged clearly is that informal teacher leaders are enfranchised by their support group and their success in the classroom. Thus the classroom is their first priority; all other activities are peripheral to it. They prefer to remain as informal teacher leaders and work toward their objective. They are aware of the anomaly of being informal teacher leaders functioning in a centralised system which has its own corps of formally appointed teacher leaders. The informal teacher leaders do not seek to challenge those with formal appointments but to work with everyone in the school for the ultimate benefit of the students. Theirs is not a role promoted by the hierarchy but by their instinct, motivation and support of their colleagues and students.

9. Conclusion

The four dimensions of teacher leadership give a fair insight into and understanding of the work and motivation of teacher leaders in Singapore schools. With this final study a pattern emerges within the schools. Firstly, teacher leaders contribute positively in terms of quantity and quality of work in the school. They are involved in a range of tasks from good classroom teaching to leadership in the school and their collaboration with their colleagues and the school leaders have allowed them to achieve some of the desired outcomes of education as promulgated by the Ministry of Education.

Secondly, by modelling their leadership for their students, they exert a great influence over the students especially those who are less motivated and marginalised. This influence over the students is critical to the well-being of the school as the reputation of the school rests on the success of the students. The teacher leaders create and cultivate the care and concern for their students and indirectly their own sense of achievement and satisfaction. This cyclical effect reinforces their role and builds the very foundation and purpose of the school. This has practical importance to Singapore schools as over 70% of parents in choosing schools for their children are influenced by the quality of teachers, followed by 57% for academic results (Liew, 2005). This preference supports the work of teacher leaders in government managed schools.

Teacher leaders are heavily dependent on collegiality to be effective in their work. They make the effort to promote genuine and not administratively imposed collegiality “which is based on extrinsic motivators and the political purposes of administrators (leading to) change...induced by administrative fiat and conflicts are suppressed or ignored” (Chew, 1999 p.15). School culture can either foster or destroy collegiality in the

way the teachers are organised. Where the school groups the staff by subject expertise or some common interests, it creates a safe environment for teacher leaders to experiment and work together. Where teachers talk and work with each other the sense of isolation and individuality soon gives way to collegiality. With true collegiality, the quality of the work taken on by individual teachers becomes superior and with distributed leadership, every teacher can be turned into an informal teacher leader.

Where the teacher leaders and the school administrators collaborate, the teacher leaders are able to present their views and those of the staff without acrimony. This has been put to good use in presenting official reports or in making or re-making of school policies. This feedback mechanism is lauded but not always supported by school administrators for fear of erosion of their authority. The informal teacher leadership can offer a parallel organisational structure based on team work and distributed leadership among the staff for the school and not necessarily for the benefit of the teacher leaders. This form of leadership does not seek to challenge the school's leadership structure nor should it be seen as an alternative but complementary to the school's decision-making structure. It gives a good understanding of school leadership in real life context and underscores the importance for central and school administrators to groom teacher leadership.

While these comments support the practice of teacher leadership, it is necessary to examine the obstacles that can prevent the exercise of such leadership and the type of support, internal and external, that they need to continue with their work. These are discussed in the first half of Chapter Five and together with the data gathered from the additional fieldwork it is possible to build a model of teacher leadership for government

managed schools in Singapore. This model of teacher leadership provides the answer to the fifth research question in Chapter One. When teacher leaders feel that they are part and parcel of the school's success through building their "self esteem, opportunities for self-development and participation in determining school practices" (Bogler, 2001 p.679), then the sleeping giant will awaken to its full potential.

Chapter Five

Further development of teacher leadership in Singapore

1. Introduction

The data gathered from the final study demonstrated the extent to which informal teacher leadership even in a centralised educational system like that of Singapore can contribute to the good of the school. Being informal in nature, it is confronted by a series of obstacles, which can hamper its growth and development. The first part of this chapter shows how the informal teacher leaders in the two schools have sought to overcome the obstacles and how they have been abetted, intentionally or otherwise by the recent educational changes introduced by the Ministry of Education. With this understanding and with input from additional fieldwork conducted during the year, a derived model of teacher leadership in Singapore schools is presented in the second part of this chapter. This model satisfies the fifth research question and brings the study to a conclusion.

As many of the obstacles are similar to those found in the literature review, the framework used in Chapter Two will be re-employed and expanded upon. Taking cognisance of Zinn's (1997 p.7) comment that "factors serving as sources of support at one time or in one setting could be barriers at other times or in other settings", each component of this framework will be considered alternatively as barriers and supports. The three components of the framework are:

- The organisational structure,
- Professional practices, and
- Personal considerations

2. The organisational structure

The organisational structure reflects “manifestations of the dimensions of classical organisational theory (bureaucracy) evolved over the years” (Kowalski, 1995 p.247). These features have been grounded into the system and some over time have been considered sacrosanct. Organisational obstacles are difficult to manipulate but teacher leaders have found ways to overcome some of the obstacles. The adoption of the *Thinking Schools Learning Nation* vision (Teo, 1997) by the Ministry of Education, has affected deeply its organisational structure. Although this has resulted in new opportunities and supports there are teething problems which require tremendous political will and a sustained effort at the national, school and community level to resolve.

The existing educational system stresses strongly on the academic aspect and teachers and students are tasked to produce the results. To meet these demands, teachers and more so the leaders have been assigned many tasks within and more so outside the curriculum time and because of the latter’s willingness and capacity for work, they soon reached a stage of diminishing returns. Meichoo expressed her frustration in terms of:

Always rushing around. We have to do so many things including meetings. I feel there are so many unnecessary things to be done (S2, 2001 pp.4-5).

The school’s incessant demands have resulted in the twin problem of overloading and the resultant lack of time.

In non-academic areas Sonny (S3, 2001) as chairman of the staff welfare had to resolve conflicts of opinions between him and the other staff members.

That kind of personal conflict takes time and effort to iron things out before transmitting it to the other party (S3, 2001 p.2).

Where the staff were not in agreement with a decision made by the school administration or worse when feelings and emotions ran high:

There is an after effect (requiring) a few hours or a few days (to resolve) (S3, 2001 p.2).

Kohmei (P1, 2002) admitted that as a result of the many demands:

I have not done as good a job as I would like (P1, 2002 p.10).

This heavy demand and the lack of time affected their performance as teacher leaders and have been reflected in other studies (O' Connor & Boles, 1992; Wasley & McElliott, 1989; Puget Sound Educational Consortium of The University Of Washington, 1988).

The twin problems have caused them to prioritise their activities. Meichoo (S2, 2001) explained that:

Whichever comes first, whichever is most important, we do that first. There are always some sacrifices somewhere (S2, 2001 p.5).

She felt that this demand on time:

Could result in the effort being spread too thinly and that some corners might have to be cut (S2, 2001 p.5).

Some teacher leaders have suggested that time be set aside for their leadership role but they were fully aware of the difficulties of such a move. Vanessa said that:

The lightening of the teaching load could give the informal teacher leaders extra time for leadership activities (but) difficult to (decide) who gets the time off (P2, 2002 p.11).

Puyi (P4, 2002) felt that a lighter teaching load might not help because:

Problems can arise any time even outside the designated time. How are you going to handle the situation (P4, 2002 p.8)?

Audrey (S4, 2001) raised the same issue when she said that:

The time you off-load me may not be the time that I need to be free to perform the counselling work (S4, 2001 p.6).

Further, she (S4, 2001) felt that off-loading would not benefit those further down the line. Sonny (S3, 2001) argued that allocating time for leadership function did not mean more work done.

There is no need for special arrangement because much of it is part of the official duties. There is no need for special attention to perform this role (S3, 2001 p.5).

Alternatively this leadership role can be allocated:

As part of their co-curricular activities (P3, 2002 p.9).

Also, it can be factored into the individual's time-table but much:

Depend(s) on the scope of duties (assigned), and the school must be realistic in what they want the teacher leaders to perform (P3, 2002 pp.4-5).

Within a school there are likely to be groups of like-minded colleagues whose support they can count on. Audrey felt that:

When this small group of people are agreed on getting this done for the staff we do it together. The support base is there (S4, 2001 p.9).

The teacher leaders in Singapore enjoyed a degree of support from the staff. After all, their colleagues having recognised them as informal teacher leaders are unlikely to reject outright their requests for assistance. While there is a likelihood that support groups can come from other schools or even from the cluster office this has not happened in Singapore.

There was unanimous agreement among the teacher leaders that this leadership should never be at the expense of the classroom role which required them to reflect on their teaching strategies (Whitaker, 1997) and consolidate their effectiveness before sharing with the teachers. This role, in the words of Kohmei:

Eat(s) into my personal time, not my classroom time (P1, 2002 p.11).

It committed them to long hours in the school. They recognised the necessity to be good at their classroom teaching as it is the basis of their leadership in the school.

Eventually all teacher leaders had to find their own time in different fashion to perform this leadership role. The school can examine the issue of overloading of teacher leaders by defining their roles and limits (Kowalski, 1995; Smylie et al., 1990). Leithwood et al. (1999c) have suggested that roles and responsibilities should be dependent on the individual and should vary from individual to individual. A sense of reality is also needed when defining roles and responsibilities. As every teacher leader carries a teaching role “you cannot continue to add new roles and positions without taking something away” (Miller, 1992 p.117). Neither should it be so prescriptive to constrain the teacher leaders in their exercise of discretion. Miller (1992) reported on teacher leaders who have worked beyond their specified job description. The niche they have created in the school “is more beholden to and in the service of other teachers than to the administration” (Miller, 1992 p.118).

Kohmei (P1, 2002) and Suling (P3, 2002) felt that time could be created for teacher leaders through the delegation of responsibilities to other members of the staff, a feature also mentioned by Lieberman (1992b) but where all the teachers were already heavily involved in other co-curricular activities then there were few remaining bodies to delegate work to. One source of support often overlooked, is for the school to encourage the practice of distributed leadership. The school can persuade teachers to take on initially smaller and less demanding roles preceded by some form of preparation. At other times they can remain as followers. Kahrs (1996) argued that “teachers have always been team players. To be a leader on one project and a follower on another is second nature to

teachers” (Kahrs, 1996 p.39). Where distributed leadership is complemented by the practice of collegiality and where the teachers are satisfied with the school leadership, they will be more willing to invest the time and energy in their students (Bogler, 2001). This will allow the maximum utilisation of talents within the school, empower the teachers and give them opportunities to lead in different capacities (Barth, 1987).

The recent changes to the Singapore educational system while maintaining its core objective have refocused its approach from “efficiency to one that promotes flexibility and a diversity of educational experiences” (Shanmugaratnam, 2004a p.2). Schools were given the option “to devise their own solutions to problems and to shape our educational policies” (Goh, 1997 p.3). Thus when the Ministry of Education announced changes relating to streaming, ranking of schools, autonomy in the introduction of new curriculum, and admission criteria to secondary schools, Junior Colleges and the University, these helped to lessen the pressure on teachers. In this context, the structural changes form part of the total solution in dealing with the complex issue of overloading and time faced by teacher leaders.

In replacing the national streaming exercise at Primary Four with a school-based examination (Shanmugaratnam, 2004d), schools were allowed to band their students “in ways that add the most educational value” (Shanmugaratnam, 2004d p.3). This meant that Primary Three and Four teachers did not have to prepare their pupils for the national streaming examination which took precedence over all activities. A school-based banding exercise is less stressful and allows teachers to divest some of the time for other developmental usage. In addition the primary schools were given additional teacher resources, a reduction in class size, reversion to a single session environment and the

abolition of the Primary One mid-year examination (Shanmugaratnam, 2004d p.4).

Schools were allowed to buy support services to assist their teachers in their administrative duties and even to employ people with specialised skills to help in their co-curricular activities (CCAs).

The secondary schools were affected by the changes in the admission procedure which no longer depended on good grades alone but could include natural abilities and other forms of intellectual achievements shown by the students. Secondary schools could modify their curriculum and introduce new teaching programmes like the Integrated Programmes (IP) which allowed students to bypass the Singapore Cambridge Ordinary Level Examination and move on to the Singapore Cambridge Advanced Level Examination or even offer a new programme like the International Baccalaureate (IB). The other change of consequence was that of the school ranking system which would “band schools instead of ranking them on their exact academic scores” (Shanmugaratnam, 2004c p.4). These changes could affect the expectations of students and parents and in turn, the subjects, the courses and the pedagogy used in the school. These changes were intended to free up much of the time teachers spent in meeting the previous academic demands of the system, lessen adherence to a rigid structure and permit greater creativity in teaching and consequently save time.

Structural changes have been adjudged to be one of the most difficult approaches to resolve this issue of time but in the case of Singapore, the recent changes have proved to be a blessing. These changes are in line with some of the solutions recommended by Zinn (1997), in overcoming the constraints of overload and time. Whether this window of opportunity can be exploited to the full depends on how schools implement the changes. If

utilised, teacher leaders can find time to work with their colleagues, gain confidence and make time for their leadership role at the school level.

In some cases these structural changes have placed new demands on teachers. Where teachers previously concentrated on producing good grades, now they are expected to be good not only in their area of expertise, but also to excel in new areas and to acquire new experiences to help their students appreciate “the demands of the modern workplace and prepare for the future” (Shanmugaratnam, 2004b p.4). To this end the Ministry has allowed teachers leave to be attached to industrial and even commercial firms to complete their experience (Shanmugaratnam, 2004b).

With constant changes to the educational system, teacher leaders have been asked to organise and lead new programmes and activities often sanctioned or requested for by the administration or agreed upon at the departmental level. Many teacher leaders have found themselves ill-prepared for the tasks at hand in terms of time and skills. In his survey of teacher leaders in Massachusetts, O’Connor et al. (1992 p.18) reported their preponderant need for training in “communication skills and an understanding of group dynamics.” Other skills recommended by O’Connor et al. (1992) included effective sales techniques and presentation, knowledge around school restructuring and how to make effective long-term changes in school. In Singapore, informal teacher teachers do not have access to the leadership training programmes available to those slotted for formal appointments like the Leaders in Education Programme (LEP) for principal-designates or the Diploma in Departmental Management (DDM) for Heads of Department or other courses available to Level and Subject Heads, Senior Teachers or Master Teachers

conducted by the National Institute of Education (NIE, 2003). Hoying (S1, 2001) lamented that:

I very much wanted training in leadership. Maybe in future we can have more time set aside to send teachers for such leadership training courses (S1, 2001 p.2).

