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**DISTRIBUTED LEADERSHIP AND
TEACHERS' SELF-EFFICACY:**

The Case Studies of Three Chinese Schools in Shanghai

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Tiivistelmä – Abstract <p>This study looks into the distributed leadership and its influence on teachers' self-efficacy in three Chinese schools in Shanghai. Against the background of the eighth national curriculum reform launched in 2002, the Chinese schools are seeking for the new way to enhance the school-based curriculum. On top of that, the trend of decentralization also encourages the school principals to involve the teachers in the school leadership practice.</p> <p>The relationship between distributed leadership and teachers' self-efficacy in this study is examined from the angle of principals' empowerment strategies. A mixed methods approach is applied to collect both qualitative and quantitative data from the three schools. The research data is collected through one questionnaire survey, 13 individual interviews, and 4 days' participant observation. The qualitative data is synthesized into three case studies, while the quantitative statistics were tested and analyzed by SPSS software.</p> <p>The findings of this study indicate that distributed leadership exists in the three research schools in various forms. School principals empower the teachers at both individual and group levels. The power is delegated through both formal and informal channels. According to the situation, school leadership can be distributed either in a long-term form or in a short-term ad hoc form. The quantitative survey data supports the qualitative findings. On average, the respondents from all the three research schools show a high level of self-efficacy in decision making, interpersonal relationships & cooperation, teaching & research, and teachers' influence on school culture. Teachers attribute their high level self-efficacy to principal's empowerment, peer recognition, a democratic culture, and a strong moral basis of the school.</p> <p>It is worth noting that the distributed leadership practice presented in this study carries the Chinese characteristics. There is more horizontal cooperation among teacher leaders than vertical cooperation between the school principal and the teacher leaders. The young teachers are more active in taking the leadership roles. Both teachers' initiatives and principal's empowerment play a key role in leadership distribution. Distributed leadership should be rooted in daily school practice and school culture.</p> <p>In the last part of the thesis, the author summarized the limitations of this research and made her recommendations for future studies.</p>	
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Aika – Month and Year Marraskuu 2011	Sivumäärä – Number of pages 108, 9 liitettä
Tiivistelmä – Abstract <p>Tämä työ tutkii jaettua johtamista ja sen vaikutusta opettajien itsetuntoon ja luottamukseen omaa ammattitaitoaan kohtaan kolmessa kiinalaisessa koulussa Shanghaissa. Vuonna 2002 tehdyn kahdeksannen valtakunnallisen opetussuunnitelmauudistuksen pohjalta kiinalaiset koulut etsivät uutta tapaa edistää opetussuunnitelmiaan. Lisäksi myös hallinnon hajauttamistrendi rohkaisee koulujen rehtoreita ottamaan opettajat mukaan koulujen johtamiseen.</p> <p>Tässä työssä opettajien luottamusta omaan ammattitaitoonsa ja jaetun johtamisen suhdetta tutkitaan rehtorien vastuunjakostrategioiden näkökulmasta. Kvalitatiivinen ja kvantitatiivinen tutkimusdata on kerätty mixed methods – menetelmällä käyttäen yhtä kyselyä ja 13 yksilöhaastattelua sekä tarkkailemalla 4:n päivän ajan tutkimukseen osallistuneiden henkilöiden työtä. Kvalitatiivinen data on syntetisoitu kolmeksi tapaustutkimukseksi, kun taas kvantitatiivinen tilastollinen data on testattu ja analysoitu käyttäen SPSS – ohjelmaa.</p> <p>Työn tulokset osoittavat, että jaettu johtajuus ilmenee kolmessa tutkimuskoulussa eri muodoissa. Koulun rehtorien vastuunjako opettajille tapahtuu sekä henkilökohtaisella että ryhmätasolla. Valta on jaettu käyttäen sekä muodollisia sekä epämuodollisia kanavia. Tilanteesta riippuen koulun johtajuus voidaan määrittää joko pitkäkestoisessa muodossa tai lyhytkestoisessa ad-hoc – muodossa. Kvantitatiivisen kyselyn data tukee kvalitatiivisia löydöksiä. Keskimäärin kaikkien kolmen tutkimuskoulun vastaajilla näyttää olevan korkea itsetunto ja luottamus omaan ammattitaitoonsa päätöksenteossa, ihmissuhteisiin ja yhteistyöhön, opetus- ja tutkijantaitoihin sekä siihen, että opettajat vaikuttavat koulun kulttuuriin. Opettajat näkevät korkean itsetunnon ja luottamuksen omaan ammattitaitoonsa johtuvan rehtorien jakamasta vastuusta, alaisten palkitsemisesta, demokraattisesta kulttuurista a koulun korkeasta moraalista.</p> <p>Kannattaa huomata, että tässä työssä esitetyssä jaetun johtajuuden käytännössä on tyypilliset kiinalaiset piirteet. Opettajajohtajien keskuudessa oli enemmän horisontaalista yhteistyötä kuin vertikaalista yhteistyötä koulun rehtorin ja opettajajohtajien välillä. Nuoret opettajat ovat aktiivisempia ottamaan johtamisrooleja. Sekä opettajien aloitteet että rehtorien voimauttamistyö ovat tärkeitä tekijöitä jaetussa johtajuudessa. Jaettu johtajuus tulisi juurruttaa osaksi koulun päivittäisiä käytäntöjä sekä koulun kulttuuria.</p> <p>Työn viimeisessä osassa tehdään yhteenveto tutkimuksen rajoituksista sekä suosituksista tulevalle tutkimukselle.</p>	
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1 INTRODUCTION

Against the background of knowledge-based society, a successful school is no longer an isolated kingdom ruled by a single heroic principal (Spillane, 2006). Instead, collective wisdoms and shared responsibilities are the key elements contributing to the school's sustainable development. According to the scholars, one source of the collective wisdom is teachers' professional initiatives. In other words, a successful school relies on teachers' teaching capacity as well as their contribution to the school leadership. (Murphy, 2005; Copland, 2003; Donaldson, 2001; Spillane, Diamond & Jita, 2000) Jackson (2004) perceives distributed leadership as a valuable instrument of school improvement. The strengths of distributed leadership are based on its flexibility and adaptability.

This study focuses on the distributed leadership in the Chinese context. After studying educational administration and leadership in China and Finland for more than eight years, I found that the concept of distributed leadership was rather alien to most of the school practitioners in China. Although distributed leadership has been studied in many western societal systems such as the United States and the United Kingdom, there are many blind spots in comparative and international studies (Bush & Bell, 2002). Therefore, my ambition is to explore the practice of distributed leadership in the Chinese context by presenting three real-life case studies.

1.1 Research focuses and research questions

Paradox: Distributed leadership is unlikely to happen if schools stay as they are. Schools are unlikely to transform themselves without distribution of leadership roles. (Jackson, 2004, p. 1)

There are two research focuses in this study: One is the principals' empowerment strategies; the other is the Chinese school context. I chose these two research focuses based on the previous research findings: First, scholars argue that the Chinese principals are not well prepared to empower their teachers in an effective way (Xiao, 2003; Suleiman & Moore, 1997). Second, the excessive school bureaucracy and hierarchy prevent teachers from taking on additional responsibilities. However, the Chinese schools have experienced a series of reforms on school-based curriculum and decentralization in school administration from the mid-1990s till now. (Zhong & Yang, 2006) During the same time, school principals and teachers are experiencing the transformation. New features of school leadership emerge from the practice. (Zhang, 2008) Thus, in this thesis I aim at presenting these new leadership features in three Chinese schools.

The line of enquiry of this thesis is based around the following research question:

How can distributed leadership improve teachers' self-efficacy level through effective empowerment strategies in Chinese schools?

The topic research question crystallizes this study into four sub-questions: What are the features of Chinese school leadership in the manifestation of distributed leadership? What kinds of empowerment strategies are used by school principals in practice? How do teacher leaders perceive principals' empowerment? Lastly, in what aspects can distributed leadership improve teachers' self-efficacy levels?

1.2 Research methods

In this study, the mixed methods are applied to collect the empirical data from three Chinese schools in Shanghai. Two professors from the Secondary School Principal Training Centre helped me in selecting the research objects according to my research design. Based on the earlier studies conducted by Bandura and his colleagues (Bandura, 1994, 1997; Bandura & Walters, 1959, 1963), a questionnaire was designed to assess teachers' self-efficacy levels from four perspectives: decision making, professional growth, interpersonal relationships & cooperation and school culture. Semi-structured interviews with school principals, Communist Party secretaries, and teachers were adopted to collect the stories concerning principal-teacher interactions in real school settings. I also spent a few days in two research schools, observing the staff meeting and teachers' research seminars. In order to get more background information about the schools, I collected and studied the school documents, promotion materials, and websites.

1.3 Significance of the study

This thesis attempts to make its contribution towards a better understanding of distributed leadership in the Chinese context. The concept of distributed leadership was established and developed in many western countries (Spillane, Halverson & Diamond, 2001). The previous studies point out that distributed leadership has become more and more popular among the practitioners because it provides a practical tool for the school leaders to diagnose the situations and build flexible leadership teams accordingly. (Gronn, 2008; Harris, 2005; Spillane, et al., 2001) Nevertheless, in many Chinese schools Confucianism and the political utilitarianism are deeply rooted in the school values such as respect for the seniority and social hierarchy. (Leng, 2005) On top of that,

there is a trend of power decentralization at all levels, from the central government to the local schools and from the school principal to teachers. (Shen, 2004; Xiao, 2003) These two features make the Chinese school leadership a special context and it is my strong interest to examine how distributed leadership functions in this environment.

In the three case studies I present the personnel changes, crises, dialogues, best practice, and conflicts in the school daily practice. Through these real-life stories, I analyze the promoting factors and the barriers of implementing distributed leadership in Chinese schools. At the end of the thesis, I present the limitations of my study and provide the recommendations to the future studies in a related field.

2 RESEARCH CONTEXT

This chapter is structured into three interrelated parts. The first part centres on the constitution of Chinese school leadership, the second section contextualizes the principal accountability system within the setting of the school decentralization reform. In the third part, I discuss the challenges and confusions faced by school practitioners and the existing forms of inner-school cooperation.

2.1 Four key players in Chinese school leadership system

For the last six decades, the People's Republic of China has witnessed a chain of school leadership reforms. There are two main indicators defining the nature of school leadership in different stages: the Party governance vs. the principal governance; centralism vs. democracy. After the foundation of the People's Republic of China in 1949, schools were governed by a school committee consisting of teacher representatives and student representatives. The school principal was assigned by the local government. In 1953, the central government established the principal accountability system which shifted the politics-centred governance to the learning-centred governance. It also regulated that the Communist Party played a supportive role in schools. However, the prototype of the principal accountability system was overthrown during the Cultural Revolution from 1966 to 1976. All the major decisions

within school needed to be approved by the Communist Party representatives. (Xiao, 2003)

One milestone is the re-establishment of the principal accountability system in 1985. This system implies that the school principal takes the full responsibilities for the school affairs, the Party secretaries supervise the power use, and the staff committee participates in the democratic management. (DeLany & Paine, 1991) Figure 1 shows the internal relations among the four key players in the Chinese school leadership system, including the principal, Communist Party representatives, the local educational bureau, and the staff committee. (Zhao, Ni, Qiu, Yang & Zhang, 2008)

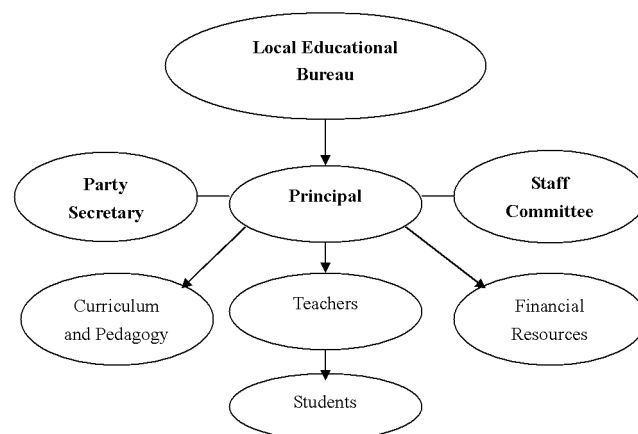


FIGURE 1 Figure 1 School leadership system in China
Source: Zhao, Ni, Qiu, Yang & Zhang (2008).

The key components in Figure 1 play the following roles:

Principal: Under the principal accountability system in Chinese schools, the school principal takes full responsibilities over the instruction, personnel, and finance. The staff committee along with the Communist Party committee supervises the principal's power. (Ministry of Education of People's Republic of China, 1995) Within the school administrative structure, usually there are two to three vice principals to assist the principal in managing the classroom teaching, student disciplines, moral education, and logistics. (Zhang, 2008; Su, Adams & Mininberg, 2000)

Communist Party Secretary: The Communist Party secretary supervises the implementation of the educational policies at the school level. In many cases, the Party secretary is also in charge of the moral education. The Communist Party has a strong influence on the personnel management. Especially in selecting the teacher leaders, teachers who are the Communist Party members usually have bigger chances to get a promotion. (Zhao et al., 2008)

Local Educational Bureau: As the basic administrative unit, the Local Educational Bureau allocates the funds to schools as well as appoints the public school principals. (Ministry of Education of People's Republic of China, 1995)

Staff Committee: The Staff Committee, along with the Communist Party Secretary, supervises principal's power in the school. The committee also provides teachers with advice and feedback to their career development. The Staff Committee protects teachers' legitimate rights and interests. (Shen, 2004; Ministry of Education of People's Republic of China, 1993)

2.2 Principal's authorities in Chinese schools

Communist Party of the China Central Committee along with the State Council (1993) regulated that the principal accountability system shall be widely applied in the secondary and lower education. To be more specific, a school principal now has the full power to hire and dismiss the school administrators, to hire and fire teachers and staff, to make decisions on the school administrative affairs, to supervise the teaching activities, to reward or punish the teachers and staff, and finally, to make decisions on the use of the school funds (Xiao, 2000; Lin, 1993). In the following section, I introduce the three key authorities owned by the Chinese principals.

Principal's Authority on Curriculum. Different from most western educational systems, the current principal accountability system in China is relatively hierarchical and centralized. The Ministry of Education designs a unified curriculum, syllabus, and

standardized examinations. The province-level governments publish the textbooks and teaching materials. (Oplatka, 2004; Zhao et. al., 2008)

In 2002, the Ministry of Education initiated the eighth curriculum reform which put the “decentralization, diversification, and autonomy” on the agenda. School principals are held accountable to the local educational bureau to implement the new national curriculum. At the same time, schools are encouraged to develop school-based curricula as the supplementation. Therefore, the transformation in policy gives principals more autonomy and authority over the curriculum development. (Zhong & Yang, 2006; Huang, 2002)

Principal's Authority on Personnel. Principals have full authority over teachers and staff in respect to recruitment, evaluation, teaching hours, promotion, and salary (Zhao et. al., 2008). Due to the increasing yet limited autonomy on the curriculum, school principals insert their influence on pedagogy through organizing classroom teaching (Oplatka, 2004). Good principals know how to match the right teachers to the right students (Ryan, Xiao & Merry, 1998).

In Chinese schools, the most common ways to accumulate the intellectual capital are as follows: First, principals attract the talented teachers by offering higher salaries and better work conditions. Second, principals provide free training programs in exchange of teachers' long-term work contracts with the school. Third, principals give teachers the official leadership positions such as the subject leader or the vice principal. (Zhao et. al., 2008; Cheng, 1995)

Principal's Authority on Finance. In addition to the intellectual capital, Chinese school principals also have full responsibilities for building the financial capital (Zhao et. al., 2008). Especially in the compulsory education phase, the funding from the local government is insufficient. With the aim of attracting more highly qualified teachers and better students, principals have to seek for other funding sources. (DeLany & Paine, 1991) Hence, fundraising has become a critical capability for an effective principal. Basically, there are three ways to generate external financial resource. First, the school enrolls more back-door high-priced students who pay extra school-choice fees. Second,

the school seeks for sponsors from the entrepreneurs or non-governmental organizations. Third, the school makes money through business such as a grocery store, a printing house, a publishing press and a cafeteria. (Ryan, et al., 1998; Ligget, Johnston & Wang, 1997).

Above all, Chinese principals take responsibilities for curriculum implementation and personnel administration. On top of that, financial management is also a key capacity owned by the school principals.

2.3 Five leadership styles applied by Chinese principals

Zhang (2008) summarized five leadership styles which are commonly applied by Chinese principals. What is worth mentioning here is that a principal's influence on the school performance is carried out through formulating the school vision and mission, supporting the teaching and learning, as well as creating a supportive environment and culture. However, according to Zhang, a principal's leadership style does not have a direct impact on students' academic performance. Instead, teachers who are heavily involved in daily class teaching are the main impact factor.