Seen in a proper context teacher leaders are not totally deprived of leadership training. Audrey (S4, 2001) recognised that attendance at:

Seminars and workshops help (S4, 2001 p.7).

Equally valuable were the sharing sessions conducted by them on their return from training courses. Where the sharing sessions are organised systematically and consistently and with the support of the school administration, the chances of successful implementation of new ideas are high. These sharing sessions also hone their presentation skills, boost their confidence and extend their influence over the staff.

The school can generate opportunities to accelerate the development of teacher leaders when appointing them as leaders of WITs teams as happened to Kohmei (P1, 2002), Vanessa (P2, 2002), and Meichoo (S2, 2001). Often one role led to another. When Kohmei's (P1, 2002), scouts group achieved the Frank Sands Gold Award:

They took me out and put me in the choir (P1, 2002 p.5), and the newsletter editorial board. It is a new challenge because I have never done anything relating to newsletters before (P1, 2002 p.2).

Principals can also initiate teacher leaders into new roles stretching their potential.

Vanessa (P2, 2002) recalled how she was given the task of being the library co-ordinator unexpectedly.

I needed on-the-job training but I managed to lead a group of teachers in running and improving the library (P2, 2002 p.6).

Kohmei (P1, 2002) observed that on-site training allowed:

You (to) learn. Slowly you will definitely gain in confidence (P1, 2002 p.2).

Often such courses or exposure programmes are more practical and valuable than theoretical courses as these are specially tailored to meet the needs of the school.

The teacher leaders can utilise the one hundred hours of training provided for all teachers in the service (Ministry of Education, 2003b). Other examples of support are seen when they function as co-operating teachers in the School-NIE Mentoring Partnership programme. The induction course preceding this programme gives them additional skills in classroom observation. All these are often overlooked as opportunities for development. Teacher leaders must learn to seize the opportunities and develop their skills accordingly.

Singapore schools, primary and secondary, are organised along departmental basis and this can be considered as yet another support for teacher leaders. Teacher leaders have the opportunity to practise new approaches or methodology within the safety of a department supported by the head and members of the same department. Where successful, these can be adopted or adapted by other departments or schools.

Other special skills they require might have to come from external sources.

Kohmei (P1, 2002) explained that she acquired part of her leadership skills:

From her previous job and also in the current school (P1, 2002 p.2).

Vanessa (P2, 2002) came to be aware of her personality type because of her role as a youth leader in her church. By participating in the Personality Profiling system DISC organised by her church, she became aware of her strong and weak areas. By and large the teacher leaders acquired many of their skills on the job but this slows down their effectiveness.

The recent structural changes have enabled teacher leaders to make good use of the Teacher Work Attachment (TWA) and the expanded range of options available under the sabbatical leave scheme (Shanmugaratnam, 2004a). Teacher leaders are no longer confined to experiences acquired in the classroom. At the Second Teachers' Conference, many of the teachers who had been on TWA have reported acquiring fresh perspectives in dealing with their students (Tan, 2004). These additional learning experiences can offer new flexibility in their design and implementation of the curriculum and their leadership role especially in the way they interact with staff and administrators, students and parents.

The Institute for Educational Leadership (2001 p.11) reported that:

Teachers need practical knowledge about contemporary family life, immigrant and minority group children and the political and social currents that swirl about public education. Too few teacher training institutions offer courses that treat these subjects in sufficient depth and practically none below the graduate level scratch the surface of training in management and leadership.

The training which teacher leaders are unable to secure from the central authorities, can be compensated locally by the school administrators and in a more appropriate context.

However there still remains the need for schools, the cluster and the central educational authorities to provide both generic and specialised training to those willing to lead their peers (Barnett et al., 1990).

3. Professional practices

The term *professional practices* include the image of the profession, the pre- and in-service training of teachers, the culture of the workplace, and the social relationship among the teachers, the administrators and the community. Of importance is the interpersonal relationship at their workplace which to a great extent is affected by the prevalent leadership style of the principal and the mores of the educational system.

Even in their professional role, teacher leaders face a number of obstacles. On the one hand, there is a perception among the public that teaching and leadership roles are incompatible (Kowalski, 1995), while on the other hand, many good classroom teachers have been promoted and forced to leave the classroom for positions in administration or supervision (Fessler, 1990). This creates ambivalence in the minds of teacher leaders. If teacher leaders do not perceive themselves as leaders it is unlikely that they will take the initiatives associated with a leader or work in a fully committed manner. On the other hand, where they are not perceived as leaders by their colleagues they might not receive the co-operation that they need to perform their role. This has caused some teacher leaders to forgo their leadership role for the safety of the classroom and a reduction in stress.

Teacher leaders tend to identify themselves with the teacher body as they are not part of the official hierarchy and are unlikely to do anything which will separate or alienate them from their colleagues (Smylie et al., 1990). This is clearly evident in Singapore schools and has caused them to be conservative and avoid risk-taking for which they do not reap material benefits. As schools in Singapore gain in autonomy and authority, even informal teacher leaders might find themselves caught up in the issue of accountability thus requiring of them and their colleagues things which can be deemed intrusive including peer evaluation and peer coaching.

While peer evaluation is not found in Singapore schools, there is peer coaching and this is one area where the teacher leaders of the two schools differ in the views. Suling (P3, 2002) of Farrell Primary would recommend outright strategies to her teachers whenever she sensed that they were experiencing difficulties in their lessons. She did not consider this as intrusive and the Primary One teachers did not seem to resent this partly because of the Asian deference to one of age and seniority. Vanessa (P2, 2002) in spite of being more junior in age and service helped the more senior teachers to deal with aspects of instructional technology or even general administration that the school wanted to implement. This allowed her to:

Choose to be a teacher with influence on the whole system (without being an official) leader (P2, 2002 p.11)

The two teacher leaders from Farrell Primary openly functioned in that capacity helping their colleagues in the areas that Teo et al. (1998) mentioned namely instructional programmes, administrative matters, management matters, extra-curricular activities (now known as CCA), pupil welfare, examination/test, and social-personal matters.

At Princeson Secondary there is no evidence of teacher leaders openly intruding into their colleagues' professional domains except in roles allocated to them by the school or when approached by other teachers. Audrey reflecting on this said:

I do not know why teachers seem to think that I know things (i.e. what to do)...maybe because I was Head of Department before. If they need some advice they just come to me (S4, 2001 p.2).

Similarly, teachers would approach Sonny (S3, 2001) as chairman of the staff welfare committee for advice or to resolve problems as narrated by him at the interview. The other two teacher leaders failed to mention any instance of teachers approaching them for assistance or advice. The way teacher leaders presented themselves and how well their

role has been understood by their colleagues (Smylie et al., 1990) can affect the culture of teacher leadership in the school.

The culture of teacher leadership in school has never been explicitly acknowledged by the staff in both schools but they had no difficulty in identifying their informal teacher leaders. To be recognised as teacher leaders by the staff, while gratifying, did not assure the teacher leaders of the support of the staff on all matters. In Chapter Two, it was stated that one of the greatest obstacles faced by teacher leaders came from their colleagues (Barth, 2001; O' Connor et al., 1992). Their acceptance or rejection of the teacher leaders could compromise their effectiveness resulting in inertia or active resistance to their leadership. Kohmei commented that:

Leaders must establish a rapport with their followers (P1, 2002 p.12).

In like manner Vanessa mentioned that:

A leader needs people who want to be led by them (P2, 2002 p.14).

Meichoo acknowledge the importance of peer support when she said that:

You can come up with fantastic ideas but if they (the staff) are not going to help you, you can forget it. You need their help and support (S2, 2001 p.4).

Hoying summed it up by saying that only when:

You are able to convince all the others that you are someone who is capable of leading then you will have followers who would be willing to listen to you (S1, 2001 p.8).

Teacher leaders are fully aware of the challenges in winning their colleagues' support.

Teacher leaders realized that one way of working with difficult colleagues is to invoke the support of the school administration. Audrey (S4, 2001) advocated this approach partly because of her previous experience as a Head of Department and partly because of her frustration in dealing with difficult colleagues rather than from a failure to

understand the working of informal teacher leadership. This approach seemed to work in the Singapore context and resistance from the staff get muted if an activity is supported by the administration. This in turn could create the impression that the teacher leaders are in league with the school administration. The teacher leaders were aware that this could affect their collegiality with their colleagues and:

Others trust you a bit less because of that (S4, 2001 p.7).

Many prefer to try other alternatives.

Where the teacher leaders were reluctant to get the administration to support them or where the administration refused to support them, one common technique was to be assertive. Audrey felt that they have:

To be assertive when asking for help or the staff would see this as a favour (S4, 2001 p.7).

Barnett et al. (1990) maintained that for assertiveness to work, the teacher leaders need to have a good track record and a strong knowledge base to fall back on. They need a solid knowledge of their own subject area, pedagogy, and an understanding of the culture of their school and the cluster group. Earlier successes tend to reinforce their informal influence and secure the co-operation of the teachers.

They could use persuasive techniques like asking for help, cajoling and even recalling debts (Romerdahl, 1991b) when they felt the impropriety of chiding their colleagues (Wilson, 1993). Where all else failed, they could side track them for the time being until they were carried forward by the growing ground swell. LeBlanc et al. (1997 p.39) advised that it is important for teacher leaders “not to be too aggressive around co-workers. Not to be forward with your materials. Work it in slowly so that they can accept

your ideas.” Kohmei (P1, 2002) reached the same conclusion when she advised her colleagues not to:

Judge the behaviour of other teachers. If we find other teachers are not very good role models, we should probably tell them but not too harshly. We can put it across gently to them (P1, 2002 p.13).

Sonny (S3, 2001) felt that there could be both a hard and soft approach in handling difficult colleagues.

There should be a balance of care and concern when dealing with difficult teachers. They cannot be spoken to in very harsh tones neither can they always be mollycoddled (S3, 2001 p.7).

He felt that his current state of relationship with his colleagues determined their level of cooperation.

The level of friendship that exists prior to the difficulty is very important. It is a pre-emptive (move). Once we have established good relations, friendliness and openness with our colleagues, when difficulties appear, these can be handled with more tact, sensitivity and more success (S3, 2001 p.7).

Vanessa (P2, 2002) felt that her warm and caring personality in building a good relationship could win them over.

Whenever I need help, I ask people for it based on the rapport that I have built up. They are all very responsive (P2, 2002 p.10).

Meichoo (S2, 2001) felt that teacher leaders could encounter difficulty in dealing with older colleagues but:

If you are diplomatic you can handle anyone regardless of the age difference (S2, 2001 p. 7).

Thus they were in agreement with Katzemeyer et al. (1996) that interpersonal relationship is the key to the success or failure of teacher leadership efforts.

Where support is not forthcoming for the teacher leaders, Kohmei (P1, 2002) recommended that teacher leaders should be more reflective:

Learn to see from another point of view and say *OK now I know why this suggestion has not been supported*. Then the teacher leader would not have to fight all the way when it is actually not a good suggestion (P1, 2002 p.14).

The same advice was given by Romerdahl (1991a) that teacher leaders need to listen and value their colleagues' suggestions and feedback.

Another likely source of concern, apart from their colleagues, was their relationship with their principal. Much has been written about how principals and heads of departments contributed to the positive development of teacher leaders (Ash et al., 2000; Blegen & Kennedy, 2000; Buckner et al., 2000; Childs-Bowen et al., 2000; Abolghasemi, McCormick & Conners, 1999; Serve, 1999; Kahrs, 1996; Katzenmeyer et al., 1996; Bredeson, 1989; Barth, 1987; Erlandson & Bifano, 1987). They could remove barriers; provide support, referrals, and public testimony to the role of teacher leaders but also be the stumbling blocks.

Where principals support the development of teacher leadership they can organise their own workshops on teacher leadership to sell the concept to their own teachers. While a number of conceptual frameworks are available for the development of teacher leaders (Crowther et al., 2002; Frost et al., 2002; Sherrill, 1999; Lambert, 1998; Zinn, 1997; Birnie & Lustgarten, 1996; Barnett et al., 1990), principals must have the vision and the determination to select the model which serves them best.

Where principals do not have enough confidence in their own leadership, feel threatened or unaccustomed to sharing leadership (Barth, 2001; Troen et al., 1994) or

where the hierarchy is strongly “top down, there is little chance that teacher (leaders) will ever be more than fringe players –available as a resource when called upon, but seldom continuously involved in decisions of substance” (IEL, 2001 p.9). Or, where the culture and tradition of the school and the community limit their leadership to the classroom to deal with pupils, curriculum and learning, uninvolved in other aspects of management and decision making, they would never make it to the ranks of effective teacher leaders and soon give up on the job. The lack of a supportive climate, power and politics or the conflict between teaching and leadership role can also hamper the growth of teacher leaders.

4. Personal considerations

In her paper *Supports and barriers to teacher leadership*, Zinn (1997) explained that intellectual and psycho-social characteristics comprising the “individual’s underlying belief and value systems, drive for excellence and insatiable curiosity and need to know, are powerful influences on their willingness and ability to engage in leadership functions” (Zinn, 1997 pp.20-21). Thus the term *Personal considerations* as used in Chapter Two includes not only traits relating to personality, character, motivation and personal beliefs, but also their commitments, state of health, and the demands of the family – both immediate and extended.

In Chapter Four, the teacher leaders realized that personal characteristics affected their leadership role. Zinn (1997 p.28) commented that “constraints and supports perceived by these teacher leaders arise from all facets of their lives.” Thus personality and related characteristics while supporting the teacher leaders are liable to be obstacles too. It is likely that teacher leaders who exhibit characteristics like reticence, non risk-

taking, poor communication and selling skills, with little or no energy to pursue their tasks, or even burnout will experience obstacles in their leadership role. Their initial lack of experience in dealing with other members of the staff and the lack of leadership training put a heavy strain on their effort making them uncomfortable with leadership.