The Patriarchal Leadership Style: The principal who displays a patriarchal style has the absolute authority in the school. In other words, one single principal makes all the decisions for the school. In some cases, the school principal also holds the concurrent position as the Communist Party secretary. As a result, a lack of supervision leads to the abuse of power, dictatorship, and segmentation in school. A patriarchal principal who has blind faith in authority puts only his henchmen in the key positions. Consequently, other teachers hold a negative attitude towards daily work under the climate of distrust and unfairness. (Zhang, 2008)

The Democratic Leadership Style: The leadership philosophy shared by the democratic leaders is that "the school's ownership belongs to everyone. The school is a big family. The prosperity of the school makes me feel proud; while the collapse of the

school makes me feel ashamed” (Zhang, 2008, p. 109). From school administrators to teachers, everyone feels belonging to the school. This type of principals is open to the changes. They optimize the internal and external resources, appreciate the constructive feedbacks from others, and value the collective wisdom. (Zhang, 2008)

The Doctrine of the Mean Leadership Style: The doctrine of the mean is the quintessence of Confucianism. Legge (1893, p.12) interpreted it as “maintain balance and harmony from directing the mind to a state of constant equilibrium and stick to it.” Self-discipline, modesty, empathy, and fairness are the key characteristics of the principals who believe in the doctrine of the mean. The school solidarity and harmony are the upmost goals pursued by these principals. Their first concern is to maintain the balance and harmony among different stakeholders. (Zhang, 2008)

The Innovative Leadership Style: The innovative principals have their own leadership philosophies. They encourage life-long learning, critical thinking, and teachers’ initiatives in the school. The characteristics displayed by these innovative principals are passionate, inspiring, creative, and eager to break the conformism. However, sometimes the innovative leaders are not conducive to the collective wisdom. They refuse to take others’ opinions into consideration and finally lose teachers’ support and trust. The innovative principals are risk takers. However, if their creative ideas are made without the solid understanding and support from the teachers, it may lead to confusion and crises. (Zhang, 2008)

The Administrative Leadership Style: The administrative style refers to the school leaders who tend to display more administrative function than leadership. They are preoccupied by hosting the visitors, processing the paper work, and networking with the stakeholders. The administrative principals over-emphasize the managerial and administrative affairs. As a result, they only pay a small amount of attention to the teaching and learning. (Zhang, 2008; Oplatka, 2004)

3 THEORETICAL FRAMEWORK AND KEY CONCEPTS

This chapter focuses on the theoretical framework, which guides the research direction and the determinants. A theoretical framework is a set of interrelated concepts or theories related to the research question (Borgatti, 1999). In this study, the theoretical framework examines the relationship between the distributed leadership and the teachers' self-efficacy through the glasses of school empowerment. The key concepts, including the *distributed leadership*, *school empowerment*, and *teachers' self-efficacy*, are defined by the author based on an extensive literature review.

3.1 Theoretical framework

Earlier studies have shown a positive correlation between school empowerment and teachers' professionalism (Boglera & Somech, 2004; Shants & Prieur, 1996; Chow, 1995). Therefore, school leaders are consciously seeking for the more effective ways to increase teachers' intrinsic motivation. In addition to that, there also exists a positive correlation between distributed leadership and teachers' self-efficacy in western schools (Spillane, 2005; Gronn, 2002; Spillane, Halverson & Diamond, 2001; Bandura & Adams, 1977).

However, in this study my research interest falls on the Chinese school context.

Figure 2 is the theoretical framework I applied in this study which connects the distributed leadership, school empowerment, and teachers' self-efficacy.

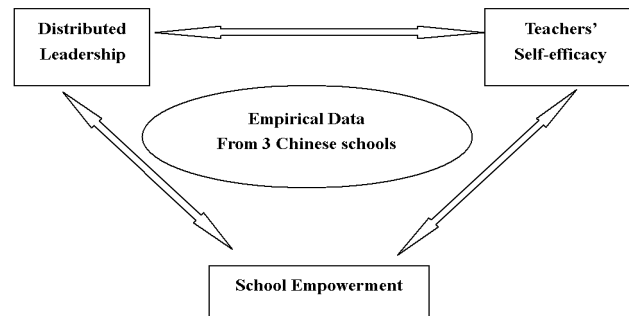


FIGURE 2 Theoretical framework

With the help of the theoretical framework, I will try to answer my research question: *How can distributed leadership improve teachers' self-efficacy level through effective empowerment strategies in Chinese schools?* In order to achieve this, I collected the empirical evidence from three Chinese schools and analyzed the quantitative and qualitative data from three perspectives which are distributed leadership, teacher empowerment, and teachers' self-efficacy.

3.2 Distributed leadership

In the traditional leadership model, power flows from top to down through a hierarchical ladder. A successful leader is often labelled as a charismatic and heroic role model. (Spillane, 2005) Transformational leadership has become a popular theme, which emphasizes an encouraging, harmonious, and ethical leadership tie within the organization (Bass, 1998; Bass & Avolio, 1994; Burns, 1978). "Power bases are linked not as counter weights but as mutual support for [its] common purpose" (Burns, 1978, p.

20). However, both the traditional leadership model and the transformational approach focus on the “leader” per se (Leithwood & Jantzi, 1990). Leaders’ inborn traits and acquired skills have been widely studied in numerous studies (Northouse, 2007).

Nevertheless, distributed leadership provides us a new lens to observe the leader-follower relationship (Spillane, 2005; Woods, 2004). Distributed leadership is built upon the participants' contributions to the participatory decision making. Research focused on distributed leadership has weathered an initial stage of conceptual exploration and now it goes into an empirical test phase. (Gronn, 2008)

3.2.1 Distributed leadership: An evolving concept

In 1954 the Australian social psychologist Gibb proposed the term “distributed leadership” for the first time. He argued that owing to the personnel fluidity and fluctuated influence, people with specialist knowledge or expertise would develop their own working patterns by dispersing the leadership. (Gibb, 1954) The rudiment of distributed leadership can also be traced back to Peter Drucker (1959), who raised the notion of the “knowledge worker”. Drucker pointed out that a company's continued existence relied upon employees’ contribution. A loyal and highly skilled workforce is a decisive competitive advantage in many successful organizations (Bolman & Deal, 2003). From the 1950s to the 1960s, the contingency model of leadership research showed that the relative importance of interpersonal relationships or task objectives depended on the situations (Fiedler, 1964). In the transformational leadership studies, Burns (1978) and Bass (1998) depicted an idealized transformational leader who won trust, admiration, and respect from the followers. The importance of vision and the meaning of work were seen as big motives. From the 1990s to the 2000s, leadership was understood as an organizational resource, a cure to all the organizational illnesses (Ogawa & Bossert, 1995; Pounder, Ogawa, & Adams, 1995). Leadership, taking the place of administration or management, has come into the centre of the organizational research. In contrast to the traditional inward management system, leadership focuses on the vision (common good, big picture), individuals (emotions, needs, motivation), as

well as on the community (teamwork, coalition). (Kotter, 1990)

Then Spillane, Halverson and Diamond's (2001) model of distributed leadership shifted the research focus one more time, from a single leader's behaviour to organization-wide activities. It is assumed that teaching and learning should be the premier focus of the school. In this sense, the "distributed perspective on leadership...stretched over social and situational contexts of the school" (Spillane, et al., 2001, p. 23). It guides the school principals in the diagnosis of their daily work, to think strategically, and to explore teachers' expertise (Gronn, 2008; Spillane, 2006). Scholars argue that distributed leadership theory is based on practising school leadership (Spillane, 2006). Studies show that leadership has already been distributed to some extent in our schools, in terms of multiple designated leaders, informal leaders, and site-based management (Archer, 2004; Spillane et al., 2001). However, scholars agree that it is still too early to affirm a causal relationship between distributed leadership with students' performance (Leithwood, Mascal, Strauss, Sacks, Memon & Yashkina, 2009; Harris & Muijs, 2004; Spillane et al., 2001). Teacher leadership, as one perspective of distributed leadership, also calls for more contemporary, fine-grained studies to examine the relationship between school empowerment and teachers' self-efficacy (Harris, 2005; York-Barr & Duke, 2004). The ultimate challenge for all the leadership theories is to improve the practice. Reviewing the literature, there is an urgent need to enrich the empirical evidence of distributed leadership in a broader context, such as Asia (York-Barr & Duke, 2004). Table 1 summarizes the concept evolution of distributed leadership.

TABLE 1 Summary of concept evolution and future development

<i>Time</i>	<i>Research Representative</i>	<i>Key Words</i>	<i>Points of View</i>
1954	C. A. Gibb	“Distributed leadership” in social psychology	Distributing leadership promotes specialists’ potential and capacity.
1959	P. F. Drucker	Knowledge worker	A knowledgeable workforce is a crucial asset for the successful organization.
1950s to 1970s	F. E. Fiedler	Contingency model of leadership	Situations decide the favourable leadership behaviours.
1970s onwards	J. M. Burns B. M. Bass	Transformational leadership	Lead through idealized influence/charisma, intellectual stimulation, inspirational motivation, and individual consideration.
1990s to 2000s	Ogawa et. al. P. J. Kotter	Shift from management to leadership	Leadership is an organizational resource. Vision, individuals, and community come into play.
2000s onwards	J. Spillane, P. Gronn	“Distributed leadership” in education field	Lead amid the shifting values, expectations, and leader-follower relationships. Anchored in accountability system.

Notes:

- Three shifts:**
 - From administration/management to leadership & management
 - From position-bounded leadership to practice-oriented leadership
 - From single heroic leader to collective wisdom
- Future Development:**
 - Distributed leadership and students’ performance
 - Distributed leadership and teachers’ self-efficacy (Theme of this study)
 - Distributed leadership in different natural settings (Theme of this study)

3.2.2 The terminology debate

Distributed leadership provides a new lens to observe leadership practice. “Empowerment”, “interaction”, “democratic environment” and “shared responsibility” are the most expressed words mentioned in various definitions (Hartley, 2007; Scribner, Sawyer, Watson & Myers, 2007; Firestone, Mangin, Martinez, & Polovsky, 2005; Harris, 2005; Spillane, Dimond,& Jita, 2000). In order to clarify the relationships among *distributed leadership, teacher leadership, and shared leadership*, I summarize the similarities and differentiations in Table 2.

TABLE 2 Concepts compared

	Distributed Leadership	Teacher Leadership	Shared Leadership	
Commonalities	<i>Personal influence vs. Position power</i>	People’s interactions overweigh positions. (Sheard, 2007)		
	<i>Leader vs. Follower</i>	Hierarchy is broken down. People are interdependent and equal. (Hartley, 2007; Murphy, 2005)		
	<i>Formal vs. Informal communication</i>	Informal communication is encouraged. Everyone’s voice should be heard and valued. (Murphy, 2005; Spillane, 2006)		
	<i>Control vs. Empowerment</i>	Empowerment along with constructive participation is greatly emphasized. (Murphy, 2005)		
Differences	<i>Power</i>	Depend on the situation (Spillane, 2006; Harris, 2005)	Teachers’ power in classroom (Fay, 1992; Murphy, 2005)	Highly decentralized
	<i>Focus</i>	Holistic view of the school (process and end result)	Classroom teaching (Pavlou, 2004; Wynne, 2001)	Interaction process
	<i>Structure</i>	Fluid and emergent structure depend on the situation (Spillane, 2006)	Structure based on teaching teams (Frost & Durrant, 2003)	Flat structure-favoured (Duignan & Bezzina, 2006)

Some researchers perceive distributed leadership as an overlapping concept with “shared leadership” and “teacher leadership”, because they all emphasize the power delegation, internal interaction, as well as teachers’ dynamics and professionalism (Hartley, 2007; Sheard, 2007; Duignan & Bezzina, 2006; Murphy, 2005). Nevertheless, other scholars like Spillane (2006) and Harris (2005) insist a clear boundary to compartmentalize distributed leadership from other relevant concepts. They argue that distributed leadership is a theory following the practice (Spillane, 2006; Harris, 2005). It goes beyond the power delegation within the school structure. More precisely, distributed leadership is a whole process concerning the internal communication,

decision-making, tasks allocation, evaluation and so on. Therefore, scholars need a holistic view to perceive how schools operate, what people do and why (Archer, 2004). Furthermore, Spillane and his colleagues (Spillane, et. al, 2001) believe that school leadership is contextually bounded and not intrinsically correct. There is no universal model to distinguish the good practice from the bad practice. Therefore, it is a big challenge for the principals to use leadership wisely and properly as they take macro and micro environments into account. To sum up, the biggest difference between distributed leadership and other relevant concepts such as teacher leadership and shared leadership is that the leadership practice is based on the situation instead of the people. (Harris, 2005; Spillane, et. al, 2001)

3.2.3 Definition and characteristics of distributed leadership

The concept of distributed leadership has evolved rapidly in the recent two decades. In this study, my own definition of distributed leadership is:

Distributed leadership is a fluid and emergent leadership shared by principals, teachers, students, and staff at all levels, which focuses on leading the process and self enhancement.

Distributed leadership takes place in an inclusive and complex school environment. Leadership practice is in the centre and the roles of leaders and followers can be shifted according to the different situations. The basic assumption of this definition is to see leadership as a shared function. Power is not a zero-sum commodity; instead, it can be expanded through delegation. (Blasé & Blasé, 2004; Jackson, 2004) Furthermore, the Complexity Theory (also known as the Chaos Theory) raises another important question: If the organizational structure develops from parts-whole relations into more complex phenomena, how would leadership react to such kind of complexity? (Kiel & Elliott, 1997) One possible answer is we need more self-managing teams that exercise distributed leadership. It is notable that the idea of distributed leadership discussed in this study does not necessarily have to be democratic. The roles of leaders and followers are emergent in certain situations when speciality and expertise are needed. The goal of this framework is to expand the space, increase the opportunities, as well as enhance the capabilities amongst all the people in the organization. (Jackson, 2004)

As one of the key concepts of the study, distributed leadership unfolds the following characteristics: *Interaction*: Leadership comes from the interactions among

the organizational members, rather than individual behaviours. *Wholeness*: The scope of leadership extends beyond the positions. School administrators, teachers, students, parents, and other communities can all be the leaders. (Bennett, Wise, Woods & Harvey, 2003) *Institutionalization*: Distributed leadership includes all forms of collaboration and participation within the school. It is integrated into the school culture and daily routines. (Gronn, 2002) *Fluidity*: The boundaries between the leader and followers are blurred. Leadership does not reside in formal positions or specific roles, but emerges from the practice. (Spillane, 2006; Bennett, et. al., 2003)

3.3 School empowerment

Another key concept in the theoretical framework is the school empowerment. In this section, I will first review two types of school empowerment. Then I will examine the organizational and cultural dynamics of empowerment against the Chinese school background. Lastly, based on the literature review, I will give my own definition of school empowerment in this study and summarize the characteristics of school empowerment.

3.3.1 Two versions of school empowerment

According to Short and Greer (1997), there are two distinct versions of the school empowerment. The first version springs from the labour-management tradition, which assumes power as a finite commodity. In brief, if the principal delegates his or her power among the teachers, it reduces the principal's authority or control over the school. Yet, the second version draws upon the participative decision-making tradition. The rationale behind this philosophy is that the power expands when more people get involved. Power is conceived as an endless commodity to accomplish the shared goals in the organization. As McGregor (1960) points out, the most crucial job of the manager is to convince employees to combine personal goals with the primary organizational goal. The school empowerment theory applied in distributed leadership is based upon the second perspective. This is because school empowerment facilitates the integration through participative involvement. (Blasé & Blasé, 2004)

3.3.2 The organizational and cultural dynamics in empowerment

When we take a closer look at the Chinese schools, the following organizational conditions and cultural factors can be identified. Firstly, schools are highly bureaucratic with the hierarchical culture of authority which reflects the Chinese government administrative structure. Luo and Najjar's (2006) research found out that from master teachers' perspective, Chinese school principals are in lack of instructional leadership capacity. The school administration is carried out on the macro-level rather than the micro-level (Robbins, 2000). For instance, the main leadership responsibilities carried out by the Chinese principals include understanding the Chinese politics, developing internal and external networks, and implementing the education policies.

Second, since the 1990s the Chinese government has been encouraging the young teacher leaders who have refreshed knowledge and skills in leadership to assume the school principal's position. This policy gives the stage to the teachers who are eager to make a change in the school. (Luo & Najjar, 2006) Therefore, school empowerment has become an important topic today in many Chinese schools. Especially researchers discovered that teachers' professional growth in teaching and leading has a positive influence on the national curriculum reform in China. (Lee, Yin, Zhang & Jin, 2011)

Third, the traditional values play a critical role in exerting school empowerment. Reciprocity and seniority are deeply rooted in the Confucian ethical foundation. These two key Confucian values dictate that both school leaders and followers should give face (to honour; to pay respect) to each other. Conformity, compliance, uniformity, and obedience are not only reflected in the hierarchical ladder, but also in the age groups. (Legge, 1893) Comparative study data shows that in a Chinese context, the approval from the superior decides whether the subordinates would take initiatives or not (Bond, 1991). More often, the young generation feels uncomfortable to lead, challenge, or criticize their senior colleagues (Chow, 1995). Yet, such behaviours are unlikely to lead to open discussions or provide fair competition. Reciprocity and seniority might become two hurdles in promoting the school empowerment in China. (Dimmock & Walker, 2000)

3.3.3 Concept and characteristics of school empowerment

Short and Greer (1997) define the empowerment as a process whereby empowered members develop capabilities by resolving their own problems. Moreover,

empowerment, no matter at individual level or group level, is tightly connected to the cooperation. Especially when experienced teachers break through the isolation and start working collegially, there is a good chance to improve school culture and effectiveness. (Rosenholtz, 1991) In this study, I define the concept of school empowerment as follows,

School empowerment is the process of delegating the power to the school members so they can develop their capabilities through participating in different kinds of school activities such as teaching, planning, decision making, goal setting, and evaluation.

School empowerment has two sources. The first source relates to teachers' authority over their own work such as subject teaching and class management; another connects to teachers' influence on the critical events in school. Yet, giving teachers more authority does not mean leaving them to swim freely or sink alone. (Short & Greer, 1997) Wilmore notes (2007, p.1) that when teachers improve their leadership skills, "they simultaneously improve other aspects of their personal, academic and community lives".

3.4 Teachers' self-efficacy

A considerable amount of literature has been published on teachers' self-efficacy. Bandura (1994, p. 71) defines self-efficacy as "people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives." In an educational context, this means a teacher's confidence and belief about his or her capabilities to educate students by improving their learning performance and socialization level.

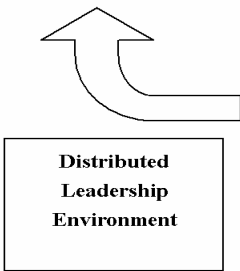
3.4.1 The historical review

Tschannen-Moran and Hoy (2001) describe the teacher efficacy as a judgment of capabilities to bring about preferred performance including students' involvement, learning outcomes and motivation. Efficacy has a positive influence on teachers' persistence when they encounter difficulties in work (Smylie & Denny, 1989). Evidence shows that teachers with a strong sense of self-efficacy are more committed to school management and teaching, more open to innovations and tougher in case of plights

(Berman, McLaughlin, Bass, Pauly, & Zellman, 1977; Guskey, 1988; Stein & Wang, 1988).

A number of instruments have been designed by Professor Hoy and her colleague to evaluate teachers' self-efficacy from different perspectives (Tschannen-Moran & Hoy, 2001). Their initial research focuses on the relationship between teachers' self-efficacy and students' motivation and management (Hoy & Woolfolk, 1990). The second stage focuses on identifying the decisive factors in relation to teachers' efficacy judgment: i.e. principals' leadership style and faculty collaboration (Hoy & Woolfolk, 1993). Then, the research emphasis turns to the meaning and measurement of teachers' efficacy and model building (Tschannen-Moran & Hoy, 2001; Tschannen-Moran, Hoy & Hoy, 1998). Their studies look into the organizational and interpersonal support that might enhance teachers' efficacy involvement (Shaughnessy, 2004). Tschannen-Moran and Hoy (2002) try to build a bridge, connecting school effectiveness with teacher professionalism. Teachers' initiatives are seen as a major resource to school community, which may benefit both student learning and school management (Frost & Durrant, 2003; Darling-Hammond & McLaughlin, 1995).

From Figure 3 we can see that teachers' self-efficacy is based on both internal and external dynamics. According to Tschannen-Moran, et al's (2002) research findings, teachers' professional commitment as well as subject knowledge and experience contribute greatly to teachers' self-efficacy. Regardless of the school, experienced teachers with a strong sense of responsibility are more confident in their daily work. The influence from teaching skills, managerial strategies and personalities vary according to school type and teaching span. However, teachers' gender, age and race seem to have mild relevance to their efficacy.

Internal Dynamics	Teachers' Self Efficacy	External Dynamics
Personal Traits ++	Focus of this study 	Students' Support +++
Professional Commitment +++		Parents' Trust ++
Knowledge and Experience 		Principal's Empowerment
Teaching Skills ++		Colleagues' Cooperation +
Managerial Strategies ++		Teaching Facilities +++
Gender, Race, Age +		School Location +
...		...

(“+++”= “Very strong impact” “++”= “Strong impact” “+”= “Mild impact”)

FIGURE 3 Internal and external factors
Source: Tschannen-Moran & Hoy (2001, 2002)

Among all the external factors, students' engagement and teaching resource have proven to have the strongest impact on the efficacy. According to Tschannen-Moran & Hoy (2001) parents' trust and involvement has modest influence while support from the principal, colleagues, and school location have little impact on teachers' efficacy improvement.

Most of the surveys were conducted in traditional schools, under the formal leadership settings. There is a lack of relevant research focusing on how the principal's empowerment and colleagues' cooperation affect teachers' self-efficacy in a distributed leadership environment. Thus, my study is going to have an investigation into principal's empowerment and its influence on teachers' self-efficacy enhancement in Chinese schools.

3.4.2 Definition of teachers' self-efficacy

Many terms have been used interchangeably in the previous studies: for example teachers' sense of efficacy, self-efficacy of teachers, instructional efficacy, teachers' efficacy beliefs, or teachers' perceived efficacy (Shaughnessy, 2004). In this study, I define the concept of teachers' self-efficacy as:

Teachers' beliefs about their own capabilities on facilitating students' learning, developing teachers' professionalism, building effective networks and improving

school leadership practice which lead to human accomplishment and personal well-being.

In Figure 4, I determine the four sources of teachers' self-efficacy based on the nature of the teaching profession in this study.

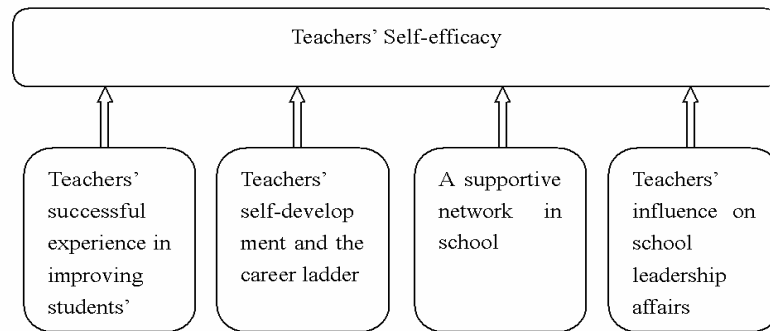


FIGURE 4 Four sources of teachers' self-efficacy

The first incentive is teachers' successful experiences in improving student learning. According to Dimmock and Walker's (2000) cross-cultural studies, Chinese schools are relatively result-oriented. Teachers who succeed in teaching receive more recognition from students, parents, the principal and peers. Moreover, owing to the previous mastery experiences, these teachers can quickly rebound from the setbacks or failures. They are willing to exert sustained efforts and perceive the challenges as opportunities rather than threats. (Bandura, 1994)

The second motivator relates to self-development and the career ladder. In a knowledge explosion era, rapid technological and social changes constantly require teachers to update their knowledge and skills as they become life-long learners. Developing teachers' professionalism matches teachers' personal goals with the shared vision of the school, thus teachers will direct their behaviours and persist in efforts until they fulfil the goals. (Bandura, 1997)

The third source of self-efficacy enhancement is a supportive network. Social interaction with colleagues and school administrators may broaden the teachers' self-knowledge of their capacities. Role models as well as peers provide "high informative comparisons for judging and verifying one's self-efficacy" (Bandura, 1994, p. 77). By investigating into teachers' work relations within the school, we may have a better

understanding of how socially efficacious teachers perform supported by a high acceptance of their peers and a high sense of self-worth.

The last dynamic on self-efficacy enhancement is teachers' influence on school leadership affairs. Bandura (1994, p. 80) argues that "the higher the sense of self-regulatory efficacy; the better the occupational functioning". Teacher empowerment is seen as a co-constructed learning process where the power and authority are granted to the teacher leaders by their colleagues (Wasley, 1991). In an inclusive context, teachers with a wide array of expertise and knowledge as well as a positive attitude and enthusiasm are willing to serve others.

4 RESEARCH METHOD

This chapter consists of four sections. First, the research rationale section introduces the main research approach, the mixed-method, which combines the quantitative and qualitative methods. Then in section two, I select my research perspectives of this study from Burrell & Morgan's (1979) research paradigm. Third, I will introduce four research instruments which I have used for data collection. The last section illustrates my research phases.

4.1 Research rationale

Educational leadership as a research field draws upon the theory and practice from both management fields and social sciences. However, all the educational leadership studies are facing three challenges: the complex relationships among the attributes; the vague boundary between leaders and followers; and the difficulty of linking causal factors. (Briggs & Coleman, 2007)

In this study, I apply the mixed methods as the main research approach, which combines both qualitative and quantitative features. The purpose of using the mixed methods is to maximize the strengths and minimize the weaknesses of both single research approaches. This research method is chosen according to the following two considerations. First, a mixed methods design allows a direct investigation into the research question. To be more specific, the qualitative research collects the stories through the interviews and observations while a quantitative survey assists the teachers' self-efficacy level assessments at the three schools. Second, the mixed methods improve the authenticity by triangulating the data from different sources. (Burke & Onwuegbuzie,

2004)

Qualitative research in education is a relatively new field. Since the 1990s, there shows a growing dissatisfaction of the findings based on the quantitative approach. On top of that, school leaders ask for more action researches, which could guide their daily practice. (Lichtman, 2006)

Although there are multiple ways to define qualitative research, five features are repeatedly mentioned by the theorists: naturalistic, inductive, interpretive, subjective and process-oriented. The goal of this approach is to develop understanding, describe the realities, and produce in-depth analysis through an evolving, flexible, and open-ended research design. The most used techniques include the interviews and observations in the natural and social settings. The researcher, as a part of the research instrument, interprets the information, infuses personal reflections, and writes the case studies. (Creswell, 2003; Lichtman, 2006; Bogdan & Biklen, 2007)

Quantitative research, in contrast to the qualitative research, relies heavily on the hypothesis testing, cause and effect, and data analysis (Lichtman, 2006). The aim of this research approach is to classify the features, count them, and construct statistical models in an attempt to explain what is observed (Gall, Borg & Gall, 2003). Quantitative research is widely used in both natural and social science. The modern tendency is to use quantitative research under the qualitative framework, known as a mixed methods design (Creswell & Clark, 2006).

The mixed methods approach, as a methodology, combines the elements from both qualitative and quantitative models (Creswell, 2003; Tashakkori & Teddlie, 2003). As Katsulis (2003) points out, the purpose of using the mixed methods is to expand our understanding from each method. In other words, “mixed methods research is defined as a procedure for collecting, analyzing, and mixing both quantitative and qualitative data in a single case study or series of studies and is becoming more common in studies across the social, behavioral, and health sciences as well as education” (Creswell & Clark, 2006, p. 3).

In this study, the research design involves collecting two types of data: the quantitative data through questionnaires and the qualitative through interviews and observations. This design emphasizes the qualitative approach, which explores the interactions between the principal and the teachers. On the other hand, the quantitative method plays a supportive and secondary role. The reason for collecting the quantitative

database is to examine the relationship between distributed leadership and teachers' self-efficacy enhancement. This is called an embedded mixed methods design. (Creswell & Clark, 2006; Creswell, 2003)

4.2 Research paradigm

Burrell and Morgan (1979) developed a 2x2 matrix of sociological paradigms (Figure 5). There are two axes in which represent two fundamental issues: the vertical axis consists of the social theories of regulation and stability on the one end and the social theories of radical change on the other end; the horizontal axis consists of the subjective (individualistic) theories and the objective (structural) theories.

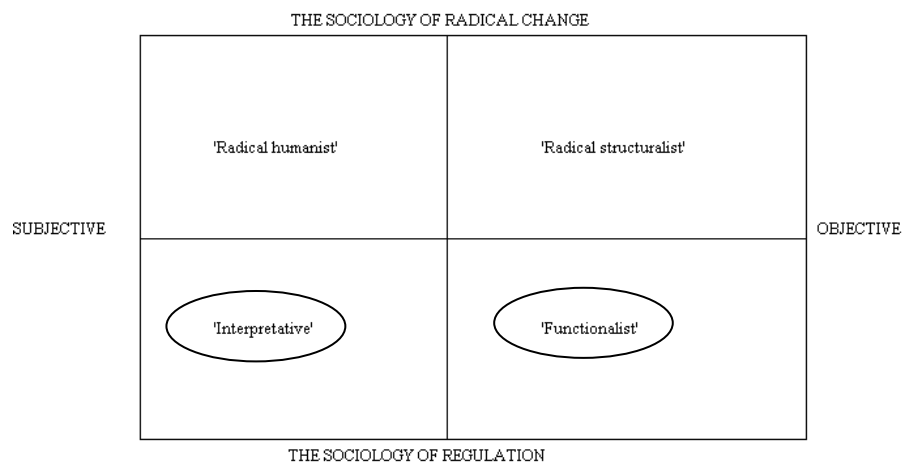


FIGURE 5 Four paradigms in social science studies

Source: Burrell & Morgan. (1979). *Sociological Paradigms and Organizational Analysis: Elements of the Sociology of Corporate Life*. p.22

These two axes divide the existing sociological theories into four quadrants: the functionalist paradigm, the interpretative paradigm, the radical humanist paradigm, and the radical structuralist paradigm. These four paradigms provide alternative lenses for the researchers to observe organizations from a social perspective.

By using the hypothesis testing, the researcher can use *the functionalist paradigm* to comprehend the situations in the organization and respond with rational behaviors from an objectivist point of view. Through observing the on-going social process, *the interpretative paradigm* helps the researcher to discover, understand, and explain

various individual behaviors from a subjective view. The researcher, who believes in humanity and true consciousness, tends to release the social constraints and promote human fulfillment by adopting *the radical humanist paradigm* lenses. Last but not least, *the radical structuralist paradigm* is the tool applied by the researcher who bears a hidden agenda to solve the fundamental conflicts through radical changes.

In this study, I choose both interpretative and functionalist perspectives as my lenses to observe the real life interactions between the principal and the teachers in Chinese schools. By using the functionalist perspective, I aim at exploring the current status of teachers' self-efficacy levels in the three research schools. This goal is realized through a quantitative questionnaire survey. By using the interpretative perspective, I seek for the explanations within the realm of my own consciousness and subjectivity. My goal is to find out the common features of the distributed leadership within three different Chinese schools. This goal is realized through the qualitative case studies.

4.3 Research instruments

Based on the research paradigm, I chose the following research instruments to fulfill my research goals. I distributed the questionnaires to the target groups whom I selected purposefully based on their leadership roles at each school. At the same time, I observed the staff meetings and research seminars in two schools. In order to get in-depth understanding of the principal-teacher interaction, I conducted 13 individual interviews. After the interviews I transcribed the data and composed the case studies. These three case studies demonstrated the epitome of the Chinese school leadership. Based on qualitative and quantitative evidence, this study examined the distributed leadership theory in the Chinese context.

4.3.1 Questionnaire

The questionnaire, as a quantitative research instrument, is widely used to collect and present the information through structured numerical data (Wilson & McLean, 1994). In this embedded mixed methods design, a closed structured questionnaire was designed to assess teachers' self-efficacy levels in three target schools (Appendix C and D).

The structure of the questionnaire is as follows: The first four questions focus on the basic information of the respondents, including their gender, years of teaching

experience, leadership position, and grade level. The following 20 questions with the rating scales from 1 to 9 concentrate on teachers' self-evaluation in four domains: the decision making, teaching and researching, interpersonal relationships and cooperation, and school culture. The third part of the questionnaire looks into teachers' self-assessment to their personal performance during the previous semester. Questions with rating scales are very useful devices to investigate teachers' degree of sensitivity and the differentiation of the responses by presenting numerical data (Cohen, Manion & Morrison, 2007).

In selecting the respondents, I deployed a purposive sampling to invite 20 school leaders in various leadership positions, including principals, vice principals, the Communist Party secretary, heads of the year, and subject coordinators. The survey participants covered over 90% of the school leaders in each school. Thus, their answers can maximally fulfill my research purpose.