Personal commitments exemplify an area where both obstacles and support are present. Teacher leaders who do not hold to their beliefs or value system when challenged and are seen vacillating will experience frustrations and could soon surrender the role.

Meichoo shared her belief that:

Not everyone wants to be a teacher leader. Some people like me, are comfortable, to be just teachers (S2, 2001 p.6).

Where circumstances permitted she would prefer to remain a teacher rather than a teacher leader. Perhaps she exemplified the reluctant teacher leader who could be coaxed to take on a leadership role when the occasion demanded it. Distributed leadership will give her the flexibility to move in and out of leadership roles.

Suling (P3, 2002) presented a new perspective from the view of a teacher leader about to retire.

The older group those having a year or two left in the service may not want to become formal teacher leaders because it would tie them down. They prefer to remain informal (leaders). The approach by the school, the scope of their duty and knowing the rational and their objectives in advance remain major considerations (P3, 2002 p.8).

This group needed to know in advance what would be expected of them and whether they would be able to live up to such expectations. This is a new aspect to teacher leadership not discussed in any literature.

Health can be an impediment to informal teacher leadership. For a teacher leader with ailing parents or where the children suffer from health problems or have genetic defects, some adjustments will have to be made. If administrators are willing to make adjustment and honour their commitments, teacher leaders can be persuaded to retain their role until the immediate crisis is over or until an alternative solution has been found. Such treatment of teacher leaders is a model in school administration reflecting the moral aspect of school leadership and has a direct impact on the students which no amount of teaching can generate. The question of personal health has not escaped the attention of two of the older teacher leaders. Suling hinted at this.

If I am given good health and the energy, I would remain (in this role) (P3, 2002 p.15).

Personal commitments in this area are bound to have an impact, positive or otherwise on their decision as teacher leaders which school administrators will want to take into consideration.

Another important consideration is the influence exerted by the family and parents, friends and students. In Vanessa's case it has a positive influence on her. Vanessa (P2, 2002) who is single explained that her role as a teacher leader was facilitated by the understanding extended by her family.

You may not be able to spend too much time with the family...and so family understanding is very crucial (P2, 2002 p.9).

(In addition) my mum takes care of a lot of my daily needs...and there are many things which she does not require me to do in the house because she can see that I am really very tired out by the time I reach home (P2, 2002 p.10).

In the same manner, family commitment can also obstruct the younger teacher leaders like Kohmei who was on maternity leave during the interview from continuing in the role. She has indicated that she:

Would like to spend more time with my family now (P1, 2002 p.5).

Suling (P3, 2002) mentioned this difficulty faced by those with young family as did Stone et al. (1997).

Audrey (S4, 2001) a former Head of Department relinquished her appointment when she started her family.

I don't want to be a Head of Department any more (at least) not at this point in time (S4, 2001 p.5). Right now there are two things that I am weighing- the school and the family. I have a very young family and I have to take care of it (S4, 2001 p.9).

Audrey (S4, 2001) added that if she is groomed to resume the Head of Department appointment without getting her agreement in advance, then:

I am not willing. But if your purpose is to develop me (without any official appointment in mind) then that's fine (S4, 2001 p.5).

Structurally, the educational system in Singapore (Ministry of Education, 2002) has several provisions to meet the demands of teachers with young family including no-pay or half-pay leave and even a part-time teaching scheme with half workload. Other basic provisions include medical leave and privileges, child care provisions, and even compassionate leave (Ministry of Education, 2002). These schemes tax the resources of the schools especially their ability to employ temporary and relief teachers to the satisfaction of the students and their parents. Where temporary and relief teachers are not available, such shortfalls are added on to the workload of the staff and give rise to unhappiness. Even where the schools are able to find good relief teachers, the schools are unable to offer them any security of tenure unless the vacancy becomes permanent. Where the schools have the support of the community, and the school administration makes the effort to give at least some basic training to the relief and temporary teachers, and provide support to their teacher leaders, this problem of the family can be resolved speedily.

The personal considerations have important implications when developing teacher leadership in schools. In selecting and developing teacher leaders, preference should be given to those who already display some of the inborn characteristics first rather than those with skills (Leithwood et al., 1999c). In addition those selected must want to be teacher leaders and have some appreciation of the role to “serve as a catalyst for the decisions other teachers make that affect student performance most directly” (Barnett et al., 1990 p.618).

5. Developed model of teacher leadership in Singapore schools

The preceding discussion on the problems faced by teacher leaders has in a way highlighted the uniqueness of the Singapore educational system. Its centralised system offers little leeway for teacher leaders to exercise initiative which is characteristic of Western educational systems. On the other hand, the recent changes to the educational system have offered in turn some unprecedented solutions for the development of teacher leaders. The next step is to build a model of teacher leadership as it developed in the two site schools thus providing the answer to the fifth research question.

To finalise the model, an additional fieldwork was conducted from 27 April to 5 May 2005 in the two government managed schools. The eight teacher leaders, who were previously interviewed, were approached again but this time round; only five of them were available. Two of them have since retired and were away overseas, while the third was transferred and could not be traced by the school. The same data collection process was observed as done previously. The interview schedule can be found in Appendices J and K. The data from the additional fieldwork helped finalise this model of teacher leadership in Singapore schools. This model differed from the previous in the re-arrangement of the

dimensions. Thus similarities with the previous model would not be elaborated upon but stated as characteristics of the dimension. Only new views collected at this interview will be presented. The regrouped dimensions are:

- Dimension One: The leadership over students.
- Dimension Two: The leadership in citizenship development.
- Dimension Three: The leadership arising from their personality and personal commitments.
- Dimension Four: The leadership in school development.
- Dimension Five: The leadership in pedagogy

5.1 Dimension One: The leadership over students

As many of the characteristics are similar and have been presented in Chapter Four, these will be restated to give the complete picture. The main characteristics are discussed below.

- The importance of being good classroom teachers

As this remained their core business, they:

Have to be leaders in student learning and even in pedagogy (S3, 2005 p.6).

It required them to be critical and to reflect on their own teaching skills before sharing with others. Their involvement in other activities in the school should not:

Affect the core business which is teaching and monitoring of students (S3, 2005 p.3).

All other activities were at best:

Add-on or value added activities rather than the essential functions of a teacher leader (S3, 2005 p.3).

- The motivation of their students

They expected the best from their students especially in their academic activities but they were not always successful. Audrey noted that her last year's students:

Absorbed much more than I taught but for this year, I am still struggling (S4, 2005 p.4).

Core curricular activities like the buddy system introduced in Farrell Primary were used by the teachers to supplement their classroom teaching or to handle other problems.

I help her (i.e. my buddy) in Mathematics because she is very weak in this subject and talk to her on her problems which I (in turn) share with the form teacher (P2, 2005 p.1).

Vanessa (P2, 2005) mentioned that even in primary schools it is a challenge to deal with the naughty pupils like those in EM3 classes but once won over these pupils:

Give me a different kind of satisfaction that is hard to express (P2, 2005 p.10).

The teacher leaders at Princeson Secondary had similar activities. Meichoo (S2, 2005) specifically requested for the Normal Technical students so that she could motivate, give regular feedback on their performance and praise them for their achievements. Sonny had to initiate his own programme for some boys in his class whom he felt were at risk and to spend more time with them:

Not academically or pedagogically but more social (in nature) (S3, 2005).

The motivation of these students meant that:

A lot of things (have to be) tackled least of which is academic (S4, 2005 p.1).

Nevertheless academic achievement remains important to the teacher leaders.

We don't expect them to do very well academically but we do want them to do well enough to go on to the next stage (S4, 2005 p.6).

To achieve success the teacher leaders found that they had to win over other teachers of that class and make it a collective effort.

- To help disadvantaged students

While there are disadvantaged students arising from financial circumstances, the teacher leaders were more concerned with overcoming the lack of home support or a home culture which did not value education. In Farrell Primary, Kohmei had to retain a pupil after school every day so that the teachers could supervise him in his homework, as he had no home support. Thus Kohmei had to get the assistance of the learning support co-ordinator and even the assistance of other external agencies to be part of this scheme.

The secondary school teacher leaders had their fair share of such students. Sonny tried to overcome the lack of home support by meeting with parents to work out a partnership where:

I take care of their (the students') school life and the parents take care of their home life (S3, 2005 p.2)

As this entailed an enormous amount of time, Sonny found that it affected adversely his relations with the rest of the students in his class and he had to strike a balance between the two needs. Both Meichoo and Audrey reported similar situations with their students and conceded this as a tiring process.

Difficulties are mostly from the students or from their parents (S4, 2005 p.1).

This disruptive behaviour arising from a lack of home support could be traced to the low priority that some minority races in Singapore place on education. In this respect Princesson Secondary had more students from the minority races and

the teacher leaders tended to highlight this difficulty more than those at Farrell Primary. Audrey referred to this phenomenon:

There are lots of students whose family don't care about education. In turn, the students do not care and you can't make them care or listen (S4, 2005 p.7).

Faced with this dilemma, Audrey had to choose the option of supporting those students who want to study as against those not willing to learn.

So championing these students is like fighting for the rights of those who wish to learn versus those who don't (S4 2005 p.2).

Not all efforts produced the academic results nor decreased the undesirable behaviour and teacher leaders had to look for a wider context within the school to solve this problem.

5.2 Dimension Two: The leadership in citizenship development

In the revised model on teacher leadership in Chapter Four, citizenship development was subsumed under Dimension Four – personal characteristics. In this model, it is treated as a dimension by itself. When queried on this, the teacher leaders were agreed on the importance of their role in citizenship development.

Sonny identified teacher leaders as:

Socially conscious citizens sacrificing for school or out of school (S3, 2005 p.6).

He feels this is his niche area having worked for the last ten years with young people helping them to:

Prepare for citizenship, for society beyond just learning of content (S3, 2005 p.6).

There is one distinguishing characteristic in this dimension.

- The building of self esteem

A taste of success and recognition can lead to positive self esteem among these disadvantaged students. Since these students are handicapped in many ways

not least of which are academic success and discipline in school, the teacher leaders in Princeson Secondary tried at the start, to build their self esteem in non-academic areas. Meichoo strongly supported this approach as she was keen to capitalise on the natural talents of her Normal Technical students.

You may not be good in studies but you can do well in whatever you are good at, meaning either sports or working with your hands even helping your parents at home. Just don't give up (S2, 2005 pp.2-3).

She encouraged them to:

Control their own destiny (by) working hard in areas they are good at (S2, 2005 p.2).

All these formed part of her effort to impart to them:

Values and life skills...for them to be good citizens who can contribute positively to society (S2, 2005 p.8).

Sonny explained his preference as:

Gravitating towards leadership in moulding citizens...helping students prepare for citizenship, for society beyond just learning of content (S3, 2005 p.6).

The teacher leaders continued to spend time with their students so that they could internalise:

The values we have taught them and (be) matured enough to implement what they have learnt (S2, 2005 p.5).

Through constant reminders, encouragement and praise, the teacher leaders set to impart these values to their students, and to encourage them to excel and do better in the future. The success they achieve in any field in school will create the self confidence they need to face the world and believe in their own intrinsic worth. The teacher leaders battled against the labelling of their students.

You are in Normal Technical. So what? You can do better (S2b, 2005 p.1).

Thus the teacher leaders assumed leadership of critical classes e.g. graduating or difficult classes to enable their students to taste success and become role models for their students and colleagues.

While the teacher leaders from the primary school did not specifically touch on this issue of citizenship development, it remained part of their school culture to instil social values in their students through projects like the recycling of used resources and the collection of money to aid poorer students. The introduction of inquiry based learning in Farrell Primary arising from their being recognised as an incubator school stimulated the students to:

Better cope with the changing world (P1, 2005 p.4).

5.3 Dimension Three: The leadership arising from their personality and personal commitments

The characteristics in this dimension, which have been documented in the earlier model remain relevant to the work of teacher leaders and are briefly discussed for completeness.

- The importance of personality

The teacher leaders were aware that their personality could help win and influence teachers and students. They must persevere in their undertakings and have sufficient energy to commence new ones. The teacher leaders in Farrell Primary continued to stress the willingness to:

Want to take up the role of a teacher leader (P1, 2005 p.6).

By way of explanation, Vanessa observed that in her school a new generation of younger teachers have taken on leadership roles and this has been accepted by the senior teachers. It was basically:

A matter of personality whether the person wants to take it up or not (P2, 2005 p.8).

Having taken on this role she felt that this new breed of leaders needed to re-examine their interpersonal skills and avoid being too blunt. Instead they should be more:

Sensitive in their non-verbal cues in dealing with the older staff (P2, 2005 p.9).

Once they decide to be teacher leaders they have:

To be role models for other teachers (P1, 2005 p.6).

In the secondary school, Audrey stated that teachers were given many opportunities to show and develop their leadership but:

Some people have resisted this idea. Not everybody likes being the efficient ideal (S4, 2005 p.6).

Sonny explained that where the prevalent school culture remained that of:

Superior and subordinate, management and followers (S3, 2005 p.6),

few teachers would volunteer to bridge the two cultures as teacher leaders have to be:

Independent minded and (able to function) informally (S3, 2005 p.6).

- The belief in the rights of the individual

They preferred the use of soft skills arising from their personality to win over teachers and students rather than depend on the school administration to secure compliance though they were not entirely averse to the use of *borrowed* authority.

Sonny cautioned that when it happened:

They cease to be a teacher leader in the eyes of the teachers and therefore be a part of the management (S3, 2005 p.6).

They tried not to impose their views on their colleagues as they felt that teachers know what was best for them. They work on the basis of mutual respect for each other.

- The impact of personal commitments

Audrey and Vanessa reaffirmed the impact of personal commitments on their role. Audrey (S4, 2005) wants to continue in an informal capacity as her family has expanded, while Vanessa (P2, 2005) with her coming marriage wants to continue as a class room teacher in a school nearer to her matrimonial home.

Where the school is sympathetic to these commitments, they are likely to return to their teacher leadership role once these commitments have been resolved. This is important in their remaining as teacher leaders. The ability to balance their personal and school needs is crucial to teacher leaders.

- The use of different leadership style

At times teacher leaders functioned as parallel leaders at other times intermediaries. Parallel leadership has been described as a collaborative engagement between teacher leaders and administrator leaders to “enable the knowledge-generating capacity of schools to be activated and sustained” (Andrews, Conway, Dawson, Lewis, McMaster, Morgan & Starr, 2004 p.19). This helped to enhance school identity, improve teachers’ professional esteem, student achievement and support from the community. Intermediaries functioned in a bridging capacity between the staff and the administrators. The informality of their role enabled teacher leaders to vary their leadership style according to their own

preference and the situation. While some have indicated a preference for a parallel form of leadership in school, much depended on their ability to be:

More or less independent, not tied to any interest group, above politics and with no qualms regarding this superior-subordinate culture with the management (S3, 2005 p.5).

Their ability to perform in either role would depend on the type of colleagues:

Those who are more vocal and bold will go straight to the Principal. Those more reserved will vent it through sharing (P2a, 2005 p.6).

The teacher leaders in Farrell favoured parallel leadership as it gave them the:

Opportunity to get problems solved and that the problems are being brought up to the authority (P2a, 2005 P.7).

However time constraint and the difficulty in meeting with their colleagues to pursue the issues could limit their role to that of intermediaries (P2, 2005). They felt that being intermediary leaders gave rise to a wrong perception that:

We are against them (i.e. the administration) (P2a, 2005 p.7).

Further as Kohmei noted:

I don't think that (the intermediary role) is really what leaders should be doing (P1, 2005 p.5).

The teacher leaders in Princeson felt that they could function well in both capacities but Meichoo preferred parallel leadership:

Working with the school to achieve our goals (S2, 2005 p.6).

Audrey added the proviso that whichever role must be for:

The benefit of the students, for the benefit of the school. (Further) I have to be convinced. Only if I am convinced can I convince the other teachers (S4, 2005 p.5).

Sonny phrased it differently.

There must be a genuine cause of concern (S3, 2005 p.5).

- The preference for distributed leadership

Closely linked to this was their preference for a greater use of distributed leadership within the school. In Princeson Secondary, activities were organised on a project basis with different teachers in charge at different time. This helped to create many leaders and was on-going (S4, 2005). Meichoo mentioned that:

Everyone has a part to play. It must be a whole school approach. In this way, the school will move forward (S2, 2005 p.6).

This approach is another reflection of their vulnerability as informal teacher leaders. They had no hold over their colleagues and the only way to share the burden was to involve everyone in some way or other. This approach recognised the worth of every individual in the organisation and softened the bureaucratic hierarchy normally found in many schools.

5.4 Dimension Four: The leadership in school development

In the revised model in Chapter Four, the teacher leaders gave many instances of their involvement in projects that made their school vibrant. Typical of their effort was the comment by Sonny that he had been involved:

In previous years in leadership for school development (S3, 2005 p.6).

Their efforts are discussed under the different characteristics of this dimension.

- Their contribution to school projects.

At the interviews conducted in 2005, they recounted instances of new involvements in school programmes. Meichoo said that although she did not:

Officially initiate progress, but I work with the school to improve the school grades and the standing of the school in whatever ways I can (S2, 2005 p.6).

Meichoo openly challenged her Normal Technical students to participate in school projects and even implemented an enrichment project for the Normal Technical

students which would make their school an interesting place to be in but not for studies alone (S2, 2005). This programme was eventually shared with the neighbouring schools. In Farrell Primary, Vanessa was rotated to work on getting parents to participate in school affairs through COMPASS in line with the changing needs of the school (P2, 2005). The success of such projects would help to publicise their respective school to the community.

Teacher leaders felt that previous achievements would not necessarily enhance their standing with the teachers or the administration, nor increase their own confidence in taking on more challenging tasks. As Audrey pointed out:

Most of the time any project you embark on is not done by you alone (S4, 2005 p.8).

This reflects a common attitude among teacher leaders not to claim credit for the performance of the students and their colleagues.

- Rallying teachers around projects

Their influence helped to create groups of like-minded teachers who in turn helped to maintain the school ethos, vision and mission. Audrey gave a good account of this when the school had to find ways to deal with a difficult Secondary Three Express class or the Normal Technical students. She received:

Lots of help from the teachers, the Disciplinary Master, the Operations manager, the Principal and the HODs (S4, 2005 p.2).

Collectively, they were able to make some progress in the class.

- The acceptance of their leadership.

Kohmei commented that the difficulties she encountered with her colleagues were due more to their tight schedule than their lack of co-operation (P1, 2005). In Princeson Secondary all the teacher leaders spoke of the strong support from the administration especially when it came to the introduction of differential learning for the students. They hardly encountered difficulties from their colleagues (S2, 2005; S3, 2005; S4, 2005). The leadership they exercised made them a useful partner of the school administration and have sometimes been mistaken to be an extension of the administration by the staff. This is one area that teacher leaders must zealously guard against.

5.5 Dimension Five: The leadership in pedagogy

This dimension has been covered extensively in Chapter Four. As with the previous dimensions, only the main characteristics will be stated.

- Their influence in pedagogy

As they have shown their competence and success in their classroom teaching other teachers are willing to learn from them. On their part the teacher leaders are willing to share with their colleagues so as to allow a school-wide approach to the problems facing them. Workshops and sharing sessions were regular activities at Farrell Primary. Vanessa pointed out the many occasions when she guided new teachers or helped her colleagues in teaching Mathematics. Even at Princeson, Sonny admitted that in the:

Areas of sharing and informal communication there are lots of that (S3, 2005 p.3).

- The need for continuous improvement

This allowed the teacher leaders to stay in the forefront of pedagogy and has been clearly demonstrated in their participation in NIE sponsored research projects conducted in their school. Vanessa was involved in research on reading/picture conversation while Kohmei on alternative Mathematics assessment. All the teachers started using inquiry based learning for science teaching as this was their innovative IT project being an incubator school. This again reflected the leadership of the teacher leaders in school development.

In the secondary school, the teacher leaders continued to evolve new methodology by experimenting with research passed on to them at workshops or in handouts (S3, 2005). Meichoo did her own personal research.

I try out new innovative ideas that I pick up from colleagues, other schools workshops or books. I improve on them and can come up with a lot of ways to help students learn better (S2, 2005 p.5).

When they shared their ideas with their colleagues, it contributed to the maintenance of a high standard of professionalism in the school. This required time especially when they had to be with the teachers to understand and analyse the situation. It helped in their own self development which should be seen in a broader context as benefiting the students.

- Their non participation in peer evaluation

In the Singapore context this is conducted only by those officially appointed by the Ministry of Education. Sonny explained that this is unlikely to take place in the near future as:

It is not expected as yet. Further, we haven't reached that level of academic culture (S3, 2005 p.3).

Should it occur, Audrey mentioned the necessity to be:

Comfortable with my own knowledge, that I am good enough before you ask me to evaluate some one (else) (S4, 2005 p, 9).

These five dimensions representing the developed model of teacher leadership is as much the product of the respondents as the interpretation given to it by the researcher.

Where a characteristic can be grouped into one or more dimensions, it has been placed in the dimension considered most suitable by the researcher to help the model achieve a sense of mobility and flow.

6. Conclusion

This chapter has examined the circumstances which can provide support and obstruct the growth and development of teacher leadership in Singapore schools. This helps in an understanding of the developed model of teacher leadership in the two schools. To recapitulate, the main dimensions and characteristics of the model are presented chronologically in Table 10.

Table 10: The developed model of teacher leadership in Singapore schools

Dimension and Description	Perceived by respondents at		
	Preliminary study 2000	Final study 2001/2	Additional fieldwork 2005
Dimension One : The leadership over the students			
1. The importance of good classroom teaching.	√	√	√
2. The motivation of their students.	√	√	√
3. Role with disadvantaged students.	Not mentioned	√	√
Dimension Two: The leadership in citizenship development			
1. To build self esteem.	√	√	√
Dimension Three: The leadership arising from personality and personal commitments			
1. The importance of personality.	√	√	√
2. The belief in the rights of the individual.	Not mentioned	√	√
3. The impact of personal commitments.	√	√	√
4. The use of different leadership style.	Not mentioned	Not mentioned	√

Dimension and Description	Perceived by respondents at		
	Preliminary study 2000	Final study 2001/2	Additional fieldwork 2005
5. The preference for distributed leadership.	Not mentioned	√	√
Dimension Four: The leadership in school development			
1. Their contribution to school projects.	√	√	√
2. Rallying teachers around projects.	√	√	√
3. Acceptance of their leadership.	√	√	√
Dimension Five: The leadership in pedagogy			
1. Their influence in pedagogy.	√	√	√
2. The need for continuous improvement.	√	√	√
3. Their non participation in peer evaluation.	Not mentioned	√	√

This table shows the subtle changes that have taken place in the model from a simple to a more sophisticated form. The use of quantitative study techniques especially the in-depth interviews allowed the researcher to build up different aspects of this model and then present it as a whole. Having explained how the peculiarities of the Singapore educational system could have affected the development of teacher leadership in Chapters Two, Four and Five, this model represents the first attempt at defining teacher leadership in these two schools. While to some extent the dimensions can be extrapolated to apply to similar Government managed primary and secondary schools in Singapore, it is necessary to note that within government managed primary and secondary schools there are other internal distinctions e.g. SAP schools, autonomous or even independent schools. These distinctions can affect the model of teacher leadership. Further this study has excluded schools managed by the religious bodies, the Chinese clans or the privately owned schools and the post secondary Centralised Institutes and the Junior Colleges. A more comprehensive study incorporating all these types of schools and level and over a longer period of time will give a true picture of teacher leadership in Singapore schools.

This model of teacher leadership demonstrates amply the benefits that can be reaped from having a parallel leadership structure in the school. Informal teacher leaders are not part of the school hierarchy and they are able to work with the staff collegially to achieve and sustain the school's vision and mission. It takes a mature school leader with the vision and the confidence to share in this type of leadership and ultimately to nurture all the teachers to participate in distributed leader and allow them to be leaders in one form or another, at one time or another.

This blueprint of informal teacher leadership can serve to encourage all teachers who aspire for some leadership role to participate whole heartedly without fear and in the interest of the students. Only when the official and unofficial leadership are working together can the school “groom young Singaporeans to develop the innovative capabilities that Singapore needs and make it a leading world city” (Shanmugaratnam, 2004c p.5). This parallel leadership can set the pace for greater democratic practices within the school and serve as the best advocate for shared leadership.

In the next and final chapter, the main findings of this study will be summarised and compared with the theory-based model. Of interest to researchers is that the differences have its origin in the local culture, system and tradition. While this local model is not quite representative of Singapore teacher leadership because of its limited sample size, it is a good indication of what can be expected by future researchers. This study can sensitise and stimulate a growing interest in the concept of school leadership as exercised by teachers rather than administrators and this pool of knowledge can be expanded to be of practical value for school administrators to work with and for the Ministry of Education to nurture at the national level.

Chapter Six

Conclusion

1. Introduction

This concluding chapter will review what has been achieved in this research and offer suggestions regarding future research on this subject. Using the literature review in Chapter Two, a model of teacher leadership based on the experiences of American, British and Australian educators was constructed but when applied to Singapore it had to be modified to fit the local situation (Dimmock et al., 2000). The local model based on the real life experiences of local informal teacher leaders was shaped by local circumstances, like the Singapore educational system and the prevalent culture of the two schools. It has to be categorically stated that the emergent local model of teacher leadership must necessarily be influenced by the personalities of all the teacher leaders engaged in this research. This local pattern has been reinforced by the concurrence of the three HODs from other schools who read the research findings. All these views helped the researcher to give this study a local face.

This local model is accurate when applied to the two government managed schools. Although most of the schools in Singapore are government managed, yet within the government managed schools there are subtle differences and these will affect the teacher leadership model. Apart from the government managed schools, there are other school systems too. In the interest of understanding leadership in schools, it is best to have two models of teacher leadership, one for government managed schools and another for the other type of schools as their culture will differ. This will imply the need to conduct the study on a larger scale and over a longer period of time. Finally being the first study of

this kind, it is meant as an encouragement for others to contribute and to better inform our teacher leaders and educators of the role that they have been playing all along.

2. Teacher leadership revisited

This study has shown that there are similarities between the model of teacher leaders in Singapore and that of the West. There are broad areas of agreement concerning their work in school and within the community. Both models have similar dimensions though not presented in the order of merit.

Table 11: The two models of teacher leadership

Main dimensions of teacher leadership as perceived from	
Literature Search	Studies in Singapore schools
1. Innovative leadership with students.	1. The leadership over students.
2. Innovative leadership with colleagues.	2. The leadership in citizenship development.
3. Influence with other groups in school and community.	3. The leadership arising from their personality and personal commitments.
4. A conglomerate of factors relating to personality and personal commitments.	4. The leadership in school development.
	5. The leadership in pedagogy.

The Singapore model features the informal teacher leaders prominently in their role over the students. Their willingness to partake of this informal leadership is partly due to their disposition as well as their own personal commitments. These two commonalities can be found in both the Singapore model of teacher leaders and that of the West. This affinity between the two models is due to the universal attraction of education, its ideals and the opportunity of working with children.

Apart from that, the Singapore model takes off differently from the Western countries. The local teacher leaders are keen on citizenship development in line with the mission of the Ministry of Education which is to “develop the individual and educate the

citizen” (Ministry Of Education, 2005 p.1). Another important difference is in the way the leadership role is acted out locally affecting both their colleagues and their students. Leadership as Dimmock et al. (2002) explained “is best thought of...in relation to the myriad activities that take place in school communities...and that leadership (is) an essentially social and cultural process” (Dimmock et al., 2002 p.395). They prefer to be viewed as part of the effort to build up the school, improve on student performance and use pedagogy indirectly to affect the professionalism and standard of their colleagues. The local teacher leaders are hardly referred to as teacher leaders by their colleagues and they do not consider their role as that of a leader within the school. These are the forms of informal teacher leadership emerging from a centralised and structured hierarchical system.