The questionnaire was designed on the basis of Bandura's (1990) *Instrument of Teacher Self-efficacy Scale*. Bandura's findings were later widely examined by the other researchers against the backgrounds of western schools (Milner & Woolfolk Hoy, 2003; Gaskill & Woolfolk Hoy, 2002; Bandura, 1997). In order to adapt the questionnaire to the Chinese school environment, I revised the questions by adding some Chinese context, such as the role of the Communist Party secretary, and teachers' influence on the school-based curriculum.

4.3.2 Interview

As Morgan (1997) claimed, the interview is a purposeful conversation usually between two people or more. In this study, I employed 13 face-to-face interviews with both school principals and teacher leaders. Before I went to the field, I got myself familiar with the school contexts, including the school history, demography, the principal's career life, and the school administrative structure. All the interview questions were tightly connected to my research question and the school contexts. Each in-depth interview lasted 30 to 60 minutes. The purpose of this technique is to hear participants' real stories in their own words, in their voice with their language and narrative (Lichtman, 2006).

During the interviews with the principals, I looked into their work experience, main leadership and administrative responsibilities, their perceptions on school

empowerment, and the best practices in school leadership. The interview questions for teacher leaders aimed at investigating the respondents' leadership responsibilities, their attitudes toward the principal's empowerment, the working environment, and their professional development. Since each research school has its unique context, the interview questions were modified accordingly. The school backgrounds are introduced in the case studies.

4.3.3 Participant observation

Patton (1990) describes the participant observation as the combination of an insider's understanding and outsider's objectivity. Direct, personal involvement into the research field has a few advantages. First, the researcher has a better understanding of the context. Second, by being on-site, the researcher collects the firsthand data. Thus, the prior conceptualizations from other sources such as the documents or personal comments hardly have a decisive impact on the research result. Third, the participant observer can discover things which are neglected by the research participants. Fourth, the direct observational approach supplements the interviews and survey data. An experienced observer can spot and interpret the hidden information that is covered or untouched during the interviews. Fifth, the observation extends the research realm. The observer can collect data from more participants. Sixth, the researcher's personal knowledge and experience can be a valuable resource to aid the research. (Patton, 1990)

In this study I used participant observation in two schools (the Sunshine School and the Ocean School). Since the research took place during the summer vacation, I did not get access to the Redbrick School for observation. The observation settings included the staff meeting, the research seminars and the teaching planning meetings. I listened to the annual reports from the teacher leaders, teachers' research proposals, and the principal's rewards to the outstanding teachers of the year. During the research process, I took notes and pictures, listened to the group discussions, and even joined the research seminars. Through participant observation, I had a deeper understanding of the school backgrounds. The teachers seemed to be more open and relaxed during the observation period comparing to the formal interviews.

4.4 Research procedure

The research procedure of this study can be outlined by the following sequential phases: *Phase 1: Preparing for the research.* During my four years' studies at East China Normal University, I have always had a strong interest in distributed leadership and its influence on Chinese schools. My Bachelor's thesis was based on a case study about one private high school in Shanghai. I looked into the school leadership through the lens of distributed leadership. The research findings showed that in a small-sized private school with around 500 students, the school principal tended to empower her teachers in both teaching and administrative work; the power distance between the principal and the teachers was small; and the principal had the full autonomy in recruiting and promoting the teachers.

My research interest in distributed leadership has continued during my studies in Finland. After reading more literature and observing more school leadership practice in Finnish and Chinese schools, I generated the new research question which investigates distributed leadership and its influence on teachers' self-efficacy in the public schools in China. My research focus also narrowed down to the principal's empowerment strategies in practice.

Phase 2: Selecting and approaching the research objects. Before selecting the research schools, I consulted two professors from the National Training Centre for Secondary School Principals in China. Both professors have conducted extensive empirical studies in different types of Chinese schools for decades. Thus their knowledge in the school characteristics helped me select the research objects.

J.H. Zhang (personal communication, May 20, 2008)

H.B. Liu (personal communication, May 22, 2008)

I asked them to recommend me a few schools which have the features of distributed leadership in the daily practice. This is because my research purposes include presenting the best practice of the principal-teacher interactions and finding out the relationships between principal's empowerment strategies and teachers' self-efficacy in a distributed context. On top of that, I also considered the school ownership (public school), the school location (in Shanghai), and the school type (covering the whole basic education

period from Grade 1 to 12).

Before going to the field, I sent my research cover letters (Appendix A and B), asking for the research permissions. Then, I made the research schedule and informed my research objects about my research plan and procedure. As a result, three schools (the Sunshine School, the Redbrick School, and the Ocean School) fit in my research design and they all accepted my research requests.

Phase 3: Designing the research instrument. After receiving the research permissions, I studied the background of each school. The two professors from the Principal Training Centre gave me the valuable information about the school characteristics and histories. On top of that, I checked the school administrative structure, the school projects and the major activities from the school websites. My research design is to use mixed methods as my approach which includes a questionnaire survey, individual interviews and participant observations. By taking the school backgrounds into account, I designed the questionnaire (Appendix C and D) on teachers' self-efficacy evaluation. The same survey was repeated in all the three research schools.

The interview questions focused on the principal-teacher interactions from the distributed leadership perspective. I pre-designed the questions which guide the interviewees into the topic (Appendix E, F, G and H). Based on the interviewees' answers, I also added more follow-up questions, encouraging them to give the concrete examples from their daily practice or clarifying their statements.

Phase 4: Collecting the data from the field. The overview of the data sources is summarized in Table 3.

TABLE 3 Data sources from the three cases

Research Schools	Quantitative	QUALITATIVE	
	(Supportive role)	(Main role)	
	Questionnaire	Observations	Interviews
Sunshine School	20 School Leaders	1 Day Staff Meeting	1 Principal 6 Teacher Leaders
Redbrick School	20 School Leaders	0 Day	1 Principal 2 Teacher Leaders
Ocean School	20 School Leaders	3 Days Research Seminars	1 Principal 2 Teacher Leaders

During the staff meetings, I distributed my questionnaires to the teacher leaders to guarantee a 100% response rate. I also attended the research seminars and staff meetings as an observer. During the lunch break, I conducted the individual interviews with the teacher leaders, the school principals and the Communist Party secretaries. In order to fit in the research timetable, three school principals selected the participants among the teacher leaders according to their availability. All the interviews were recorded under interviewees' approvals. The participants were given the chance to remain anonymous in the case studies.

Phase 5: Processing and analyzing the data. After the data collection (from June to August 2008), I processed the survey data with the assistance of SPSS 14.0 and transcribed all the interview records and observation notes. Since all the interviews and the questionnaire survey were conducted in Chinese language, I translated the original research instruments and research data into English later on. The three case studies were composed on the basis of the school documents, participant observation as well as the interviews.

5 QUALITATIVE DATA FINDINGS

This chapter consists of three case studies. According to the research design, these three schools were chosen because they have displayed the features of distributed leadership in their daily practice. The data was collected through 13 interviews and 4 days' participant observation. The case studies consist of the structure of the school backgrounds, the principal-teacher interactions, the principal empowerment strategies, as well as the driving forces and the barriers to distributed leadership in the Chinese school context. The school background information was collected from two university professors who had conducted research in the target schools before, school promotion materials, websites, and principals' introductions during the interviews. In order to show the objectivity in the research, I used both direct quotes and synthesized stories to fully express principals' and teachers' original thoughts. The purpose of this chapter is to show the real life practice of distributed leadership in Chinese schools. The school principals and teacher leaders in this study have been experiencing a series of changes at both micro and macro levels. They dared to question the bureaucracy. And more importantly, they were seeking for the creative ways of teaching, learning, and leading.

5.1 The Sunshine School case

The Sunshine School case is about one comprehensive school seeking for its path after a dramatic school merger. People in the Sunshine School had experienced the leadership change, the structure adjustment, the internal integration, and finally reached a new stage of balance and harmony. These stories revealed the doubts, the growing pain, the success, and the learning points that the school principal and teachers had experienced.

5.1.1 The Sunshine School background

In 2001, the local educational authority merged three schools into a new comprehensive school named the Sunshine School. The new school is composed of 143 teaching staff and 1624 students from Grade 1 to 9. However, the merger caused a lot of tensions among the teachers. During the first two years, the Sunshine School was in a crisis. In brief, the teachers' morale was low, the school vision was unclear, and school culture was underdeveloped. The local education bureau replaced the whole top management team with a group of experienced teachers from a local high-performing school. But the situation was not improved until the year 2004, when a new school principal, Ms. Fu, was appointed. In her 26 years of experience in schools, Principal Fu functioned in many roles: a moral education teacher, a Communist Party secretary, a vice principal, and a principal. Principal Fu describes herself as "a people person, a supporter, and a dreamer". Under Principal Fu's leadership from 2004 to 2009, the Sunshine School went through two major changes: setting the new school vision and building the new school structure. During the change process, a few teachers took their initiatives to shoulder more responsibilities and became teacher leaders. By the year 2009, the Sunshine School has become one of the most popular comprehensive schools in the school district. The school attracts over 300 applicants every year. Over 80% of the graduates continue their studies in general upper secondary schools, while the rest of the graduates enroll in vocational schools.

5.1.2 School vision: New ways of being and doing

I believe that a shared vision anchors the school culture as well as appropriate behaviors.

A Class Teacher in the Sunshine School

From the year 2001 to 2004, the main focus of the school development fell on building a school vision. Right after the school merger, the local education bureau transferred a school principal from another high-performing school to lead the new Sunshine School. The top management team consisted of one principal, three vice principals and five teacher leaders. However, all these administrators came from different schools holding various expectations toward the future.

The first school principal, Mr. Wong, came from the White Polar Upper Secondary School. After working in a high-performing upper secondary school for more than 15 years, Principal Wong believed that students' academic excellence was the

utmost goal of a school. Under his leadership, Sunshine School set the first school vision as:

“The Sunshine School aims at preparing students to be life-long learners who are academically excellent and bear strong sense of social responsibility.”

(The Sunshine School vision statement 2001-2004)

When this research was conducted, Principal Wong had retired. However, his vice principal, Ms. Lin, who also held the vice principal position in the current team, told me that the first school vision was mainly modified on the basis of the vision statement of the White Polar School. This was because the White Polar School was a successful example of practicing this vision. Many teachers who came from White Polar were labeled as “the elites” after the merger. Nevertheless, teachers from other schools had not adapted to the new environment. They complained that “the elites” made the school vision within their top management team without consulting others. Once the school vision was created, “the elites” announced it in the staff meeting. As a result, nobody was against that vision. Neither did anybody take it seriously. The divisions among the teachers remained the same.

The old tale about a charismatic principal saving a failing school did not happen in this case. The main reason was that the high expectation from the principal was not in accordance with the teachers’ and students’ needs. Negative feelings spread in classrooms, teachers’ offices and parents meetings. After a year, an education specialist was invited to diagnose the problems in the Sunshine School. He pointed out the differences between the Sunshine School and the White Polar School. First, the Sunshine school is a comprehensive school that provides compulsory education to local inhabitants aged from 6 to 15; while the White Polar was an upper secondary school targeting at students age from 16 to 18. Different from the White Polar, academic excellence was not the only goal for the Sunshine School. During the compulsory education period, education for all was the utmost goal. Second, the personnel change in the White Polar was small. Teachers were familiar with each other. But in a newly merged school, the Sunshine School teachers still need time to form their community. The specialist suggested that the Sunshine school should set up a vision based on the reality mentioned above.

In late 2004, the former Communist Party secretary, Ms. Fu, was delegated to assume the principal position in the Sunshine School. This critical leader change

enabled the administrative team to rethink and redesign the school vision. When I interviewed Principal Fu, she left me an impression of a calming and cheerful leader in her forties. Before taking the position as the school principal, Ms. Fu was the Party secretary in the Sunshine school. As one of the “elites”, Principal Fu perceived the teacher segmentation as one of the biggest sequelae of the school merger. She used the words “angry and confused” to describe teachers’ reactions toward the school merger. Thus, when assuming the position as the school principal in 2004, Ms. Fu invited each teacher to a face-to-face discussion, listening to their thoughts and expectations. She categorized the feedback into three aspects: All the teachers believe that teaching and learning is their number one concern; teachers want to develop themselves; and teachers want to work in an inclusive culture. Based on the feedback, the administrative team made the school vision:

“The Sunshine School aims at providing a friendly and equal learning environment to all the students who have various academic, social, physical needs. The school is committed to creating a culture of respect, trust and care among all the teachers and learners.”

(The Sunshine School vision statement 2004-now)

On top of the school vision, there is also a slogan for the Sunshine School: *Grant the sunshine everywhere in our campus!* Principal Fu explained how she explained the slogan to her teachers,

“I told my teachers to ask themselves three questions: Have I had a face-to-face talk with every kid in my class? Do I communicate with the students in the way they expect? How can I improve my subject teaching and class management? If there is any hesitation or ‘no’s in the answers, it signifies the ‘shadow’ in our school. If we want to see the sunshine at every corner in our school, we have to illuminate the ‘shadows’ first. So this is what the slogan means. I hope everyone can walk the talk.”

A class teacher agreed with Principal Fu in her interview. From the teacher’s view, she found the new school vision was more lucid, because the young kids can easily understand that the sunshine stands for warmth, brightness and hope. It fits the school name perfectly. One big difference she had noticed after the leadership change was that Principal Fu acted not merely as an authority, but she also showed teachers how to walk the talk. For example, the school janitor no longer wore the security guard uniform but put on his casual jackets. The janitor was encouraged to receive the school visitors in a more friendly way instead of using a defensive attitude. She used the phrase “incremental and powerful” to describe the influence of the new school vision. “People started to greet each other. That does make a difference. It took several months, but the

segmentations among the teachers were removed slowly.”

5.1.3 School structure: New platform for lateral and vertical cooperation

Much of the research evidence shows that distributed leadership flourishes in collaborative settings (Harris & Muijs, 2004; Caine & Caine, 2000; Little, 2000; Longquist & King, 1993). In the Sunshine School, a series of structural changes contributed to both horizontal and vertical cooperation. The first structural reform was to simplify the linear management structure. This broke down the traditional school layout, which divided the teachers and students according to the grade level. The new structure in the Sunshine School merged the grade groups into 3 key stages. Based on Principal Fu’s description, I drew Figure 5 to illustrate the new structure: Key Stage 1 (from Grade 1 to Grade 3: Student Age: 6-8), Key Stage 2 (from Grade 4 to Grade 6: Student Age: 9-11), and Key Stage 3 (from Grade 7 to Grade 9: Student Age: 12-14). The heads of the Key Stages take full charge of all the administrative and the teaching affairs. During the same time, they also assume the roles as the subject teachers.

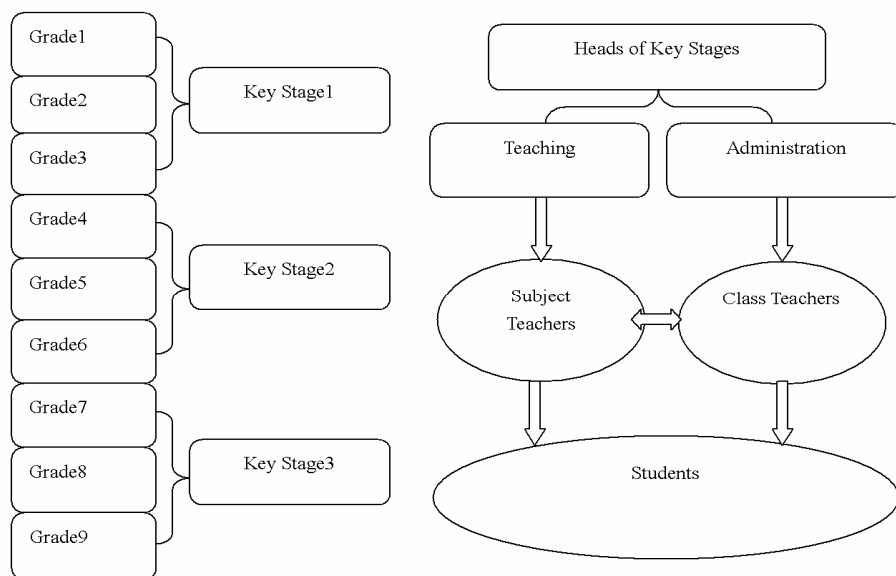


FIGURE 6 New structure of three key stages in the Sunshine School

Based on the interview data, I summarized the advantages of this new structure. Teachers were assigned more responsibilities to make decisions concerning teaching and learning in a less hierarchical structure. It allowed teachers to rebuild their teams

and connect to more teachers. New teacher leaders emerged naturally through this reform. The teacher segmentation problem was improved because more teachers, not only “the elites”, got a chance to assume leadership roles. Moreover, the flat structure improved the internal information flow, because the hierarchy was decreased. Thirdly, the new structure increased the flexibility. The interviewee elaborated that because teachers were working in a “bigger pool”, it was easier for the head of the Key Stage to “group teachers for certain tasks”. Fourthly, by minimizing the hierarchy, this structure facilitates the authority of expertise instead of the authority of position and creates equality. One interviewee emphasized that she felt “less embarrassed now” when seeking for peer support, because “people no longer judge you according to your career background or position”.