All teacher leaders irrespective of whether they are local or from the Western hemisphere, are concerned about the motivation and the performance of their students and more so in an Asian society which places a high premium on good academic results. This is clearly shown in the actions of the local teacher leaders who push their students to excel academically. The types of students the teacher leaders come into contact will strongly affect their orientation irrespective of whether they are from the primary or secondary school. Where the teacher leaders in the secondary school had to teach Normal Technical students who are less academic inclined, the motivation of the students takes on a different approach. Realistically they pay more attention to students who are willing to learn even though weak academically and spend lots of time nurturing their potential. On the other hand neither do they neglect those who have no interest in their studies or disadvantaged in other forms. They spend time counselling and resolving their personal and home problems. This occupies most of their time in and out of school.

For students who are biding their time in school, teacher leaders approach them differently by making them believe in their own ability, build up their self esteem and imbue in them values to live by as adults. This is the situation faced by the teacher leaders of Princeson Secondary which has a higher percentage of minority races over other government managed secondary schools. Thus their leadership role and style over their students is determined to a large extent by the type of students that they encounter.

One obvious difference is that local teacher leaders do not openly champion the rights of any minority group of students. While teacher leaders in Singapore are passionate about disadvantaged students who performed badly in school due to social-economic reasons, this has never resulted in the championing of any minority group. The preservation of harmonious living among the multicultural and multireligious community has been one of the cornerstones of the Singapore government and is embedded in the Teachers pledge (Ministry of Education, 2004). Dimmock et al. (2002) commenting on the Singapore situation, wrote that schools would find it hard to deviate from close alignment with government policies. Further, government schools are all funded and staffed exclusively by personnel recruited by the Ministry of Education. This explains why teacher leaders do not discriminate when participating in activities organised by the various communities or self-help groups.

One other area where the local teacher leaders differ from their counterparts in the West is in the way they search for continuous improvement to ultimately benefit their students and raise the standing of their school. Local teacher leaders are not deeply involved in research as practised in the West. They tend to cherry pick ideas tested by others and implement these only at their own class level. Success or failure is always

confined to their own class and seldom extended to other classes unless someone in authority pushes for it. Teacher leadership in Singapore continues to be influenced by the norms of equality, privacy and autonomy.

Teacher leaders in Singapore see their informal role in two ways. There are those who had served previously as formal teacher leaders e.g. HODs and because of their personal commitments have decided to relinquish their appointment but nevertheless continued in some form of leadership role. The concept of informal teacher leadership fits them and they have taken easily to such a role. The other type of informal teacher leaders are those who have not held any formal appointment and are happy to remain as informal teacher leaders. Their motivation could be due to some personal desire to help their students achieve and eventually make their way into society as positive contributors. In this study, the majority of those identified as teacher leaders belong to this category.

Their background tends to affect the way they exercise authority and leadership in the school. It was found that informal teacher leaders who had been in formal authority tend to be more amenable to the use of borrowed authority and self assertion rather than the use of persuasive techniques. They prefer to get things going reminiscent of their former appointment without the tedious process of winning their colleagues over. Informal teacher leaders who have never been in authority tend to be more sensitive to the possible reactions from their colleagues and prefer informal approaches and other forms of persuasion including the use of their personality to achieve their goals.

One fact that emerged is the presence of many young informal teacher leaders. This is sometimes rationalised as part of youthful enthusiasm and idealism. However there is more to it. The Singapore educational system promotes teachers on the basis of performance and not seniority and the Enhanced Performance Management System (EPMS) is competency based with opportunities for self improvement. This explains why half the teacher leaders in the primary school are in their late twenties (approaching the thirties) and do not have more than five years in service. The younger teacher leaders in this study have been promoted having been recognised as teachers with potential. With proper guidance from the school administrators it is not too difficult for them to pick up leadership skills. This trend is likely to continue in Singapore schools.

The concept of informal teacher leadership is neither widespread nor formalised in Singapore schools. In reality when the concept of informal teacher leadership was discussed in the two schools, most of the staff associated it with those in authority. The teachers are aware that some classroom teachers have taken on a heavier load and invariably have some form of leadership role piled on them. These grassroots leaders serve as a rallying point whenever points of differences arise with the hierarchy. Although the concept of informal teacher leadership is hardly ever discussed in schools and the informal teacher leaders hardly ever regard themselves as leaders, there seems to be an implicit recognition of this type of leadership in the two schools.

The centralised nature of the Singapore curriculum does not permit schools much less the teachers to make changes to the curriculum except with the consent of the Ministry of Education. Informal teacher leaders in Singapore are not associated with curriculum changes, only with innovations in teaching methodologies and strategies. All teachers are

encouraged to teach the curriculum in ways that will meet the needs of their students. In this area, the teacher leaders have done well even in non-examination subjects like National Education where they have effectively reached not only their students but also those who service the school like the canteen vendors. By being innovative in their teaching methodology, they have carved out a niche area for themselves.

By the same token, informal teacher leaders in Singapore are not involved in peer appraisal. Peer appraisal has been considered by many teacher leaders in the United States as the pinnacle in teacher leadership. In the Singapore system, teachers are appraised only by the principal assisted by the vice-principal and the heads of department. The outcome of this is that informal teacher leaders do not possess any clout over their colleagues and teacher leaders in Singapore have to depend heavily on the use of interpersonal skills and influence to win their colleagues over. It means that teacher leaders can be open when dealing with their colleagues without any hidden agenda. Further the help given by an equal would not entail a loss of *face* which is important to the Asian mentality. Teacher leaders in Singapore thus have a unique opportunity to deal openly with their colleagues, promote higher professional standard for every teacher and raise the performance of the school.

In summary, informal teacher leaders in Singapore are:

- Good classroom teachers well versed in pedagogy, commanding the respect of students and colleagues;
- Concerned about the progress and personal development of their students and serve as role models to them;
- Able to influence the students and colleagues through their leadership style and personal commitments;

- Always supporting school projects and rallying students and colleagues to do likewise;
- Younger in age and experience and might not have served previously in an official appointment.

Teacher leadership in Singapore seems to slumber in its present form neither affecting strongly their colleagues nor consciously extending their influence over the school. Informal teacher leaders need to use this “power in the service of others” (Gehrke et al., 1997 p.16) to build the parallel leadership in the school based on distributed leadership. The development of parallel leadership in the school is likely to boost the morale of teachers, give them an opportunity to participate in the governance of the school, and ultimately attract good candidates for the service. Not to develop this parallel leadership in the school will relegate informal teacher leaders to the level of ‘good to have’ but ‘not essential’ for good leadership in school.

3. Limitations of the research

In conducting this research, it became clear to the researcher that the teachers in school focus mainly on doing what they know best – teaching their subject. Their heavy workload, lack of external contacts or exposure and non involvement with research work left them with little or no time to be concerned with leadership. The centralised educational system makes clear the distinction between the classroom teachers and those in authority. This has not prevented the more spirited teachers from wanting the best for their school and their students leading to some form of small informal leadership role.

Local teachers being unfamiliar with the concept of informal teacher leaders as practised by American, British or even Australian teachers, have found it difficult to reconcile the informal teacher leadership role with that exercised by appointed leaders. Further, informal teacher leaders seem to run counter to Asian tradition of an appointed head. Local teachers do not seem able to differentiate the existence of informal leadership at different levels within the school nor practise the concept of distributed leadership on a regular basis. If informal teacher leadership exists it is explained in terms of passion or youthful enthusiasm of the individual. The centralised system has created the mentality that those who do not hold official appointments in the school hierarchy, are not perceived as leaders but more like facilitators or intermediaries or in common parlance *busybodies*. In the same frame of reference it is not necessary for the administration to involve them in all aspects of school management including governance which elsewhere “seems to be one of the current strategies used to create a community of professionals for the purpose of teaching and learning improvement” (Ovando, 1996 p.31). The concept of teacher leadership based on service has not been embraced by the staff and the administration.

Again the issue of a small number of teachers and schools crop up. While this small sample population and the methodology affect the ability to generalise the findings to all the government managed schools in Singapore, it nevertheless has to start small because of the uniqueness and limited resources of this study. It is recognised that a larger sample can result in more views and to an extent might have influenced the outcome of the model. The crucial issue in this research is to establish whether informal teacher leaders exist and if they do, to identify their likely characteristics and build a model of local teacher leadership. Once these have been established, then subsequent studies can follow varying in intensity, sample size and different types of schools. The importance of this

study is that it established the existence of informal teacher leaders and proposed a local model of teacher leadership for other researchers to follow up in due time.

This study did not take into consideration the role of principals and heads of department in cultivating and developing teacher leadership in schools. It has been mentioned that principals and heads of department can either help or impede the work of teacher leaders based on the implications mentioned by the informal teacher leaders. No part of the study has been directed at this area. Neither did the study differentiate between the types of informal teacher leaders identified by school administrators and those by the staff. There seems to be significant differences between the two categories as school administrators and the staff have their own agenda in choosing their informal teacher leaders. Reacting to this issue which appeared in the final study, teacher leaders of both categories were included in the study. A separate study can surface subtle differences and lead to a clearer understanding of the needs of both groups in the school context.

Again no attempt has been made to verify the roles of the teacher leaders through interviews with the school administration or with other members of the school staff. The local model has been built mainly on the recollections of the teacher leaders. This approach was largely a confidence-building measure as local teacher leaders might not take it well if they are aware that their work will be scrutinised by their colleagues. Thus the alternative was to invite some Heads of Department from other schools to scrutinise and comment on the data and the model. This anonymous approach proved to be useful as comments were forthcoming and critical in their focus. Relevant comments have been reflected in this chapter.

Although local circumstances and changes initiated by the Ministry of Education and schools have been considered when constructing the developed model of teacher leadership, this remains a period of flux. Even now new changes have been announced by the Minister for Education at the MOE Work Plan Seminar (Shanmugaratnam, 2005) and these are likely to affect the model. Subsequent researchers need to assess how the latest changes have affected the face of teacher leadership.

4. Future research

For the concept of informal teacher leadership to remain relevant there is a need for this study to be replicated at the national level to learn about the operational aspect of teacher leadership in schools. The study should include all the different types of schools in Singapore including the non-government schools (commonly referred to as mission schools or government aided schools), the government managed schools with subcategories covering the Special Assistance Plan Schools (SAP), the independent schools, the autonomous schools (Ministry of Education, 2001b), the centralised institutes, junior colleges and the newly established specialised schools like Sports School and the Science and Mathematics School organised by the National University of Singapore. This conglomerate of schools in Singapore will yield a truly national set of data on teacher leadership. This national data will be valuable to administrators at all level in deciding on the best form of initial teacher training and self development programmes to unleash the potential of teacher leaders.

The Ministry of Education have openly declared the characteristics required for its teachers (Teo, 2001a, 2000g, 2000d, 2000c, 1998a). This study has shown that many of the desired characteristics are similar to those shown by the informal teacher leaders. The

findings from a nationally funded research can confirm that the characteristics of informal teacher leaders reflect the qualities extolled by the Ministry of Education and at the same time encourage the greater use of distributed leadership which can loosen the rigid school hierarchy. Distributed leadership makes for good followers too. The teachers in a centralised system need to be convinced that it is legitimate in wanting to be informal teacher leaders as this is expected of them by the Ministry of Education.

In its anxiety to promote leaders, the Ministry of Education have offered many incentives to those willing to take on the leadership track. At the school level, it is logical for administrators to recruit their formal leaders from those already performing an informal teacher leadership role. This can reduce the number of informal teacher leaders and diminish their role and efficacy. It can create the impression that informal teacher leadership is the first step in the corporate ladder and unsettle the confidence of their colleagues in this concept. Future studies can be conducted to determine the likely detrimental results of such an action on the role of informal teacher leaders.

With a national model of informal teacher leadership in place, similar studies can be conducted in neighbouring ASEAN countries under the auspices of the Council of the Southeast Asian Ministers of Education Organisation (SEAMEO) to enable each country to create its own model. What has been conceived initially as Singapore's aid programme to raise the level of teacher training and development in the ASEAN countries and make Singapore the educational hub of this part of the world (Teo, 1999b) can eventually result in the emergence of an ASEAN model of teacher leadership, placing the ASEAN countries on par with the rest of the world in the development of education.

In the midst of the euphoria on teacher leadership, Leithwood et al. (1999c), cautioned that many of the merits of teacher leadership were derived mainly from small qualitative studies. There is a need for large scale investigation to substantiate the effects of teacher leadership. A critical comment by Trachtman (1991) quoted by Stone et al. (1997) states that studies on teacher leadership have not “resulted in any measurable student achievement” (Stone et al., 1997 p.16). Leithwood et al. (1999c) also reported that there is little quantitative evidence of the impact of teacher leadership on students.

It was pointed out in Chapter Three that in the absence of data, the researcher could conduct initially a qualitative study followed by more intensive quantitative studies. With the construction of a local model of teacher leadership, it is time to undertake a quantitative study of informal teacher leadership not only in Singapore but eventually the whole of the ASEAN bloc. The combined evidence stemming from the quantitative and the qualitative approach will put the findings in its true perspective.

5. Conclusion

Teacher leadership is not “for teacher autonomy (or) the celebration of individualism but for the development of schools and networks” (Frost et al., 2002 p.15). The promotion of teacher leadership is a shared responsibility of everyone within the school community (Serve, 2001). Teachers must be prepared to take on the extra responsibility associated with teacher leadership and support each other in its implementation just as the school administrators must be mature and confident to realize the advantages and not be threatened by the impact of teacher leadership. The educational authorities at all levels and the school of education in the local university can provide support and facilities to encourage the on-going development and study of teacher

leadership. This involvement of teachers will create a critical mass of teacher leaders in schools to allow distributed leadership to function. However, it has to be recognised that not all teachers would want to serve but for those willing to serve, some will acquire a higher profile than others but all will perform some aspect of leadership in the school at one time or other.

For this to happen, all parties to the educational process need to contribute. Schools and educational authorities must be willing to change or modify any system which hinders teacher leaders from developmental work in the school. These can range from archaic mindset on management and use of transformational leadership, to organisational structure, creating fresh and new sets of expectation to replace those of the past. The on-going changes in the Singapore educational system present a rare and opportune moment to launch the concept of teacher leadership on an island-wide basis.

Teachers on their part have to remain strong advocates of student learning in school and not be blinded by their own individual success in the classroom. They should look at teacher leadership as “part of their professional (development) working collaboratively to share and support learning” (Frost et al., 2002 p.16). The emphasis is that this concept can be promoted by every single teacher in the school and hinges on the importance of collegiality. It is immaterial whether they play a major or minor role but a role most appropriate to the situation and their ability. Ultimately it is the responsibility of every school to “build its own teacher leaders if it is to stay afloat, assume internal responsibility for reform, and maintain a momentum for self renewal” (Lambert, 1998 p.3).

The community has to be convinced of the new role and positive impact of teacher leadership on their children's learning. They must contribute as partners and not demand accountability alone. The recently launched COMPASS is a good vehicle for parents to play a more positive role in the school, working with teachers to develop school policies and curriculum. Kowalski (1995) in line with Strike (1993) felt that "parents and students ought not to be treated as clients but rather as partners with the teachers being the firsts among equals in discourse about education" (Kowalski, 1995 p.252).

The changes taking place in Singapore have given the community a hand in the development of teacher leadership. The recently launched Teacher Work Attachment (TWA) scheme brings together the most successful business organisations to share their organisational and management skills with teachers. It is likely that many of the teachers involved in this scheme are functioning as informal teacher leaders. When teacher leaders have to work with their counterparts from a different environment, they gain new insights in interpersonal skills and humanism in general. In recognition of the importance of this, the National Institute of Education (NIE) has launched a new training module for trainee teachers which will enable them "to engage in group projects to provide services to the community, both local and regional, to inculcate a spirit of volunteerism" (Shanmugaratnam, 2004a p.3).

While there is no quantitative data to support the contributions of teacher leaders, there are indications that "teacher leaders can help other teachers to embrace goals, to understand the changes that are needed to strengthen teaching and learning and to work together towards improvement" (Leithwood et al., 2003 p.3). These show sufficient promise to enthuse and strengthen those who believe that the effective way to implement

and sustain change is through teacher leadership. Thus, if teacher leadership is treated as part of the bigger issue of organisational change and not merely to enhance individual opportunities and capacity (Smylie et al., 1990), it stands a better chance of contributing and reaping benefits in the school. Together these groups can lead to the building of schools and the community as centres of learning for both teachers and students (Harris, 2003a) and contribute to sustainable leadership (Hargreaves et al., 2003) for school renewal. School leadership would then be undertaken by many and not the appointed few. The distributed leadership practice will in turn reinforce greater support from all parties.

Informal teacher leadership is the first step in this process. As teacher leadership is capable of performing a multitude of roles if given the appropriate support and resources, it can reduce reliance on the principals for sole leadership in the school hierarchy and introduce a parallel system based on distributed leadership where every teacher and even students can contribute their share according to their expertise and skills. Teachers must be prepared and be willing to be part of this ultimate teaching experience.

As with all practices, teacher leaders must recognise the existence of constraints in the system, culture and society and be able to work around them, armed with knowledge of school restructuring, management skills and even charismatic charm. Kowalski (1995) has argued that teacher leadership should not be seen as a challenge between professionalism and the prevailing democratic system “but rather as one of refashioning organisational cultures and climates so the two may coexist” (Kowalski, 1995 p.253). The best proponents of teacher leadership are the teachers themselves. They form the last wave for the successful restructuring of schools to meet the demands of the twenty-first century.

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Appendix A The covering letter

Dear Teacher

Instrument to identify informal teacher leaders

Thank you for taking part in the identification of teacher leaders in your school.

This pilot study will enable me to gather a comprehensive list of the characteristics of teacher leaders applicable in Singapore schools. This research forms part of the course work for the Doctor of Education programme offered by the University of Leicester. This course work is supervised by Prof. Tony Bush, Director of the Educational Management strand, Educational Management Development Unit, University of Leicester.

Informal teacher leadership is held by many researchers to be the key to sustained educational reforms in schools. While they normally do not hold official appointment in the school hierarchy they are able through their mastery of pedagogical and related skills, to negotiate collegiality among their colleagues and provide a valuable link between administration and teachers to promote and achieve change in the school system. (It is intentional that this description should be broad enough to allow for future inclusions).

Using the matrix which describes the characteristics of informal teacher leaders, identify 4 informal teacher leaders in your school from the staff list supplied. Rank all the teacher leaders you have identified. The teacher leader ranked as No 1 will be the one closest to your concept of teacher leader, with No 2 your second choice and through to No 4. Against each name, list the characteristics, which would best describe that teacher leader and circle all relevant boxes where appropriate. You may add other characteristics, which you feel, would help clarify the concept of informal teacher leaders.

Please return this instrument together with the staff list in the envelope provided and deposit it in the locked box provided for your convenience in the staff room within three days. Once the data has been collated and interpreted, it will be made available to the staff on a private basis.

You are requested to record your name in order to give this survey authenticity and credibility. The confidentiality of this survey will be strictly safeguarded.

Thank you for participating in this identification survey.

Yours faithfully
Francis Wu
Ed D candidate 1999
University of Leicester

21st September 2000

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Appendix B Characteristics of informal teacher leaders

Characteristics			
Group	Area	Description	Observed by
A	Curricular Instruction	1. Have depth and understanding of curricular matters beyond content knowledge	Leogrande, 1995
		2. Mastery of teaching skills in the classroom	Corallo, 1995
		3. Constantly seeking challenges	Wilson, 1993
		4. Value opportunities for growth for themselves and their students	Wilson, 1993
		5. Interested in shaping or influencing teachers' professional role and responsibilities	Symlie et al. 1990,
		6. Perform the role of a change agent i.e. willing to accept changes in curricular and help other teachers to adapt to changes	Fullan, 1993 Gehrke et al. 1997.
		7. Committed to self-reflection to improve their teaching skills	Leogrande, 1995
		8. Practice self directed learning	Aiken, 1998
B	Concern for student learning	1. Foster student responsibility in the learning process	Leogrande, 1995
		2. Search for creative ways to motivate students	Wilson, 1993
		3. Spend substantive amount of time and energy on their students	Wilson, 1993
C	Leadership	1. Use classroom expertise to negotiate collegiality	Leogrande, 1995
		2. Involved in peer-coaching	Gehrke et al. 1997.
		3. Mentor to beginning teachers	Gehrke et al. 1997.
		4. Provide assistance to colleagues when requested or accepted	Symlie et al. 1990.
		5. Show no disapproval of other teachers' behaviour	Wilson, 1993
		6. Aware of their impact on other teachers	Gehrke et al. 1997.
		7. Prefer persuasion rather than confrontation when dealing with colleagues	Romerdahl, 1991
		8. Favour participatory decision making among teachers	Wilson, 1993
		9. Keen on leadership role being shared among colleagues	Wilson, 1993
		10. Do not consider themselves as administrators or leaders	Fay, 1992
		11. Contribute to the shaping of the school's vision	Aiken, 1998
		12. Act as intermediary between administrators and teachers	Mackenzie, 1995
		13. Willing to take risks	Corallo, 1995
D	Personality	1. Had served previously in formal leadership appointments like HOD, subject head etc.	Wilson, 1993
		2. Have strong sense of self worth	Leogrande, 1995
		3. Good role model to colleagues and students	Leogrande, 1995
E	Community	1. Liaison between community and school	O'Hair et al. 1997.
		2. Involve students in community	O'Hair et al. 1997.
F	Others	**	

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The teacher leaders I have identified and ranked in the following order are

No 1. Mr./Mrs./Mdm./Miss _____

The characteristics identified* are as follows:

A	1	2	3	4	5	6	7	8					
B	1	2	3										
C	1	2	3	4	5	6	7	8	9	10	11	12	13
D	1	2	3										
E	1	2											
F	**												

No 2. Mr./Mrs./Mdm./Miss _____

The characteristics identified* are as follows:

A	1	2	3	4	5	6	7	8					
B	1	2	3										
C	1	2	3	4	5	6	7	8	9	10	11	12	13
D	1	2	3										
E	1	2											
F	**												

No 3. Mr./Mrs./Mdm./Miss _____

The characteristics identified* are as follows:

A	1	2	3	4	5	6	7	8					
B	1	2	3										
C	1	2	3	4	5	6	7	8	9	10	11	12	13
D	1	2	3										
E	1	2											
F	**												

No 4. Mr./Mrs./Mdm./Miss _____

The characteristics identified* are as follows:

A	1	2	3	4	5	6	7	8					
B	1	2	3										
C	1	2	3	4	5	6	7	8	9	10	11	12	13
D	1	2	3										
E	1	2											
F	**												

Name of participant _____

Date _____

*Please circle as many relevant boxes as you deem appropriate.

**Feel free to add your own observations

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END OF QUESTIONNAIRE

Appendix C The personal particulars form (preliminary study)

Date: _____

1 Personal Particulars	
1.1	Name (Mr/Mrs/Mdm/Miss/Dr) : _____
1.2	Date of Birth (dd/mm/yy) : _____
1.3	Age : _____
1.4	Sex: (Male / Female)
1.5	Place of Birth : _____
1.6	Country of Birth: _____
1.7	Residential Address: _____ Postal Code: _____
2 Qualifications	
2.1	Academic
	Spouse Own
2.1.1	Primary School Leaving Certificate or Lower
2.1.2	GCE "O" Level Certificate
2.1.3	GCE "A" Level Certificate
2.1.4	Polytechnic Diploma
2.1.5	University Degree
2.1.6	Post Graduate Qualification
2.1.7	Professional Qualification
2.2	School Currently Posted To: _____
2.3	Address : _____ Postal Code: _____
2.4	School's Telephone Number : _____
2.5	No. of Years at Present School : _____
2.6	Substantive Grade : _____
2.7	Past Experience
	Years of Experience as a
2.7.1	Classroom Teacher
2.7.2	Senior Teacher
2.7.3	Level Co-ordinator
2.7.4	HOD

	Primary	Secondary	JC / CI	Others
2.7.1 Classroom Teacher				
2.7.2 Senior Teacher				
2.7.3 Level Co-ordinator				
2.7.4 HOD				

- 2.8 Have you been on paid / no pay leave for staff development purposes? YES / NO
- 2.9 If YES
- 2.9.1 Give details of the institution which conducted the staff development
- 2.9.1.1 Name of Institution _____
- 2.9.1.2 Country _____
- 2.9.1.3 The area of study _____
- 2.9.1.4 The nature of the staff development programme FULL-TIME / PART-TIME
- 2.9.1.5 Where were you deployed on your return from your study leave.(School / Ministry HQ / Department etc) _____
- 2.9.1.6 How did the staff development programme influence your attitude toward teaching?

3 Membership of Professional Qualification

- 3.1 Are you a member of a professional organisation? YES / NO
- 3.2 Have you been asked to conduct a training course / workshop for teachers in your school? YES / NO
- 3.3 Do you feel competent to conduct a training course / workshop for teachers in your school? YES / NO
- 3.4 What training areas are you most competent or qualified in? _____

4 Into the Future

- 4.1 Are you likely to remain in the teaching service? YES / NO / MAYBE
- 4.2 What factors would influence your decision? Please elaborate
- 4.2.1 Pay YES / NO / MAYBE / UNDECIDED

- 4.2.2 Service Conditions YES / NO / MAYBE / UNDECIDED

- 4.2.3 Training YES / NO / MAYBE / UNDECIDED

- 4.2.4 Prospect YES / NO / MAYBE / UNDECIDED

- 4.2.5 Others (Please specify)

Thank you for your co-operation

Appendix D The interview schedule (preliminary study)

Dear _____

An Interview

Thank you for participating in the earlier exercise to identify informal teacher leaders in your school. The response from the staff has been good and they have identified you as one of the informal teacher leaders. Having discussed the process with my supervisor I am now able to continue with the second part of my studies, which is to conduct an interview and solicit your views on basic issues. The structured interview will be based on the questionnaire attached to this letter. I must also thank you for agreeing to the interview kindly arranged by your principal.

In order to reduce the interview time to the minimum, I have included a personal particulars form. The background information supplied by this form would help me understand the data collected at the earlier identification survey and the issues raised at this interview in its proper perspective. Please return the personal particulars form to me as soon as possible for processing purpose.

The subject being researched – informal teacher leadership – can only be done at the school level. It is gaining importance in educational circles in the United States, Australia and in many parts of the western world. The general feeling has been that educational reforms must involve those closest to it – the teachers and in this respect, teacher leaders have a crucial role to play. With the many educational changes taking place in Singapore schools, it is important to know more about our teacher leaders. Your participation in this study will enable me to identify the characteristics and roles of teacher leaders in our schools and contribute to this body of knowledge.

In conclusion I must add that all the three sources of data will be closely safeguarded and used only by me for the Doctor in Education programme under the supervisor of Prof Les Bell of the University of Leicester, UK. I will be most happy to share the findings with you at the end of the exercise. I can be contacted at 8797102 (office) or 2410202 (home)

Thank you once again.

Yours truly

Francis Wu
Ed D Candidate
University of Leicester

Interviewletter

Appendix D The interview schedule (preliminary study) (continued)

Objective

This interview is to gather views in support or to refute the following hypothesis:

- Teacher leaders can be found in schools.
- Teacher leaders have the potential to sustain school improvement.
- Teacher leaders have not been consciously cultivated or developed in schools.

This interview will thus probe for views in three areas:

- The reaction of teacher leader on being identified as such by their colleagues.
- The work undertaken by the teacher leader, and
- Ways to encourage and develop teacher leaders in the school.

This interview should not exceed one hour.