5.1.4 Principal’s empowerment strategy: Individual-based empowerment

An effective principal is the one who brings out the best in teachers. What I have done in my school is treating teachers as professionals, granting professional autonomy, and supporting teachers’ decisions.

--- Principal Fu in the Sunshine School

Another characteristic of Sunshine School is the cultivation of young cadres. Principal Fu said from the year 2006 the majority of the teacher leaders were under 40 years of age. One Music teacher shared her story about how her leadership potentials were developed in the Sunshine School. After the leadership change in 2006, Ms Lee was invited to a face-to-face talk with the new principal. After teaching music in primary schools for than 10 years, Ms Lee was familiar with the curriculum. On top of that, she was also qualified to teach several musical instruments. During the discussion with the principal, she pointed out that music teachers did not get equal opportunities for their professional development comparing to other subject teachers. She clarified in the interview with me, “In Chinese schools, music teachers are labeled as the ‘second class’. More in-service training opportunities are given to other subject teachers because their subjects are considered as more important and valuable by the society.” Principal Fu also admitted in her interview that contrary to the high-performing schools, the Sunshine School had very limited resources for teacher training. But her leadership philosophy came to play when she faced such dilemmas. Principal Fu supported Ms Lee’s proposal and gave her the opportunity to attend a national music teacher seminar in Beijing. Ms Lee shared her learning experience with her colleagues after the seminar. Along with three other music teachers, Ms Lee suggested to organize a student orchestra

in the Sunshine School. After three years, the student orchestra had won a few prizes in Shanghai. Ms. Lee was appointed Head of the music teaching group in the school district.

When listening to other teacher leaders' answers, I found that individual-based empowerment was a phenomenon whereby the teachers were assigned to accomplish specific tasks with their expertise. To give another example, one Physical Education (P.E.) teacher raised the issue that students' physical health was as important as their intelligence development. He initiated to add the morning run and the aerobic exercises during the breaks. He commented in his interview: "We know this meant extra work but we would love to make a positive difference."

During the interviews, other teachers also gave me a few examples about how they initiate the changes in their teaching or teamwork. Principal Fu attributed teachers' attitude change to the new school climate which encourages risk-taking and innovation. She said, "I empower my teachers to lead a change. The basic principle is the students' benefit. I am not afraid to take the blame if it my teachers fail. But I give full credits to them if they succeed."

5.1.5 Principal's empowerment strategy: Team-based empowerment

Corresponding to the individual-based empowerment, team-based empowerment was also a strategy used by Principal Fu. One example was establishing the interdisciplinary teaching groups. In 2006, the Sunshine School decided to enrich the school-based curriculum. One Arts teacher cooperated with two English teachers and one Chinese literature teacher. When being asked what the biggest difference was working in an interdisciplinary team, she said, "It was unpredictable. The language teachers had new perspectives toward arts. They enrich my knowledge when they refer a painting to a famous poem or a well-known writer. You won't believe how much I have learned from my colleagues."

As the interviewees pointed out, the team-based empowerment makes them appreciate different perspectives, provides a greater insight into issues, and sets a full breadth of opinions. More importantly, teachers enriched the school curriculum by combining several subjects and applying new group teaching methods in class. Teachers also renewed the student evaluation system. Students presented their learning outcomes through workshops, essays, and hand crafts instead of examinations.

To give the opportunity for interdisciplinary cooperation, Principal Fu explained the role of the school administrator, “As the principal, I need to rearrange the timetables for teachers to meet and talk to each other.” The real teamwork is more complex than merely putting people together. The school principal has to make sure the resources are available, the environment is friendly, and participants feel comfortable. Principal Fu mentioned that she also gave personal space to the teachers who preferred solo work. (cf. Husband & Short, 1994)

5.1.6 Driving forces of distributed leadership

The Sunshine School suffered from a series of post-merger challenges and finally found its way to success. From a distributed perspective, there are a few driving forces propelling the school reforms.

Driving force 1: The school vision institutionalized the values of respect, trust and care. It took 4 years for the Sunshine School to set up a widely-accepted vision based on the school values and philosophy. Teachers were consulted during the process. The school principal also used the metaphor to explain the new vision to the entire school. She showed teachers how to realize the new school vision, starting from every little positive change in the daily routine.

Driving force 2: The school culture was another influential element in teachers’ attitudes toward distributed leadership (cf. Katzenmeyer & Moller, 2001; Snell & Swanson, 2000). Trust and cooperation were widely mentioned by the teacher leaders during the interviews. Plentiful literatures show that the good social relationships among school staff outweigh the general professional norms, individual working experience or personal characteristics (Smylie, 1996; Hart, 1994, 1990). In the Sunshine School, interdisciplinary teams broke down the subject boundaries. The teachers had opportunities to expand their professional network by working with the teachers from other fields. Many teachers mentioned that they learned to appreciate each other’s work through cooperation. Peer recognition was seen as a key strategy to acknowledge teacher leadership. Moreover, the interviewees displayed a strong sense of belonging when they represented their school in public and tried their best to create a good reputation for the school. (cf. Katzenmeyer & Moller, 2001; LeBlanc & Shelton, 1997; Harrison & Lembeck, 1996; Kahrs, 1996)

Driving force 3: A concise administrative structure ensured the information flow

between the senior management team and the teacher leaders. When merging 9 grade groups into 3 Key Stages, Heads of the Key Stages were authorized more autonomy to make independent decisions. This concise structure accelerated the information dissemination and increased the transparency of decision-making. According to Moller & Katzenmeyer (1996), one empowerment strategy widely applied by school principals is to let teacher leaders get access to information and resources. In the Sunshine School, teacher leaders' requests were valued by Principal Fu. She rewarded the teachers who were willing to take more responsibilities and set them as role models.

Driving force 4: School leaders led with a moral compass. Embedded in the daily work was the ethics of care. The Sunshine School teachers walked the talk, made decisions based on the shared values, and prioritized students' needs and benefits. The teachers said in their interviews that they were more willing to work in an ethical school than in a test score-oriented school. (cf. Noddings, 2005)

5.1.7 Barriers to distributed leadership

Ainsco and Southworth (1996, p. 243) reminded us that "the work of teachers acting as leaders...creates a number of potential difficulties". In the Sunshine School, the barriers such as role ambiguity and over-whelmed workload were mentioned by teacher leaders. One Head of the Key Stage felt stressed out when she had to teach and lead at the same time. When the power was decentralized, teacher leaders in the Sunshine School shouldered a huge amount of extra responsibilities outside their class teaching. The tension between teaching and administrative work leads to the role ambiguity. Lack of time was perceived as the leading cause to this role conflict. Two teacher leaders mentioned that during the last semester they failed to provide individual-based instructions and detailed feedback to students. (cf. Clift, Johnson, Holland & Veal, 1992)

The second challenge was to keep the balance between private life and work. "My husband and kid complained that I became a workaholic", said one subject coordinator. Three teachers said the heavy workload kept them away from their families which made them feel "guilty". Since strong family value is deeply entwined in the Confucian-heritage culture, family is seen as the prototype of all the social organizations. (Hofstede, 1991) Barth (1988) pointed out that those successful teacher leaders, just like their principal, also need assistance. In fact, distributed leadership heavily relies on effective administrative leadership. This rings the bell to the school principal who is responsible

for “setting a comfortable climate that encourages teachers’ attempts to enter the circle of leadership” (Blegen & Kennedy, 2000. p. 4).

The third obstacle mentioned by the school principal was the teachers’ low readiness level to function as effective leaders. Principal Fu commented that some teachers were reluctant to take on extra responsibilities unless the new task was accompanied by an alluring bonus. Fostering distributed leadership does not happen overnight. Instead, it is intentional, step-by-step work. Equipping teachers with leadership skills and knowledge is as important as delegating leadership accountabilities to them. (cf. Blasé & Blasé, 2001) Thus, it is of great importance to have effective monitoring and constructive evaluation from the principal. The superior’s support and recognition are also crucial in fostering teachers’ self-efficacy.

5.2 The Redbrick School case

Different from the Sunshine School case was about a newly merged comprehensive school, the Redbrick School case was developed around a high-performing upper secondary school (Grade 10-12) with an over 100-year history. This case focused on how distributed leadership contributed to the school’s sustainable development.

5.2.1 The Redbrick School background

The Redbrick School was founded in 1905 by a distinguished patriotic educator. In the long school history, many visionary educators and philosophers served as principals or school board members. Thus, their educational philosophies have been deeply rooted in the school culture today. As a high-performing school in Shanghai, over 90% of the graduates from the Redbrick School were admitted to the universities every year (The Redbrick School, 2006).

The Redbrick School had a truly idyllic and picturesque campus with abundant trees and flowers. In the centre of the campus, there is a monument with the engraved school motto *Rich in knowledge and tenacious of purpose; inquiring with earnestness and reflecting with self-practice*. The teachers’ offices were located in a separate administration building. According to the school principal, the purpose of this arrangement was to ensure teachers have a more independent and undisturbed working environment.

5.2.2 School culture: Nurturing a democratic atmosphere

Principal Jin has served as the Redbrick School principal for over three decades. He described himself as “a leader, a coordinator, and a delegator”. In his leadership philosophy, these three identities were in a continuum. First, a good principal should be a role model who demonstrates a strong commitment to his work. When teachers are ready to work on their own, a good principal knows how to coordinate different departments. The last stage of principalship is school empowerment. Principal Jin believed that for a school’s sustainable development, the best way was to let teachers lead themselves.

After rendering Principal Jin’s comments, I am bringing up another angle from the teachers. One teacher leader who had worked in the Redbrick for 20 years talked about how people made group decisions. “Sometimes not everyone is happy with the group decision. We spend a lot of time on discussion, negotiation, and compromising.” She thought that a teacher leader ought to be professional enough to accept the collective decisions no matter how much they differed from his or her original ideas.

The novice teachers mentioned that it was not easy for them to challenge the authority at the beginning. “I have to say that questioning your superior is not a mainstream culture in most Chinese schools.” However, after working in Redbrick for several years, she realized that it was not just about the position power. The purpose for group decision making was to get more teachers accountable for their work-related issues. The Head of the Young Teacher Association (YTA) in the Redbrick School concluded that it had been much easier for teachers to implement the decisions when they had been involved in the process.

5.2.3 Human resource: Building career ladder for young teachers

Within the Redbrick School, teachers took the leadership initiatives in a more democratic and autonomous way. A formal organization called the Young Teacher Association (YTA) had been established since the very beginning of the school history. The YTA possessed its administrative prerogatives including that teachers select their own Head by voting, only teachers under 40 years of age can join the YTA, and teachers in the YTA make their own organizational regulations and leadership pipeline.

Principal Jin said his opinions were consulted during the election of the YTA leaders, but the school principals never manipulated the results. In contrast to the top-

down appointment, the YTA leaders emerged through peer recognition. This approach also eliminated the weakness that teachers were generally unwilling to take the advice on their pedagogy from the leaders chosen by the school administrators. Instead, teachers tended to invest more trust on the selected colleagues because they believed he or she would perform well. (cf. Wasley, 1991)

In a community-based empowerment strategy, the personal power is heavily accentuated while the position power is downplayed (cf. Katzenmeyer & Moller, 2001). One YTA member commented, “Here your endeavors are recognized by your colleagues. I think this is one of the reasons I stay in the Redbrick.” Another YTA member echoed this viewpoint, “This is a fair play. Teachers concentrate more on teaching and professional development rather than playing the micro-politics in office or flattering the school leaders.”

As highlighted earlier, the age limit regulated only teachers under 40 years of age are eligible to join the YTA. The YTA has its own leadership pipeline. It serves as an avenue for teachers’ professional growth. As a high performing school, the Redbrick is famous for its highly qualified teaching group. Not only the experienced teachers want to work in the Redbrick, many novice teachers also choose the Redbrick School as their career starting point.

The Head of the YTA introduced the leadership pipeline in her interview. At stage one novice teachers receive one-to-one guidance from their mentors. Usually it takes one year or two for the young teachers to get used to the school culture and make their judgments on various situations. Stage two provides teachers more freedom to make conscious decisions in their work. When teachers move onto stage three, they display a high confidence level in teaching, adopt the critical thinking in daily work, and build good relationships with other teachers. When teachers reach the expert level, stage four, they demonstrate the leadership potentials as well as extraordinary teaching capabilities. With the excellent performance and interpersonal relationships, some teachers emerged from the crowd and became the teacher leaders. The YTA system attracts and retains the most brilliant teachers. Teacher leadership emerges from the daily practice and is enhanced through peer recognition (cf. Spillane, 2006).

5.2.4 Principal’s empowerment strategy: Culture-based empowerment

In the Redbrick School, a climate of democracy encouraged teachers to engage in

leadership. The freedom of speech, the self-governed YTA, as well as the collaborative decision making have been embedded in the school culture for decades. Principal Jin described the teacher empowerment in the Redbrick School as a “deliberate process”. Clearly in the Redbrick it has become a tradition to discuss major issues openly before making the final judgment. This leadership philosophy can be traced back to the founder of the school, Mr. MA Xiangbo, who was a pioneer in introducing the self-governing approach into the Chinese schools (Hayhoe & Lu, 1996).

Rogers (1969) perceives the culture-based empowerment as a symbiosis which highlights the mutual respect and reciprocity of value. Gronn (2000) also portrays the distributed leadership as a collective intelligence flowing within the school system. One teacher who had worked in several schools compared the working culture in the Redbrick School with other schools. She pointed out that even many schools claimed that they embraced the idea of democratic management; very few of them really put these words into actions. She said, “In some schools democracy means keeping everyone informed of the decisions. However, in the Redbrick, democracy means keeping everyone involved in the decision making process.” One example she gave was that in the Redbrick, the YTA let the young teachers to decide the teacher training programs. At the end of each semester, the YTA members need to fill in a questionnaire survey evaluating their performance during the previous semester. The last section of the survey asks the teachers to list out their needs for the special guidance and choose the specific training programs from the list. The YTA summarizes teachers’ choices and arranges the training accordingly during the summer holidays.

5.2.5 Principal’s empowerment strategy: Position-based empowerment

Apart from the culture-based empowerment, the Redbrick School case also displayed a more traditional power distribution approach: the position-based empowerment. One unique feature of the Redbrick School was the Young Teacher Association (YTA). The Head of the YTA was elected by the teachers. This has been a formal leadership position which represents the young teachers under 40 years of age. As a self-governed organization, the YTA has its own leadership pipeline. Teachers who take leadership positions in the YTA have specific job descriptions on top of their teaching responsibilities.

This formal model of teacher empowerment has been embedded in structure and

protocol. Researchers suggest that the official teacher empowerment encourages a sense of ownership; it constrains the leader's position power within boundaries at the same time. (Leithwood, Mascall & Strauss, 2009) The focus of the YTA was on teachers' professional development, including the in-service training projects and the pedagogy workshops. The purpose of separating the YTA training from other compulsory teacher training was that the YTA had built its own professional network with the external educational trainers who provided more specific guidance to the young teachers. YTA's administrative costs were partly financed by the local education bureau. The school principal had regular meetings with the YTA leaders. Principal Jin said his role was to provide resources both financially and intellectually to the YTA.

5.2.6 Driving forces of distributed leadership

The first driving force is teachers' high level of confidence. When conducting the interviews, I sensed the teachers' self-belief in explaining their roles, responsibilities, and reactions to challenges. During the interviews, one Chemistry teacher quoted, "Attitude is everything" (cf. Keller, 1987). He elaborated that teachers were confident because they were able to perceive mistakes as learning opportunities. Nobody liked the negative results and face-losing, but in the Redbrick people followed the principle that "blaming is not an option". The Head of the YTA told that the first lesson she gave to the newly recruited teachers was "learn to believe in yourself not only when you succeed, but also when you fail".

The second driving force is the leadership pipeline. In the Redbrick, the YTA played an important role in nurturing young teachers' development. One English teacher said she chose the Redbrick as her career starting point because she heard the Redbrick was the place where teachers' biggest potentials could be exploited. After being an active YTA member for 2 years, she had been elected the mentor for other newly recruited teachers. Since most of the leadership positions in the YTA change every two years, the majority of the members had opportunities to assume leadership roles through the pipeline. The YTA leaders and their successors had at least three months time for knowledge transition and co-working to ensure the new team could function. Bolman and Deal (2003) argue that leaders should create conditions to nurture people who can carry out meaningful changes. In the Redbrick School, the leadership pipeline contributed to the school's sustainability in human resource and intellectual capital

accumulation. Once the intelligence was shared and good interpersonal relationships were built, it minimized the risks of losing one or two key individuals.