The Interview Questions

1. You have been identified as a teacher leader. What are your reactions to this?
2. As a teacher leader, what would you consider to be your area of strength i.e. what you are best at doing in the class and outside the class?
3. What leadership roles are you involved in, formally and/or informally, within and outside your school?
4. What other roles are you involved in?
5. Should teacher leaders be involved in community work?
Additional prompt question: How can this be achieved without affecting their role in the school?
6. What are some of your achievements in this school, either relating to the curriculum or in non-curriculum areas?
7. What conditions would favour the development of teacher leadership in your school.
Additional prompt question: Elaborate on the type of support you want from the administration, your cluster group, the Ministry of Education, your peers, the community, and the parents.
8. Should teacher leaders be given special consideration in terms of time to perform this leadership role?
9. How should teacher leaders be assessed in their performance for promotion, for performance bonus etc.?
10. Should your school attempt to identify and systematically develop teacher leaders?
Additional prompt question: What are the pros and cons of such an approach?

Appendix E The frequently asked questions (FAQ) handout

1. Can I identify a HOD, Subject Head, or Level Head?

As HODs, Subject heads and Level heads hold formal appointment they should not be identified. You may identify teachers who had been HODs in the past but who are no longer performing that function.

This identification is to seek the informal teacher leaders.

2. How do I know that teacher is a teacher leader?

You may use the characteristics given and the definition in the covering letter as guidelines. Sometimes leaders are not easily quantifiable. As you have worked with the teachers, you can use your guts feeling and identify as many of the characteristics as possible for each teacher leader identified.

3. How do I identify a teacher leader?

Try to look at the picture holistically. Once you have identified the informal teacher leaders, select as many of the characteristics you would associate with that person. Try to identify as many characteristics as possible. You may add in other characteristics that are not on the list.

4. Must I identify 4 teacher leaders?

Try to identify as many as possible but not more than 4. This will give a broad base for the study. If every one identifies only one teacher leader, the study will have limited value.

5. Must I write my name?

Putting a name gives the study credibility. You are assured of the strictest confidentiality on the part of the researcher. When you return the survey form, seal it in the envelope provided and no one will be able to read your identification process.

6. Can I discuss the identification n with my colleagues?

You are strongly advised not to discuss with any colleague. This survey is based on your perception and discussion might influence your selection and turn it into a popularity effort. The data collected is for this study alone and will not be shared outside the school.

Thank you.

Appendix F The interview schedule (final study)

Objective

This interview is to gather views in support or to refute the following hypothesis:

- Teacher leaders can be found in schools.
- Teacher leaders have the potential to sustain school improvement.
- Teacher leaders have been consciously cultivated or developed in schools.

Process

This interview will probe for views in three areas:

- The reaction of teacher leaders on being identified as such by their colleagues.
- The work undertaken by the teacher leader, and
- Ways to encourage and develop teacher leaders in the school.

This interview should not exceed one hour.

The Interview Questions

1. You have been identified as a teacher leader. What are your reactions to this?
2. As a teacher leader what would you consider to be your area of strength i.e. what you are best at doing in the class and outside the class?
3. What leadership roles are you involved in?
 - a. formally within the school
 - b. formally outside the school,
 - c. Informally within the school, and,
 - d. Informally outside the school.

Additional Prompt Question: Are there other roles you are involved in?

4. Should teacher leaders be involved in community work?

Additional prompt question: How can teacher leaders balance their involvement in the community with their work at school?

Additional prompt question: Are you involved in community work?
5. What are some of your achievements in this school, with regard to
 - a. the curriculum, and
 - b. non-curriculum areas?
6. What conditions would favour the development of teacher leaders in your school?

Additional prompt question: Elaborate on the type of support you feel the administration, your cluster group, the Ministry of Education, your peers, the community, and the parents could render in this process.
7. Should teacher leaders be given special consideration in terms of time to perform this leadership role?
8. Do you see the leadership role being performed at the expense of the classroom role?
9. How can this conflict of interest be resolved?
10. Should your school administration attempt to identify and systematically develop teacher leaders?

Additional prompt question: What are the pros and cons of such an approach?

11. In your view, what characteristics can you discern in teacher leaders with regard to the following areas:
- 11.1 Personality
 - 11.2 Collegiality
 - 11.3 Professionalism in and out of the classroom
 - 11.4 Expertise and/or knowledge in educational matters
 - 11.5 Leadership
 - 11.6 Support base, (teachers, administration, community), and
 - 11.7 Motivation.

Thank you for your support and cooperation

Interview Schedule® Revised09062001

Appendix G The personal particulars form (final study)

Date: _____

1 Personal Particulars	
1.1	Name (Mr/Mrs/Mdm/Miss) _____
1.2	Date of Birth (dd/mm/yy) _____
1.3	Age _____
1.4	Sex (Male / Female)
1.5	Place of Birth _____
1.6	Country of Birth _____
1.7	Residential Address _____
1.8	Postal Code _____
2 Qualifications	
2.1	Academic
2.1.1	GCE "O" Level Certificate
2.1.2	GCE "A" Level Certificate
2.1.3	Polytechnic diploma
2.1.4	University degree
2.1.5	Dip Ed / PGDE / DDM/ DEA*
2.1.6	Masters / Doctorate qualification
2.1.7	Non-teaching professional qualification**
	*Delete accordingly **Please specify
2.2	School currently posted to _____
2.3	No. of years at present school _____
2.4	Appointments held at present school _____
2.5	Total number of years in education service _____
2.6	Present substantive grade GEO2/A1/A2* GEO1/A1/A2*
2.7	Past Experience
	Years of Experience as a
2.7.1	Classroom Teacher
2.7.2	Senior Teacher
2.7.3	Level Co-ordinator

	Own	Spouse

	Primary	Secondary	JC / CI	Others Pl specify

2.7.4	HOD			
2.7.5	MOE HQ officer			

2.8 Have you been on paid / no pay leave for staff development purpose? YES / NO*

2.9 Number of occasions ONCE/ TWICE/ THRICE*

2.10 If YES, give details of the institution/s which conducted the staff development programme/s

2.10.1 Name of Institution/s _____

2.10.2 Country _____

2.10.3 The area/s of study _____

2.10.4 The nature of the staff development programme/s FULL-TIME / PART-TIME*

2.10.5 The duration of the programme/s _____

2.10.6 The qualification/s awarded at the end of the course _____

2.10.7 Where were you deployed on your return from your study leave? (School / Ministry HQ. If MOE please specify Division and Unit.)

2.10.8 How did the staff development programme/s influence your attitude toward teaching?

3 Membership of Professional Organisations

3.1 Are you a member of a professional organisation? YES / NO*

3.1.1. If yes, please supply the name of the organisation and years in that organisation

Name _____

Year _____

3.2 Have you been asked to conduct training courses / workshops for teachers in your school? YES / NO*

3.2.1. If yes, please give the titles of the courses or describe the type of training courses conducted by you.

3.3 Do you feel competent to conduct training courses / workshops for teachers in your school? YES / NO*

3.4 What training areas are you most competent or qualified in? Give specific examples

3.5 Rate the effectiveness of your workshops.
Highly effective / effective / not effective / waste of time*

4 Into the Future

- 4.1. Are you likely to remain in the teaching service? YES / NO / MAYBE / UNDECIDED*
- 4.2. What factors would influence your decision?
- 4.2.1. Pay
- 4.2.1.1. Better promotional opportunities YES / NO / MAYBE / UNDECIDED*
- 4.2.1.2. More open appraisal system YES / NO / MAYBE / UNDECIDED*
- 4.2.1.3. Others: _____
- 4.2.2. Service Condition
- 4.2.2.1. Greater autonomy in professional matters YES / NO / MAYBE / UNDECIDED*
- 4.2.2.2. Greater authority to principal on professional matters YES / NO / MAYBE / UNDECIDED*
- 4.2.2.3. More time for classroom matters YES / NO / MAYBE / UNDECIDED*
- 4.2.2.4. Greater involvement with students YES / NO / MAYBE / UNDECIDED*
- 4.2.2.5. Less administrative tasks YES / NO / MAYBE / UNDECIDED*
- 4.2.2.6. Others: _____
- 4.2.3. Training
- 4.2.3.1. Time be allocated for training purpose YES / NO / MAYBE / UNDECIDED*
- 4.2.3.2. Training programme should include other fields YES / NO / MAYBE / UNDECIDED*
- 4.2.3.3. Opportunity to decide my own professional development YES / NO / MAYBE / UNDECIDED*
- 4.2.3.4. Others: _____
- 4.2.4. Others
- 4.2.4.1. If you resign from the service, would you return to the teaching profession at a later stage?
YES / NO / MAYBE / UNDECIDED*
- 4.2.4.2. Comments: _____

Revised 08062001

Thank you for your co-operation!

Appendix H Portrait of teacher leaders: Farrell Primary School

Kohmei*

Kohmei is married with one child and expecting the second child when interviewed in 2002. She is 29 years of age and the second youngest teacher leader in the school. She worked in the customer service department of a quasi-government firm before making a switch to teaching. She has been influenced by the many good teachers she encountered in her primary and secondary school days. The teaching profession runs in the family.

She is a graduate from the local university and has taught in Farrell Primary for 3 years. She has a music background having completed the ABRSM grade 8 in her secondary school days.

As the practice in all primary schools in Singapore, she teaches the whole range of subjects in the curriculum except for mother tongue. She is the music co-ordinator for the school, teacher in-charge of the school choir and a member of the School Newsletter Editorial Board. She is also a member of the WITs team which produced an *i* movie to explain the concepts of Total Defence to the pupils. It was one of the entries at the zonal level WITs competition.

*All activities are with reference to year 2002

Vanessa*

Vanessa is 27 years old, single and the youngest teacher leader in Farrell Primary. She has taught as a contract teacher for two years before signing on for the NIE course. She was a former student of Suling and now works with her as her colleague. She has only five years of teaching experience in a primary school. She is motivated by her passion to help others and a love for kids. She is a group leader in her church.

She is a local graduate in Social Work and Psychology and is part of the Ministry's effort to provide primary schools with graduate teachers. She is meticulous in her preparation. She came to the interview with written answers to every question.

Like Kohmei, she teaches all the subjects in the curriculum except for mother tongue. She is the Mathematics co-ordinator for the school (an internal appointment), in-charge of the Mathematics Club, member of the Pastoral Care and Career Guidance Committee (PCCG), and mentors new and beginning teachers. As a member of the WITs team on Total Defence Package, their recommendations contributed to a more effective teaching of Total Defence in Farrell Primary. Her PCCG team implemented a new syllabus on sexuality education called *Growing Years Series* for pupils from Primary Five and Six.

She exudes confidence and is clear in what she wants to achieve.

*All activities are with reference to year 2002

Suling*

Suling is married and her children are in their late teens and early twenties. She became a teacher at the behest of her former teacher and is now near retirement age (57 years of age). She has served 38 years as a teacher. She is very approachable and willing to help and share resources with her colleagues. She treats all her pupils as her grandchildren and continues to offer them advice until their adult stage. She has influenced four of her former pupils to be teachers.

She belongs to the older group of non-graduate teacher and has taught in Farrell Primary for 12 years, mainly at the Primary One level. She considers her responsibility to help the younger teachers as her legacy so that the pupils can be left in good hands.

She is trained as a teacher counsellor to meet the needs of all the pupils in the school and as an Emergency Behavioural Officer (EBO) to her colleagues. She is a mentor and a co-operating teacher to new and beginning teachers. This mentoring function reserved for beginning and contract teachers is built into her timetable. She volunteered to act as the Mathematics level representative for Primary One and is involved in the Enablers Programme for lower primary pupils.

At the end of the interview she quoted Henry Ford. "Coming together is a beginning, keeping together is a progress and working together is a success". This sums up her philosophy to teaching.

*All activities are with reference to year 2002

Puyi*

Puyi at 59 years is the oldest teacher leader and will be applying for optional retirement in the middle of the year after serving for 40 years in the education service. He had been a HOD for 8 years in a previous primary school and a teacher at Farrell Primary for 6 years. He has attended professional development courses like the FPCE for the training of HODs and a Science course conducted by RECSAM. He recalled that the two courses boosted his confidence in the role he played in the previous school. He feels strongly that teachers should make use of all training opportunities available to them to upgrade themselves.

He is a non-graduate form teacher of a Primary five class. His concern for the pupils' well-being, individually and collectively has enabled many of them to make good eventually. He has shared his expertise with his colleagues in both methodology and co-curricular activities. Although he has good interpersonal relations with the teachers, he confided that the teachers do not share ideas unless requested and that he did not have the confidence to conduct courses for them.

He is the teacher in-charge of the Badminton Club and assistant to the Prefect Master. As Badminton has declined in popularity he has difficulty in recruiting good players but he has improved the selection process of school prefects. He is reticent and feels that there are many teachers in the school who could be better leaders.

*All activities are with reference to year 2002

Appendix I Portrait of teacher leaders: Princeson Secondary School

Hoying*

Hoying is single and at 27 years old is one of the youngest teacher leaders in this study. She joined the service as a polytechnic graduate teacher in a primary school and eventually upgraded to that of a graduate teacher. She has completed her M.Ed and intends to pursue a Doctorate qualification. At the time of the interview, she was just posted to Princeson Secondary. Altogether she has 3 years of teaching experience

She is strongly competitive and holds the conviction that teachers must be leaders as they develop the leaders of the future. As she is new to the school she has not been given any leadership position but has been paired off with a more senior teacher to learn the ropes. This is the school's mentoring system to prepare new teachers for future appointments.

She has been helping her students to excel in their studies especially in her subject Physics and in advising them on their career choices. She sets the example by leading a small group of students for a community project in China (Henan) though at her own cost. However she has not reported any assistance to the other teachers as she has yet to establish herself. She feels that the inclusion of parents in school activities as envisaged by COMPASS is to the advantage of the school.

*All activities are with reference to year 2001

Meichoo*

Meichoo like Hoying, is single and started as a non-graduate teacher before applying for study leave to pursue a full-time degree course at the University of Calgary. She is 41 years old and fits the literature definition of a teacher leader. She served at Princeson for about 15 years and is a member of the Singapore Teachers Union (STU) for the same number of years.

She speaks her mind openly and is insistent on remaining an informal teacher leader. She is fiercely committed to the well-being of her students and feels frustrated when time and administrative work prevent her from doing her best for the students. She has not reported giving assistance to other teachers but has shared views on pedagogy and related issues informally. She even consulted her colleagues for their views and collated them for the interview session with additional input of her own.