5.2.7 Barriers to distributed leadership

Despite the driving forces discussed above, there are some complicating factors that hinder the leadership distribution in the Redbrick school. The first dilemma was that some teachers perceived the collaborative decision making as an extra burden. When the situation called for a quick decision, using the collective decision making strategy to collect opinions from different perspectives was way too time-consuming. One teacher leader questioned the idea that democratic management was the answer to everything. She said, “We need a more decisive principal. A wise decision does not always mean the group satisfaction.”

Linked to the collective decision making, the second barrier was the micro-politics within the management team. When the resource was scarce, the conflicts among different interest groups were unavoidable. Principal Jin said like many other organizations, the Redbrick also had “whistle blowers, opinion leaders, and free riders” in the team work. His way of managing the internal conflicts was to “be fair and reasonable”. Principal Jin said, “I never forget that I am leading a group of highly educated professionals. Coercion does not work here.” The democratic school management required the principal to reconcile various interest groups as a mediator or even a politician (cf. Bolman & Deal, 2003).

5.3 The Ocean School case

The Ocean School featured the school teachers as change agents. By conducting researches, teachers reflected on their teaching performance, team work, knowledge creation, and professional growth. This case investigated how distributed leadership supported the learning community and teachers’ professionalism in a Chinese school.

5.3.1 The Ocean School background

The Ocean Secondary School was first established in 1945 as a private school funded by the democrats before the liberation of Shanghai. After its establishment, the Ocean School had experienced a series of mergers. By the time this research was conducted,

the modern Ocean Secondary School comprised 39 classes from Grade 7 to 12 with approximately 1400 students and 120 teachers. The school was divided into the lower secondary section and the upper secondary section. Each section had its own campus along one street. The core leadership team consisted of one principal, two vice principals for lower secondary section and two for upper secondary section.

5.3.2 Teacher professionalism: Developing teachers into researchers

By the end of 2007 the Ocean School launched a national project financed by the Ministry of Education: *The Action Research on Improving School Leadership under the Organizational Changes*. This research project aimed at involving more people into school leadership work and developing people's leadership capacity at various levels. Over 70% of the teachers in the Ocean School voluntarily joined the project. Participants formed research teams targeting at four domains: school administration, pedagogic leadership, class management, and student leadership.

According to the three-year research plan, by the end of 2009, four research teams should compose their research reports and then compile them into a book. However, in the early phase of the project, teachers found conducting the academic research was a rather alien concept to them. In order to prepare teachers with necessary research skills, a few external professors from the national teacher training university were invited to the Ocean School. Once a month, these professors organized the research seminars with the teachers. In the seminars the teachers learned how to use different research methods and compose a solid research report.

The teachers summarized the three advantages of conducting a school-based research project. First, they knew the students better through researching the class dynamics. In return, the quality of teaching got improved. Second, the teachers shared their research outcomes with others. A learning community was built through the research project. Last but not least, the teachers became more innovative in their work. They learned to observe and analyze their daily teaching practice with various theoretical lenses.

When I conducted interviews in the Ocean School, the four research teams were composing their final reports. I attended their research seminar. Dr. Chang was one of the external experts from the teacher training university who supervised the research project in the Ocean School. During the break of the seminar session, I had a chance to

talk to Dr. Chang. He said after guiding the teachers for almost a year, he found that the biggest difference between the teachers who attended the research project and those did not was that the former were more objective when analyzing their daily work. He also stressed that letting the practitioners do the research would dramatically benefit the teaching and learning. Because all the research questions emerged from the practice, they were thus more concrete and specific.

The school principal, Mr. Tong, used both financial and moral incentives to motivate his teachers. All the research project participants received an extra bonus for their over-time work and more in-service training opportunities. When the research reports got published, the authors would get remuneration. Every year the Ocean School received a lot of visitors from all over the world. Principal Tong always gave the stage to his teachers to introduce their research results. As he said, he wanted “everyone to know we are doing something magnificent”.

5.3.3 School value: Creating and leading an ethical school

During the interview, Principal Tong told me the story about how he led teachers to build an ethical school. The lower secondary section of the Ocean School admitted nearly 300 students in the school district every year. In the year 2008, the local education bureau suggested the Ocean School should receive 54 additional students whose parents were migrant workers in Shanghai. According to the domicile policy, the Ocean School had the right to deny the students who did not have residence records (Hukou System¹) in the same school district. Principal Tong called for a staff meeting to discuss whether or not the Ocean School should accept these 54 applicants.

As expected, the teachers held two opposite views. Those teachers who were against the proposal expressed their concerns: The teacher-students ratio in Ocean School was quite high already. If they admitted the extra 54 students, there would be one teacher to take care of over 40 students. Therefore, the teachers would have to

¹ Hukou System: A household registration record officially identifies a person as a resident of an area and includes identifying information such as name, parents, spouse, and date of birth. Since the 1980s, hundreds and thousands of migrant labors pour into cities with their kids. Without the Hukou, these kids are not allowed to enter the city schools as their counterparts who have the residence record. These migrant kids can either stay in their hometown and enroll in local hometown schools or pay extra fees to get access to city schools. (Macleod, 2001)

adjust their teaching plans. All of these changes would add a lot of extra workload to the teachers.

The teachers who supported the idea of taking more students gave the following reasons: The local education bureau would secure the finance and facility resources to the Ocean School. The local students would have a chance to study with the migrant students who came from different parts of China. These migrant students should be integrated into normal classes instead of being isolated in one special class.

Principal Tong said it was one of the most difficult decisions he made. The principal, along with the Party secretary and two vice principals weighed the pros and cons and finally decided to admit those 54 students to their lower secondary section. When being asked how to convey the decision to the teachers and convince them to implement the decision, Principal Tong replied that first, he promised to provide all the necessary resources the teachers would need. Second, the Ocean School recruited five teaching assistants from the teacher training university to share the administrative work with the class teachers.

Principal Tong said, “Teachers all understand the professional ethics one educator should bear. But when it affects the personal interests, making the right choice is far from easy.” One subject coordinator referred to the same story in his interview. He recalled that not all the teachers accepted the decision at the first stage. Many opinion leaders refused to take more students in their classes. They even gathered a group of parents to express their dissatisfactions to the principal’s office. In the end, the principal along with six class teachers presented a concrete action plan to the dissenters. This action plan included the pre-tests to evaluate the students’ knowledge level, the teaching assistance policy, the resource assurance, and a feedback system. By the end of the semester, teachers and parents agreed to admit extra students to the Ocean School. 47 out of 54 migrant students were admitted. The remaining seven students did not enroll due to their family reasons.

During the interviews, teachers who participated in the decision making process said the plan was risky but the result was rewarding. One of them said the whole school had a better understanding of their value toward the society at large. One teacher concluded, “As a teacher, I know what I stand for now. I am proud of my profession”.

5.3.4 Principal's empowerment strategy: Long-term empowerment

The three-year national project in the Ocean School provided a self-reflective environment for teachers to rethink and redesign their daily teaching performance. The school principal empowered teachers to conduct empirical research in their classes. Empowering teachers to be researchers had its strategic significance. Principal Tong in his interview pointed out that a successful school should not rely on a few elites, because the personnel change would damage the school competitiveness if the “key people would be gone”. The research project encouraged teachers to share their expertise within the team. Thus, the whole team became more competitive instead of the individuals. A learning community was established through this process.

The three years' time span gave the teachers sufficient time to learn the new skills and practise them. When this research was conducted, over 20 teachers had published one or two articles in the education journals. When considering what has been the biggest change for teachers after participating in the national research project, there was a consensus that the teachers felt more confident in teaching and leading. All the interviewees agreed that this long-term project provided teachers with sufficient resources to develop their profession.

5.3.5 Principal's empowerment strategy: Short-term empowerment

Apart from the long-term teacher empowerment, Principal Tong also used pragmatic power distribution in the Ocean School. This type of empowerment is a reaction toward external events and it is characterized by its ad hoc quality. (cf. Leithwood, Mascall & Strauss, 2009)

The second story told us that at a critical moment, the school principal empowered a temporary task force to make an action plan and convince the dissenters. This short-term empowerment solved the conflict among the teachers. As Principal Tong said, “It was a critical moment because you will either win the support or lose the trust from your teachers. I had to find those teachers who really believe in our school values, and more importantly, who can do a good job.”

In a high stakes pressured environment, empowerment can be difficult, because teachers did not want to risk their interpersonal relationships or sacrifice their time. Thus, it is crucial that the leader can create a comfortable and supportive environment in which the empowered teachers are willing to assume a temporary informal leadership

role (cf. Martin, 2002).

5.3.6 Driving forces of distributed leadership

During the interviews, the teachers who participated in the national research project emphasized that they had acquired new knowledge and skills to improve their teaching. Different from the in-service teacher training programs, developing teachers into researchers focused on the internal knowledge creation and circulation. Teachers' self-efficacy was enhanced through knowledge accumulation.

The second driving force in the Ocean School was the external professional guidance. University experts were invited to guide teachers' researches. They brought in the most up-to-date theories, research methods, and international perspectives. The research seminars guided teachers to design the research instrument and collect the empirical data. After collecting the first-hand data, the teachers learned how to analyze the data and to compose a research report. Teachers claimed such research skills training were extremely important for them to complete the project in time and with high quality.

5.3.7 Barriers to distributed leadership

Although many teachers in the Ocean School confirmed that they were empowered in the long-term and/or short-term projects, there were still some obstacles hindering the leadership distribution. The first concern was that some empowered teachers did not fulfill their tasks. These teachers were not fully prepared for the challenges or they over-estimated their leadership capacity. Thus, when promoting the distributed leadership in the school, it was crucial to develop an evaluation system. The school principal should have an overall supervision of teachers' work and provide guidance when needed.

Another challenge was to differentiate distributed leadership from pseudo empowerment. People reacted to the empowerment differently. One teacher mentioned that she joined the research team just because most of the other teachers did. She was afraid that if she did not do some teaching-related research, she would be "left out". During the interviews, a few teachers also complained there were some free-riders in the team. Thus, the genuine distributed leadership brings out the commitment from the empowered teachers.

6 QUANTITATIVE DATA FINDINGS

This chapter presents the quantitative data from the questionnaire survey. There are six sections in this chapter. The first two sections introduce the questionnaire design, the sample selection, and the demographic data of the survey participants. The third section focuses on the internal consistency analysis of the questionnaire as well as the survey validity. Section four combs through respondents' answers to 20 questionnaire items under four domains of self-efficacy. I will compare the quantitative data with the qualitative findings in Chapter 5. Section five examines the internal correlations among the four domains and their relationship to teachers' self assessment. Section six concludes the main findings from the quantitative research.

6.1 Questionnaire design

In the research design of this study, the quantitative research plays a supportive role to the qualitative research. The mixed methods approach triangulates the data collected from both quantitative and qualitative methods. In the quantitative research I used the questionnaire survey to examine the teachers' self-efficacy levels in three research schools. This questionnaire consists of three parts: the participants' personal information, the participants' self-efficacy levels, and participants' self assessment. A total of 60 questionnaires were distributed with a 100% response rate in each school. The questionnaire was originally in the Chinese language for the convenience of the respondents. The questionnaire was later on translated into English for the purpose of the thesis and international readers.

In the first part of the questionnaire, the participants provided their personal

information on the following aspects: gender, years of teaching experience, current position, and grade level. The second part of the questionnaire focused on the four domains of teachers' self-efficacy level including decision-making (DM), teaching and research (TR), interpersonal relationships & cooperation (RC), and school culture (SC). Before going to the field, I collected the information about each research school and found all the three schools were conducting a few school-based researches with the topics of school culture, school leadership, and students' learning. In order to adapt the questionnaire into the school context, I intentionally added the context-related questions such as the school-based curriculum development, hierarchical cooperation, and the school-based research project. The third part of the questionnaire asked the participants to give a self assessment to their work performance in the previous semester from 1 (Not satisfactory) to 4 (Excellent performance and made great progress).

6.2 Sample selection and demography

In this study, 20 teacher leaders from each research school participated in the questionnaire survey. All the 60 participants have been active in the leadership positions for years. The purpose of using the purposive sampling is to ensure the researcher can get access to the knowledgeable people who hold a professional role, expertise and experience to fulfill the research inquiry (Cohen et al., 2007).

Due to the fact that my research was conducted during the summer vacation, my questionnaires were distributed during the school executive meetings and got a 100% response rate. For the convenience of analysis, I group the subject coordinators, the teacher association leaders, and the Heads of the year under the category of teacher leaders. The school principals, the vice principals and the Party secretary are grouped under the category of top management team. This research aims at exploring the relationships and interactions between these two groups. The first focus is how the top management team empowers teacher leaders. The second focus is how the teacher leaders take the initiatives to assist the top management team in leading the school.

Table 4 shows that in the three schools the majority of the school leaders were female (71.1%). This result corresponds to the reality that in China there are more female teacher leaders than their male counterparts in the basic education system in big cities such as Shanghai. However, the gender distribution tends to be more equal in

schools at township and village levels. (cf. Ding, Chen & Sun, 2011).

TABLE 4 Sample demographics

	Sunshine		Redbrick		Ocean		All	
	n	%	n	%	n	%	n	%
GENDER								
Male	8	40%	2	10%	7	35%	17	28.3%
Female	12	60%	18	90%	13	65%	43	71.1%
YEARS OF TEACHING EXPERIENCE								
0-3Years	3	15%	0	0%	1	5%	4	6.70%
4-6Years	1	5%	6	30%	11	55%	18	30.00%
7-10Years	1	5%	8	40%	3	15%	12	20.00%
>10 Years	15	75%	6	30%	5	25%	26	43.30%
CURRENT POSITION								
Head of the Year	3	15%	3	15%	6	30%	12	20.00%
Subject Coordinator	13	65%	17	85%	10	50%	40	66.70%
Principal/Vice-Principal	3	15%	0	0%	3	15%	6	10.00%
Party Secretary	1	5%	0	0%	1	5%	2	3.30%
GRADE LEVEL								
Grade 1-6	7	35%	0	0%	0	0%	7	11.70%
Grade 7-9	12	60%	0	0%	14	70%	26	43.30%
Grade 10-12	0	0%	20	100%	6	30%	26	43.30%
Other	1	5%	0	0%	0	0%	1	1.70%

In Sunshine School, 75% of the respondents had more than 10 years' teaching experience, while in the Redbrick School and the Ocean School the percentages were only 30% and 25% respectively. This data echoed the findings from the qualitative research that in the Redbrick and the Ocean, young teachers were more active in leading. In the Sunshine School and the Ocean School, both the school principals and the Party secretaries participated in the survey. However, in the Redbrick School, only teacher leaders filled in the questionnaires because the school principal and Party Secretary were not available. Three cases represented three different types of schools: the Sunshine School covered the primary (7 respondents) and the lower secondary (12 respondents) levels², the Redbrick School was at upper secondary (20 respondents) level, and the Ocean School consisted of both lower (14 respondents) and upper secondary (6 respondents) levels. The statistical data indicated that teachers did not have more than one official leadership role in the school. For example, the school principal does not serve as the subject coordinator at the same time. This implies that in these three schools, the official leadership structure tends to make clear job descriptions

² Note: Sunshine School has 1 respondent (Party Secretary) does not teach a subject at any grade level.

for school leaders and reduce the role ambiguity

6.3 Internal consistency analysis

Cronbach's Alpha is widely used as a measure to test the reliability of the survey answers. In order to examine the internal consistency of the questionnaire items, I applied Cronbach's Alpha to calculate the coefficient of reliability in the SPSS. (Cortina, 1993; Cronbach, 1951) Cronbach's Alpha examines if the respondents' answers in this survey were stable and consistent.

Table 5 shows that the Cronbach's Alpha values are DM (0.776), TR (0.763), and SC (0.760). Since all the Cronbach's Alpha values are all above 0.7, the internal consistencies of the respondents' answers are acceptable. The Cronbach's Alpha in RC (0.816) is above 0.8 which indicates the six items have good internal consistency. Generally speaking, the higher Cronbach's Alpha is, the more reliable the test is. What is worth noting here is in social science researches the Cronbach's Alpha value of 0.7 or higher is considered acceptable. (Nunnally, 1978) Thus, the data collected through the teachers' self-efficacy questionnaire in this research is reliable.