As she is one of the more senior staff, she has been made subject and form teacher, a member of the disciplinary committee and teacher in-charge of Art and Craft Club. Her two WITs projects gained the silver award at the national competition and have resulted in overall improvement in the discipline of the school. She mentors new and beginning teachers in spite of her reservations about others observing her in class. She maintains a high standard in her work and is put off by slipshod work whether from the students or staff.

*All activities are with reference to year 2001

Sonny*

Sonny is married and in his mid thirties. He studied in the U.S., completed his Masters and returned to complete his PGDE course at NIE. Although he is keen on a doctoral programme he finds it difficult to balance this with the demands of his young family. He maintains that there is a constant need for all teachers to upgrade with changing times. He has been with Princeson Secondary for 8 years.

Quiet and unassuming, he has turned down the offer of a HOD appointment and prefers to remain an informal teacher leader with the autonomy to develop his own programme with his colleagues and trusted by the school administration. His character development programme for students is implemented by the school.

While he is concerned about students' grades and achievements, he is more interested in the transmission of values and expectations and their character development in their adolescent years. His motivation comes from his value system originating in his religion. He models his service as a deacon and a youth leader in his Church and resembles Vanessa of Farrell Primary in his motivation.

He has taken on many duties among which are the chair of the staff welfare committee, National Education co-ordinator, Project head of history and teacher in-charge of cricket. He is also a member of the School Excellence Model Committee and the Staff Suggestion Committee. In spite of all these demands he felt that these are part of his official duties and that leadership in the class and in the school are part of the same development. His views set him apart from the other teacher leaders in his school.

*All activities are with reference to year 2001

Audrey*

On graduating from the university, Audrey worked for a year before joining the education service. She has 13 years of experience; the last 9 years were spent at Princeson and 5 years as a HOD. She relinquished her appointment when she married and started her family. Her young family and her health would determine whether she would upgrade or remain an informal teacher leader. She is now in her late thirties.

Since her HOD days, she has been maintaining a high profile in the school and many students and teachers continue to associate her with the school leadership. She is the choir mistress and the pastoral care co-ordinator in the school. She uses this appointment to counsel all students wanting to leave school after their N Level course. To improve her students' grades she organised remedial classes and even one-to-one tutoring. The students regard her with affection and maintain contact with her over the years.

The teachers trust her and often seek her advice. One beginning teacher reported that she would have difficulty emulating Audrey's charisma with her class. She takes a wide interest in the affairs of the teachers, often volunteering her services to the Staff Welfare Committee as an expression of her care and concern. Her pragmatic nature is evident throughout the interview.

*All activities are with reference to year 2001

**DIMENSIONS OF TEACHER LEADERSHIP
AS PERCEIVED BY RESPONDENTS
THE INTERVIEW SCHEDULE 2005**

Dimension	Explanation
Leadership over student learning <i>Promotion of a better world for students and their need to experience success and recognition</i>	Teacher leaders are convinced that the disadvantaged students can be responsible for their own learning and success. Thus they assume leadership of critical classes e.g. graduating or difficult classes to enable them to taste success.

Q1. When planning for special programmes to meet the needs of such students in your class or school, have you met with difficulties, lack of co-operation or support from either your colleagues or from the school administration or from both?

Q2. Would you champion the cause of such students?

Dimensions	Explanation
Leadership over teachers in pedagogy <i>Peer evaluation of teachers</i>	There are teacher leaders in the States who consider this as the most promising function as it allows them to share their ideas and influence their colleagues. At the same time it forces them to continuously improve their own knowledge and skill in the class and school practice at large.

Q3. Is there some form of peer evaluation in your school? e.g. In the EPMS are you given the opportunity to coach and then evaluate your colleagues at the end of the year?

Dimensions	Explanation
Leadership over teachers in pedagogy <i>Involvement in action research</i>	Ash et al. (2000) and Childs-Bowen et al. (2000) have stressed the importance of action research in the classroom and the school. This would confirm the effectiveness or otherwise of their strategies and direct them to improvement.

Q4. To what extent are you involved in classroom action research or any other educational research?

Dimensions	Explanation
<p>Leadership in school development</p> <p><i>Teacher leaders as parallel leaders or alternate leaders in the school</i></p>	<p>There are 2 possible roles for teacher leaders: as intermediaries where they mediate between the teachers and the school hierarchy or as parallel leaders, where they work with the school hierarchy to enable knowledge-generating capacity of the school (Andrews et al., 2004).</p>

Q5. Are teacher leaders in your school perceived as parallel leaders or as intermediaries?

Q6. In what capacity would you like to function?

Q7. How do you assess the role of teacher leaders in your school?

Q8. How can the concept of teacher leader be expanded to include more teachers?

Dimensions	Explanation
<p>Overall</p>	<p>Refer to <i>Dimensions of Teacher Leadership as perceived by respondents (Accompanying table for interview 2005)</i>. Put a tick ✓ in the last column against each item that you are in agreement with.</p>

Q9. Which of the dimensions of teacher leadership have you attempted or have been able to achieve?

Q10. What other dimensions should teacher leaders be involved in?

Thank you for your assistance

Interview 2005 (for respondents)

DIMENSIONS OF TEACHER LEADERSHIP AS PERCEIVED BY RESPONDENTS.
(Accompanying table for interview 2005)

No.	Dimensions	Perceived by respondents	Endorsement
1. Leadership over student learning			
1.1	Motivation of students to achieve high performance	1. Their altruistic nature causes them to spend inordinate amount of time with students to motivate, coach and monitor their performance in and out of school.	
1.2	Nurturing a culture of success	2. Reaffirm their students' inherent ability to achieve in one field e.g. academic or another e.g. CCA and work towards that. 3. Keen to capitalise on the students' natural talents to believe in their own self worth.	
1.3	Role model to teachers and students	4. Willing to accept assignments that others would not relish. They thus become role models though sometimes reluctantly as they are not sure of their own role and acceptance by the community.	
2. Leadership over teachers in pedagogy			
2.1	Motivation of teachers to achieve high standards of professionalism	5. As they perceive teaching as a profession, they are more willing to invest time in helping their students and colleagues achieve. They thus act as co-operating teachers and mentors. These activities induct the teachers into the culture of the school and help set standards for the school. 6. They are not keen on claiming credit for the performance of the students and their colleagues.	
2.1	Acquiring and sharing of new approaches to teaching to bring about improvement	7. They are keen to share new approaches with their colleagues especially on completion of a new training programme. Thus the benefits are made available school-wide.	
2.2	Acceptance by teachers in shared decision making through distributed leadership	8. Their preference is to adopt a form of distributed leadership as this enables them to distribute and allows their colleagues to be responsible for an area in any project. This approach recognised the worth of every individual in the organisation and softens the bureaucratic hierarchy normally found in many schools.	

No.	Dimensions	Perceived by respondents	Endorsement
3. Leadership in school development			
3.1	Rallying teachers around new development	9. Keen to support projects that would benefit the students and try to win the support of their colleagues but not to the point of imposing it on their colleagues as they feel that teachers know what is best for them.	
3.2	Maintenance of network and collegiality to promote school vision and objectives	10. Look for same minded colleagues to support them. This support group is important as it enables the teacher leaders to effectively complete their tasks. It also has a psychological value important in times of crisis. 11. Through this support group, the teacher leaders could reach out to the entire school population. They thus help to shape and maintain the school's mission and vision and translate these in their classroom teaching.	
3.3	Willing to spend time listening, discussing and analysing situation to produce results/ideas or in action research	12. Critical to practise self-reflection and through it improve their own teaching skills before sharing with others. 13. Their search for the best solution often entails sharing and even personal coaching when needed.	
3.4	Collaboration rather than confrontational approach in dealing with school administrators	14. Keeping the school administration informed often result in their support especially when such projects affect the whole school.	
3.5	Acceptance as part of the decision making process by the school administration	15. They are often consulted and recruited to participate in important school reports or programmes by the school administration. For new programmes normally the Ministry would provide some form of initial training for the teachers.	
4. Leadership in modeling citizenship			
4.1	Search for self development to benefit school	16. Involved in self-development for the ultimate benefit of the students. Self-development should be seen in a broader context as benefiting the school.	
4.2	Personal beliefs like respecting individual differences	17. Though unwilling to impose their beliefs on others they are not averse to the use of <i>borrowed</i> authority. They prefer to deal with colleagues and students on a mutually respecting basis.	

No.	Dimensions	Perceived by respondents	Endorsement
4.3	Promotion of a better world for students and their need to experience success and recognition	18. Convinced that the disadvantaged students can be responsible for their own learning and success. 19. Assume leadership of critical classes e.g. graduating or difficult classes to enable them to taste success.	
4.4	Effective interpersonal skills with students and colleagues	20. Willing to use their interpersonal skills to win and motivate their students. 21. As for their colleagues, they use interpersonal skills to build collegiality and so influence and share effective methodology with them. 22. Teachers who have previous work experience elsewhere seem to have an advantage in that these skills are also relevant in the teaching service.	
4.5	Ability to plan, organise and effectively monitor and complete tasks	23. Every successful event enhances their standing with the teachers and the administration and increases their own confidence in taking on more challenging tasks.	
4.6	Perseverance (energy)	24. Need for perseverance to complete projects and start new ones. Though at times disheartened, they persist in their effort.	
4.7	Family and personal commitments	25. Family and personal commitments limit their ability to be teacher leaders. Where the school is sympathetic to these commitments, they are likely to return to their teacher leadership role once these commitments have been resolved. This seems to be a major consideration in their remaining as teacher leaders.	

Interview 2005

**DIMENSIONS OF TEACHER LEADERSHIP
AS PERCEIVED BY RESPONDENTS
THE INTERVIEW SCHEDULE 2005
(FOR INTERVIEWER)**

Dimension	Explanation
Leadership over student learning <i>Promotion of a better world for students and their need to experience success and recognition</i>	Teacher leaders are convinced that the disadvantaged students can be responsible for their own learning and success. Thus they assume leadership of critical classes e.g. graduating or difficult classes to enable them to taste success.

Q1. When planning for special programmes to meet the needs of such students in your class or school, have you met with difficulties, lack of co-operation or support from either your colleagues or from the school administration or from both?

Additional Prompt Questions

1. Support can be in many forms including moral, manpower, good will, resources or even vocal
2. What type of support do you get from your colleagues?
3. What type of support do you get from the school hierarchy?
4. Are such programmes meant to complement the curriculum or are these entirely new in direction?

Q2. Would you champion the cause of such students?

1. What is your own philosophy of education?
2. How far would you go in your dealings with your students?
3. Would this be counter to the accepted practice of a multi-cultural, multi-religious and multi-racial Singapore?

Dimensions	Explanation
Leadership over teachers in pedagogy <i>Peer evaluation of teachers</i>	There are teacher leaders in the States who consider this as the most promising function as it allows them to share their ideas and influence their colleagues. At the same time it forces them to continuously improve their own knowledge and skill in the class and school practice at large.

Q3. Is there some form of peer evaluation in your school? e.g. In the EPMS are you given the opportunity to coach and then evaluate your colleagues at the end of the year?

Additional prompt Questions

1. Did you have the opportunity to coach and then evaluate your colleagues in the last EPMS?
2. In what capacity are you functioning in the EPMS?
3. Are you comfortable with peer evaluation of teachers?
4. Is there some form of peer evaluation in your school?

Dimensions	Explanation
Leadership over teachers in pedagogy <i>Involvement in action research</i>	Ash et al. (2000) and Childs-Bowen et al. (2000) have stressed the importance of action research in the classroom and the school. This would confirm the effectiveness or otherwise of their strategies and direct them to improvement.

Q4. To what extent are you involved in classroom action research or any other educational research?

Additional prompt Questions

1. If YES. What research are you involved in?
2. Have you been able to share these research findings with your colleagues?
3. If NO. How do you know that your classroom pedagogy is yielding the results that you want?
4. How do you improve your pedagogy skills over the years?
5. Can you use the students' performance in national and semestral examinations to gauge your own performance?

Dimensions	Explanation
Leadership in school development <i>Teacher leaders as parallel leaders or alternate leaders in the school</i>	There are 2 possible roles for teacher leaders: as intermediaries where they mediate between the teachers and the school hierarchy or as parallel leaders, where they work with the school hierarchy to enable knowledge-generating capacity of the school (Andrews et al., 2004).

Q5. Are teacher leaders in your school perceived as parallel leaders or as intermediaries?

Additional prompt Questions

1. When teachers have differences with the school's hierarchy or with one another, do they turn to the teacher leaders?
2. Apart from being an intermediary, do you perceive your role to be that of a parallel leader?
3. When teachers have difficulties with their pedagogy, do they turn to the teacher leaders?
4. Were you able to initiate independently new programmes for your school or teachers?

Q6. In what capacity would you like to function?

Additional prompt Questions

1. Which role are you most comfortable with?
2. Any specific reasons for wanting that role?

Q7. How do you assess the role of teacher leaders in your school?

Additional prompt Questions

1. Are the teacher leaders in your school part of the decision-making body i.e. on a regular basis or on call?
2. Do you see a positive contributory role for teacher leaders in your school in school governance?

Q8. How can the concept of teacher leader be expanded to include more teachers?

Additional prompt Questions

1. What can you do to promote this?
2. What can the school do to promote this?
3. How can the teachers help themselves to be teacher leaders?

Dimensions	Explanation
Overall	Refer to <i>Dimensions of Teacher Leadership as perceived by respondent (Accompanying table for interview 2005)</i> . Put a tick ✓ in the last column against each item that you are in agreement with.

Q9. Which of the dimensions of teacher leadership have you attempted or have been able to achieve?

Additional prompt Questions

1. Which dimensions, in your opinion, should not be undertaken by teacher leaders?
2. Which dimensions would you consider as core areas of teacher leaders?

Q10. What other dimensions should teacher leaders be involved in?

Additional prompt Questions

1. Consider this question against the background of Singapore's social and educational system
2. Consider this question in the light of the school leadership.
3. How would you characterise the school leadership?

Additional question

Are you a member of the executive committee in your school?

Thank you for your assistance

Interview 2005 (for interviewer)