TABLE 5 Internal consistency analysis of the four questionnaire sub-sections

Sub Sections	Cronbach's Alpha	Items
Efficacy on Decision Making (DM)	0.776	4
Efficacy on Teaching and Research (TR)	0.763	6
Efficacy on Interpersonal relationships and Cooperation (RC)	0.816	6
Efficacy on School Culture (SC)	0.760	4

6.4 Teachers' self-efficacy levels in three schools

In the second section of the questionnaire, there were altogether 20 questions to evaluate

the teachers' self-efficacy levels in the three schools. This section had four domains including efficacy on decision making (DM) with 4 items, efficacy on teaching and research (TR) with 6 items, efficacy on interpersonal relationships and cooperation (RC) with 6 items, and efficacy on school culture (SC) with 4 items. The participants were asked to score their levels of agreement from 1 (totally disagree) to 9 (strongly agree) on each item.

All the 20 statements were formed in a positive tone which means the higher the score is, the more confident the respondent feels in this situation. When examining the survey results, I divided the Likert scale into three stages: scores from 1 to 3 mean teachers have low self-efficacy, from 4 to 6 mean teachers have medium self-efficacy, and from 7-9 mean teachers have high self-efficacy. I calculated the means and the standard deviations of each item in the questionnaire. The means showed teachers' self-efficacy level in a certain situation described in the statement.

6.4.1 Efficacy on decision making

In the decision making domain, the teachers in the three schools marked their levels of agreement on the following four statements:

DM5 I feel I am consulted by the principal in the decision making process.

DM6 My voice is heard and valued during decision making.

DM7 I feel I easily get access to the information I need before I make any decisions.

DM 8 I have the autonomy to lead my team without too much intervention from other leaders.

Table 6 summarizes the answers in the decision making domain. When looking at Item DM5, we can see that teachers in the Redbrick and the Ocean schools felt that during the decision making process, they were consulted by school principals to some extent, but their ideas were not completely heard and valued. In the Sunshine School, the respondents showed a medium level of self-efficacy on being consulted by the superior and a high level of self-efficacy on getting their opinions valued.

TABLE 6 Efficacy on decision making in the three schools

School	DM 5		DM 6		DM 7		DM 8	
	Mean	St.Dev	Mean	St.Dev	Mean	St.Dev	Mean	St.Dev
Sunshine	6	2.79	7	2.75	7	1.94	8	2.10
Redbrick	4	2.49	5	2.68	7	1.82	9	1.24
Ocean	4	2.00	5	2.32	7	1.74	9	0.83

In Item 7, all the three school respondents demonstrated high levels of self-efficacy (Mean=7) in information sharing and access. What is worth mentioning here is, that all the teacher leaders in the three schools felt they had high autonomy in leading their own teams without unnecessary intervention. This data from the survey echoed with the findings from the interviews that teacher leaders in the three schools felt they were empowered to take full charge of their teaching groups or project teams. It was widely mentioned that school principals mainly played the role in backing up teacher leadership.

6.4.2 Efficacy on teaching and research

The efficacy on teaching and research was measured by six items. TR9, TR10, TR13, and TR14 examined the teachers' confidence in their teaching abilities, especially in the areas of using teaching materials, helping students with learning difficulties, coping with insufficient parental support, and facilitating independent learners. TR11 and TR12 focused on teachers' professional development and their influence on school-based research projects. Item TR 12 was designed in the context of the eighth Chinese national curriculum reform which encourages teachers to discover and enhance their teaching potentials through conducting researches (Zhong & Yang, 2006).

TR9 I have influences on choosing the teaching materials and instruments for the teaching groups.

TR10 I am confident in my abilities to help students with learning difficulties.

TR11 I am willing to participate in continuous professional development.

TR12 I feel I am able to influence school-based research projects.

TR13 When there is a lack of parental support; I can still promote students' learning.

TR14 I believe I can increase students' interest in learning and develop them

into independent learners.

From Table 7 we can see that all participants indicated a high self-efficacy on teaching and research. In TR9, teachers from the Sunshine School gave an average 7 out of 9 on utilizing teaching resources in the school. This result was backed up by the interview with one music teacher. She mentioned that the Sunshine School principal gave her full support in using the facilities and classrooms for rehearsal during the school anniversary celebration. Respondents from the Redbrick and the Ocean schools gave 7 and 6 for using the teaching materials and instruments. However, during the interviews in these two schools, teachers and principals did not give concrete examples on this issue. Thus, the quantitative data revealed the information which was not mentioned in the qualitative research.

TABLE 7 Efficacy on teaching and research in the three schools

Efficacy on teaching and research in three schools													
	TR9		TR10		TR11		TR12		TR13		TR14		
School	Mean	St. Dev	Mean	St. Dev	Mean	St. Dev	Mean	St. Dev	Mean	St. Dev	Mean	St. Dev	
Sunshine	7	2.01	8	1.50	8	1.88	8	1.48	8	1.63	8	1.29	
Redbrick	7	1.39	8	1.03	8	2.56	8	2.06	8	1.07	7	1.22	
Ocean	6	1.71	7	1.18	7	1.46	8	1.07	7	1.85	7	0.94	

The respondents in all the three schools showed a high level of self-efficacy in helping the student with learning difficulties in TR10. According to the qualitative research, the Sunshine School emphasized “*providing a friendly and equal learning environment to all the students who have various academic, social, physical needs*” in their new school vision since 2004 (The Sunshine School, 2004). Principal Fu declared in her interview that she encouraged teachers to have individual discussions with each student in their class. She emphasized that teachers should know students’ special needs and provide support in a student-friendly way in the Sunshine School. In the Ocean School, teachers combined their research projects with the subject teaching. One research team was conducting researches on pedagogic leadership. One mathematics teacher pointed out that he adjusted his teaching plan several times after analyzing the class dynamics through the research survey. Teachers also shared their best practices in helping students with learning difficulties in the research seminars in the Ocean School. The Redbrick School is a high-performing general upper secondary school in Shanghai. Therefore, the

students in the Redbrick are mostly eminent in academic studies. During the interviews, the teachers did not mention the challenges in managing the students with learning or discipline problems. But the quantitative data showed they felt confident in this field too.

Item TR11 examined teachers' willingness in participating in professional development. All the respondents from the three schools showed strong agreement. Referring to the qualitative findings, we can match these high scores with the interview findings. The Young Teacher Association in the Redbrick School helped the young teachers building their career ladder. Teachers in the Sunshine School also gave their examples of attending in-service teaching seminars and class observations. In the Ocean School, teachers joined the research project to conduct work-related researches and had their research outcomes published. Teachers summarized the benefits of attending these programs to be broadening the views, extending professional networks, and receiving leadership opportunities.

Against the background of the eighth national curriculum reform, teachers said they were given more autonomy in designing and developing the school-based curriculum. Statistically, Item TR12 demonstrated the teachers' strong confidence in influencing the school-based research. Teachers in the Sunshine School integrated the interdisciplinary teaching in their school-based curriculum. The Ocean School launched a national research project in which over 70% of the teachers participated. Both the quantitative and the qualitative data showed that after the national curriculum reform, teachers received more autonomy to conduct the school-based research. However, during the interviews, some teachers also mentioned that they expected more guidance in analyzing the class dynamics with the theoretical frameworks. For example, the Ocean School cooperated with the teacher training college. There were external professors who visited the school on a regular basis, teaching research methods and organizing academic seminars.

Item TR13 investigated whether teachers felt capable of promoting students' learning when there was no sufficient parental support. The statistical data showed that the teachers in the three schools could manage their teaching at school with great confidence. This finding was also backed up by Item TR 14 which examined teachers' beliefs in nurturing students into independent learners. Teachers scored their confidence levels in the scale between 7 and 9. In the interviews teachers used the phrases such as "number one concern" (the Sunshine School), "main responsibility" (the Sunshine

School), “extremely crucial” (the Redbrick School), and “the meaning of schooling” (the Ocean School) to describe the significance of teaching and learning. Interviewees from the Sunshine School and the Ocean School also mentioned that most Chinese parents checked students’ homework on a daily basis during the basic education level from Grade 1 to 9. Sometimes the parents also provided guidance and tutoring when students had learning difficulties. However, parents had less involvement in checking and guiding students’ homework when students entered upper secondary schools (from Grade 10 to 12) in the Ocean upper secondary section and the Redbrick School. One teacher from the Sunshine School and two teachers from the Ocean School said they paid extra attention and care to the students who had family issues, i.e. parents as migrant workers, divorce, or single parenting.

6.4.3 Efficacy on interpersonal relationships and cooperation

The third domain of the survey was teachers’ self-efficacy on the interpersonal relationships and cooperation. There were 6 items under this category.

RC15 I believe I can motivate and support my colleagues to achieve their goals.

RC16 I feel I can competently complete the tasks assigned by the principal.

RC17 As a teacher leader, I contribute to hierarchical collaborations between senior management team and teachers.

RC18 As a teacher leader, I know the needs from my team members, and therefore I am able to fulfill their requests.

RC19 I can establish good relationship with all students by building trust and respect.

RC20 I believe I win parental support and trust through my excellent work.

This domain included teacher leaders’ interpersonal relationships with colleagues, superiors (the school principals), parents, and students. It also indicated teachers’ cooperation with their team members. Both RC15 and RC18 focused on the horizontal collaboration among the teachers.

From Table 8, the results showed that teacher leaders were aware of colleagues’ needs and felt confident in helping them achieve their goals. During the interviews, interviewees widely mentioned the concept of teamwork. There were several forms of

teamwork in the three schools including project-based teams (the Ocean School), interdisciplinary teams (the Sunshine School), subject-based teams (the Sunshine School), permanent association (the Redbrick School), and temporary task force (the Ocean School).

TABLE 8 Efficacy on interpersonal relationships and cooperation in the three schools

School	RC15		RC16		RC17		RC18		RC19		RC20	
	Mean	St. Dev	Mean	St. Dev	Mean	St. Dev	Mean	St. Dev	Mean	St. Dev	Mean	St. Dev
Sunshine	7	1.59	8	1.28	8	1.49	8	1.22	9	1.19	8	1.48
Redbrick	8	1.51	8	1.07	8	1.01	9	0.95	9	0.47	8	1.23
Ocean	6	1.60	7	1.86	7	0.85	7	2.06	8	0.87	7	1.27

Different from RC15 and RC18 which looked into the teacher leaders' role in horizontal collaboration, RC16 and RC17 focused on their influence on teachers' vertical collaboration with the senior management team. In RC16, the teacher leaders in the three schools were very confident in completing the tasks assigned by the principal. In the interviews, the Sunshine School teachers gave the examples of leading the school orchestra and initiating sports activities. The school principal also adjusted the timetables for teachers to have regular team meetings. In the Redbrick, the Head of the YTA led a self-governed organization and built its own leadership pipeline. Teachers from the Ocean School formed a task force, assisting the school principal to collect empirical data and convince other teachers and parents to accept the decision about student enrolment expansion. In these cases, the teacher leaders played the role as the medium between senior management team and the other teachers.

Item RC19 and RC20 scrutinized if the teacher leaders felt confident in maintaining good relationships with students and parents. Both the Sunshine School and the Redbrick respondents gave the highest scores in winning students' trust and respect. Teachers from the Ocean School also gave an average 8 in this statement. The Sunshine School teachers brought their school vision into actions by practising the slogan "*Grant the sunshine everywhere on our campus*". The teachers agreed that small things such as having face-to-face talks, remembering every student's name, crouching down or sitting down during the talks can shorten the power distance between teachers and students. As to the teacher-parents relationship raised in RC20, the Redbrick school teachers said

they used the online forum, regular phone calls, and emails to communicate with parents. The teacher-parents meetings usually took place twice a semester. Parents were also invited to other school events. The teacher leaders in the Ocean School gave the example of how to convince the parents to accept the school decision of admitting extra 54 immigrant students. Although the teachers met some resistance at the beginning, they finally won the support from most of the parents when they emphasized the school ethics.

6.4.4 Efficacy on school culture

The focus of the fourth domain was on the efficacy on school culture. This domain was examined by the lenses of the teachers' personal connection to the school culture (SC21), the school ethics (SC22), the challenging environment (SC23), and the teachers' sense of belonging (SC24).

SC21 I believe I represent our school culture throughout every day work.

SC22 I feel everyone in school is treated equally and fairly.

SC23 I enjoy my job even in difficult situations.

SC24 I believe I am an irreplaceable part of the school. I can greatly contribute to school's future development.

The survey data in this domain was concordant with the results from the previous three domains (Table 9). Both the Sunshine School and the Redbrick School teachers had high-level beliefs in practising school culture during their daily work. The Ocean School teachers gave an average 6 to this statement. The concrete examples given by the interviewees backed up their choices in the questionnaire survey. The Sunshine School embedded the values of respect, trust and care in their school vision. The idea of interdisciplinary teams encouraged teachers to cooperate with new colleagues. The new culture also eliminated the interpersonal estrangement and dissection caused by the major school merger. The Redbrick School has a robust culture. The successive principals of the Redbrick infused their educational philosophies into the school culture. Many traditions such as the Young Teacher Association, democratic management, encouraging innovation and risk-taking were seen as the seeds from which the school culture blossomed and harvested. The Ocean School teachers saw themselves as the culture constructors. Since 2007, many school teachers worked on the national research project. They perceived this project as a milestone in their school history which should

be characterized as the school feature. However, a few teachers in the Sunshine School and the Ocean School also mentioned that they did not have a deep understanding of how to link the school culture with their subject teaching.

Table 9 Efficacy on school culture in the three schools

Efficacy on school culture in the three schools									
	SC21		SC22		SC23		SC24		
School	Mean	St.Dev	Mean	St.Dev	Mean	St.Dev	Mean	St.Dev	
Sunshine	8	1.47	8	1.23	8	1.29	7	2.04	
Redbrick	8	1.25	9	0.94	8	0.94	8	1.12	
Ocean	6	1.73	7	1.31	7	1.23	7	1.32	

SC22 looked into the ethics of equality from the teachers' perspective. As literature points out, Chinese schools have the feature of a bigger power distance comparing to their western counterparts. The power is distributed unevenly in such a hierarchical structure. (Jackson & Bak, 1998; Walker, Bridges & Chan, 1996) However, in contrast to the previous research findings, all the three research schools respondents strongly agreed that they were treated equally and fairly in their schools. Especially in the Redbrick School, the majority of the respondents gave a 9 to this item. The meaning of equality and fairness was elaborated by the interviewees as "free speech", "open discussions", "transparent decision making process", as well as "constant feedback".

SC23 explored the respondents' confidence level in dealing with work-related challenges. The teacher leaders usually face the pressures from two sources: one from their own class teaching and another from the leadership work. Challenges related to leadership work referred to by the interviewees included "role ambiguity", "work-private life imbalance" (the Sunshine School), "micro-politics", "indecisive leadership" (the Redbrick School), "capacity-position mismatch", and "free-riders in teamwork" (the Ocean School). Bandura (1994) and Pajares (1997) believe that teachers' self-efficacy is grounded in people's perceptions on both environmental opportunities and obstacles. Based on the statistical data from the survey, respondents in the three schools could bear the uncertainties and perform in accordance with the increasing demands. In the interviews, the teacher leaders also mentioned that they felt more self-actualized if the school cultural context acknowledged and appreciated their efforts.

Item SC24 was future-oriented. It examined teachers' efficacy level on their future contribution to the school development. There were two reasons for categorizing this item in the domain of school culture. First, it reflected whether the school culture recognized and appreciated the uniqueness of every single teacher. Second, it explored if the school culture nurtured teachers' long term commitment to the school development. Teachers' answers to this statement were in conformity with the previous three statements in this domain. The qualitative evidence showed that many interviewees were willing to link their future careers with the school development. When being asked about the reasons for it, the teachers referred to the following aspects: "a healthy environment" (the Sunshine and the Ocean School), "an ethical school" (the Ocean School), "an inspiring atmosphere for novice teachers" (the Redbrick School).

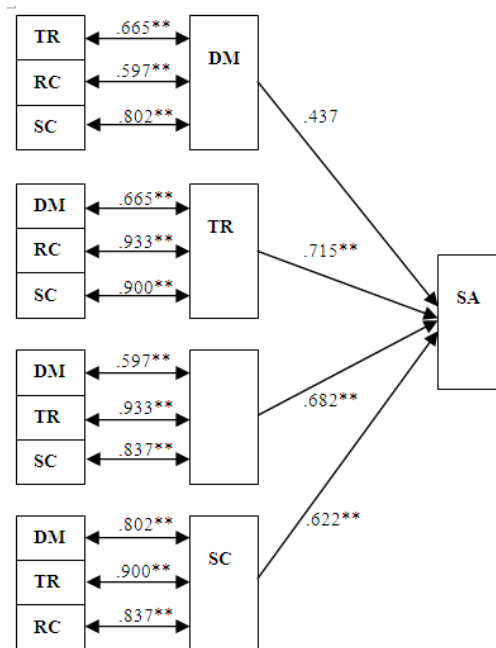
6.5 Correlations among teachers' self-efficacy domains in the three schools

The research focus of this study is to find out if distributed leadership exerts influence on teachers' self-efficacy level in the Chinese school context. This section tests the correlations among the four domains and their relationships with Item 25 teachers' self-assessment (SA). The correlation test answers two questions: First, if teachers feel confident in one domain, do they feel confident also in other domains? Second, which domains have strong influences on teachers' self-assessment on their performance in the previous semester? The three research schools were examined separately because of their unique contexts.

6.5.1 Correlations in the Sunshine School

From Figure 7 we can see that all the four domains have positive relationships with each other in the Sunshine School. The strongest predictor of teachers' self-efficacy level on decision making (DM) was the school culture (SC) (0.802**). Interpersonal relationships and cooperation (RC) had a strong positive influence on teachers' capacity in teaching and research (TR) (0.933**). School culture (SC) ranked as the second biggest predictor of efficacy on teaching and research (TR) (0.900**). Moreover, the majority of the respondents chose 3 (meeting the requirements and made some progresses) in their self-assessment (SA, Mean=3, St.Dev=0.324). The self assessment

result showed that respondents felt satisfied statically and had a high level of confidence in their performance. Teaching and research (TR) contributed significantly (0.715**) to the result of the self assessment. This is followed by the interpersonal relationships and cooperation (RC) as well as the school culture (SC). Teachers' efficacy on decision making (DM) also had a positive relation (0.437) to the teachers' self assessment result. But this correlation was not significant at the 0.01 level comparing to other predictors such as TR, RC and SC.



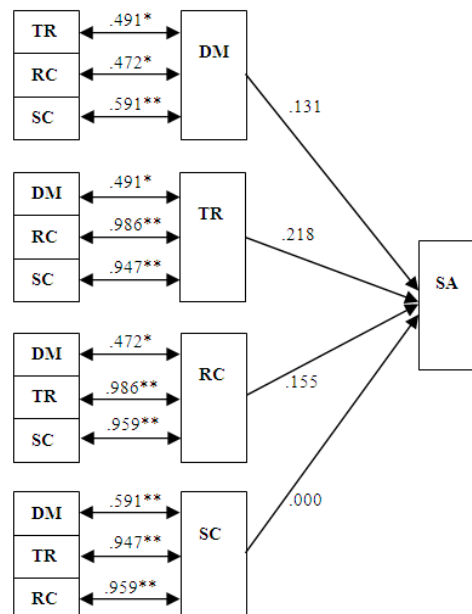
** Correlation is significant at the 0.01 level (2-tailed).

FIGURE 7 Correlations among teachers' self-efficacy domains in the Sunshine School

It can be concluded that in the Sunshine School, teachers' self-efficacy levels in the four domains were interrelated. For instance, the teacher who feels confident in building and maintaining interpersonal relationships with the colleagues also feels confident in conducting the teaching and research. In the self assessment, teachers felt satisfied with their performance and they believed they had made progress during the previous semester. This conclusion was heavily influenced by their efficacy on TR, RC and SC.

6.5.2 Correlations in the Redbrick School

When looking at the internal correlations in the Redbrick School (Figure 8), we can find that the efficacy on decision making (DM) predicted (0.591**) teachers' efficacy on school culture (SC). Similar to the Sunshine School, teachers' perception on their interpersonal relationships and cooperation (RC) played a decisive role (0.986) in their teaching and research (TR) capacity. School Culture (SC) was seen as the second biggest positive predictor to teaching and research (TR). Teachers also gave an average 3 (meeting the requirements and made some progresses) out of 4 in their self-assessment.



* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

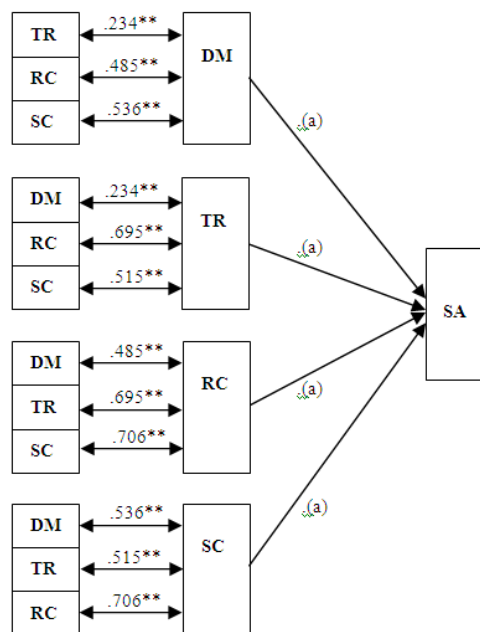
FIGURE 8 Correlations among teachers' self-efficacy domains in the Redbrick School

The statistics showed the positive correlations between the four self-efficacy domains and the teachers' self assessment result. However, such correlations were not significant. We can draw the conclusion that in the Redbrick School, good interpersonal relationships and cooperation contributed to teachers' high performance in teaching and

research. This also nurtured a healthy school culture which made teachers feel self-actualized and committed.

6.5.3 Correlations in the Ocean School

Figure 9 shows that the Ocean School had the similar findings that all the four domains were interrelated. The strongest predictor (0.536**) of the efficacy on decision making (DM) was the efficacy on school culture (SC). Similar to the Sunshine School and the Redbrick School, the interpersonal relationships and cooperation (RC) positively predicted teachers' teaching and research confidence level (TR) (0.695**). If teachers felt they had a big impact on school culture (SC), they also had a stronger self-efficacy on maintaining beneficial interpersonal relationships (RC) (0.706**) within the school.



** Correlation is significant at the 0.01 level (2-tailed).

(a) Cannot be computed because at least one of the variables is constant.

FIGURE 9 Correlations among teachers' self-efficacy domains in the Ocean School

In the last item of the questionnaire, all the teachers from the Ocean School chose 3 (meeting the requirements and made some progresses) in the self assessment. Thus, the statistics did not show what factors actually had the biggest influence on the

respondents' teaching performance in the previous semester. But, we can draw the conclusion that in the Ocean School, teachers felt satisfied with their performance. Teachers also believed that the good interpersonal relationships and cooperation would dramatically benefit the school culture. A democratic school climate encouraged teachers to make independent decisions on teaching.

7 DISCUSSION AND CONCLUSION

The last chapter discusses the findings from both the qualitative and the quantitative researches. It is followed by the conclusion section which summarizes the whole study. The limitations of this study are mentioned in this chapter as well. Based on the limitations, I will give the research recommendations to other scholars who share the similar research interest.

7.1 Discussion on qualitative findings

When comparing and contrasting the findings from the three case studies, I found that distributed leadership exists in the Chinese schools in different forms. There were three themes that emerged from the qualitative data: The first theme comes from the Sunshine School case, which is the individual-based empowerment versus the team-based empowerment. The second theme focuses on the culture-based empowerment versus the position-based empowerment (the Redbrick School case). The third theme looks into the long-term empowerment versus the short-term empowerment (the Ocean School case). What is worth mentioning is that even though each case has a specific focus, there are common features in all the three cases studies. The school leadership is distributed flexibly, sometimes even spontaneously, in the three research schools (cf. Spillane, 2006; Gronn, 2000). Figure 10 synthesizes the findings from the qualitative research.

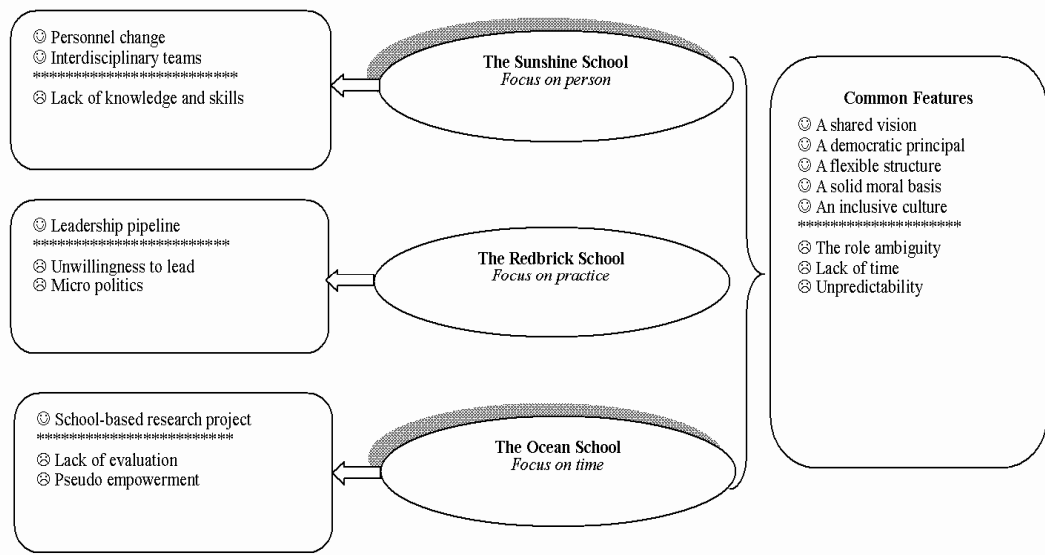


FIGURE 10 Synthesis of the three case studies

Although each research school has its unique background and practice, there are a few common features that emerged from the qualitative findings. During the interviews, I realized that most of the interviewees were not familiar with the concept of distributed leadership. But according to the concrete examples given by the interviewees, both school principals and teacher leaders practise the distributed leadership in their daily work. The interviewees gave an explicit statement such as “a shared vision can unite the whole school working toward a common goal.” The teacher leaders appreciated “a democratic school principal” who supported their initiatives. On top of that, “a flexible administrative structure” allowed the teachers to team up with different colleagues. Interviewees in all the three schools emphasized that they had a strong sense of belonging when working in an ethical school with “a solid moral basis” as well as “an inclusive school culture”. Teachers felt more committed to their work when the hierarchical barriers were removed. (cf. Zhang, 2008; Blasé & Blasé, 2004; Bennett, et al., 2003; Beatty, 2000; Clement & Vanderberghe, 2000)

If we compare the definition of distributed leadership in this study with the qualitative data, we can conclude that even if the school principals and teachers did not use the term of distributed leadership, they were actually practising it in their daily work. In many cases, the school principals empowered the teachers when an emergency took place. Such kind of leadership was emergent and fluid (Harris, 2005; Spillane, 2006).

The leadership responsibilities did not always connect to the official roles. Instead, the roles of leaders and followers can be shifted according to the situations. Last but not least, the interviewees agreed that they had experienced the personal and professional development after assuming the leadership roles in the school. (cf. Huang, 2007; Spillane, 2006)

Despite all the positive traits of the distributed leadership discussed above, there were also some challenges faced by the practitioners. Since the scope of leadership goes beyond the position, sometimes it is very difficult to draw a clear job description for the empowered teachers (Bennett, et al., 2003; Crowther, Kaagan, Ferguson & Hann, 2002). This means the teacher leaders have to play several roles at a time. However, the lack of time was another big barrier which prevented teachers from multitasking. Teachers even felt guilty when they failed to balance their work and private life. From the school principal's point of view, implementing the distributed leadership was sometimes risky because it was hard to detect teachers' readiness or predict the situation. All the three school principals agreed that even after they had empowered the teachers in a certain situation, they still followed the cases. A team-based empowerment approach was applied by them more often. Because equipping the teacher leaders with sufficient resources and assistance was one of the solutions to the unpredictability (cf. Gronn, 2008).

Spillane (2006) reminds us that distributed leadership is context bound. Figure 10 (on page 82) also shows the unique features of distributed leadership in each research school. The Sunshine School took the top management team change as an opportunity which led to a school-wide reform. Yet, the Redbrick School has institutionalized a young teacher leadership pipeline for decades. The Ocean School, on the other hand, explored teachers' leadership potentials by involving them into a school-based research project. I also summarize the learning points from the qualitative findings. First, the teacher leaders need special training which enhances their leadership knowledge and skills. Second, the school principal should give constructive feedback and effective evaluation after the empowerment. Third, the school principal should institutionalize the distributed leadership into the school culture and daily practice.

7.2 Discussion on quantitative findings

The quantitative approach investigated into teachers' self-efficacy levels in the three research schools. In general, the statistics showed that teachers felt confident in making work-related decisions, conducting researches, networking with peers, as well as influencing the school culture.

When relating the survey data to the interview findings, I found that teachers' self-efficacy came from various forms of distributed leadership in the school such as multidisciplinary teams, individual-based empowerment, and self-directed association. The statistics of correlations also illustrated that the teachers' self-efficacy in the four domains were inter-related. This finding implied that school principals could use both direct and indirect approaches to improve teachers' self-confidence in a certain field. For instance, if the school principal wants to improve teachers' confidence in teaching and research, on top of providing the direct pedagogical training (the direct approach), the principal can also create the conditions for teachers to cooperate with each other and improve their interpersonal relations (the indirect approach).

The last question in the survey asked the teachers to give a self-assessment about their performance in the previous semester. In accordance with high self-efficacy levels in the four domains (decision making, teaching and research, interpersonal relations and cooperation, and teachers' influence on the school culture), the respondents gave an average 3 out of 4 in the self-evaluation which meant they were satisfied with their performance and they had made some progress in work. Above all, in this study the quantitative findings aligned with the qualitative findings. I conclude that in the three research schools, various forms of distributed leadership enhanced the teachers' self-efficacy levels.

7.3 Limitations and recommendations

The limitations of this study can be categorized as follows. *The limitation of the school type:* Since all the three research schools are public schools, the findings of this study might not be applicable in the private schools. Thus, I recommend other researchers who share the similar research interest to investigate the distributed leadership and teachers' self-efficacy in private schools. *The limitation of the infrastructure:* This

research only presents the three case studies in Shanghai. However, the school leadership in other parts of China can be very different. Further studies conducted in the rural areas in China will be of great value. *Limitation of the language accuracy:* Since both the researcher and the research objects are native Chinese speakers, I conducted all the interviews, questionnaire survey, and participant observation in the Chinese language. All the research data were translated from Chinese to English afterwards. There are the risks that some contexts might be lost or the wording might be inaccurate after the translation. Hence, it is recommendable to conduct a longitudinal study of these three schools in the future. In addition, since the three research schools in this study have their own characteristics, it is recommendable to conduct similar research in other schools too.

7.4 Conclusion

This research looks into the distributed leadership and its influence on teachers' self-efficacy in three Chinese schools. The trend of decentralization in the educational system along with the eighth curriculum reform emphasizes the teachers' initiatives in developing the school-based curriculum and enhancing the school leadership (Zhong, 2006). As the three case studies showed, the distributed leadership emerges from the daily practice in various forms. The school principals used different empowerment strategies to delegate the responsibilities among the teachers in certain situations (cf. Spillane, 2006; Gronn, 2000).

In this research, I present the best practice of the distributed leadership in three Chinese schools. It is remarkable that both the qualitative data and the quantitative data supported the conclusion that distributed leadership does exist in the three research schools. What is worth mentioning is that such distributed leadership bears the following Chinese characteristics. First of all, although the interactions between the school top management team and the teacher leaders are active and diverse, there is more horizontal cooperation (among teachers) than vertical cooperation (between school principals and teachers) in schools. Second, in the three research schools the young teachers who are under 40 years of age tend to be more active in taking the leadership roles than the senior teachers. Third, promoting distributed leadership requires both teachers' initiatives and principals' empowerment. It is crucial for school

practitioners to understand that power can be expanded only if the school principals are willing to delegate the power and the teachers are ready to take on the responsibilities. Last but not least, in order to institutionalize the distributed leadership in the schools' daily practice, it is of great importance to equip teachers with the leadership knowledge and skills.

In conclusion, this study was conducted to reveal the implementation of distributed leadership in the three research schools in China. It is crucial to examine the school practice against the Chinese background. I hope that this study will contribute to the continuing discussions and further understanding of Chinese school leadership.

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APPENDICES

Appendix A: Research Cover Letter (English version)

Dear Principal:

My name is Meng Tian, a Master's degree student at the Institute of Educational Leadership, University of Jyväskylä, Finland. Currently, I am conducting a research in the field of distributed leadership in Chinese schools. The purpose for this research is to collect data for my Master's thesis. My research design requires me to conduct the individual interviews, a questionnaire survey, and the participative observation in your school. I kindly request for your permission to take your school as one of my research objects.

In order to collect my research data, I would like to invite 20 teacher leaders, including the school principals and the Communist Party secretary for one questionnaire survey. This questionnaire focuses on teachers' self-efficacy level in your school. Participants will answer 25 questions including the personal information, the teachers' self-efficacy evaluation and the self-evaluation about teaching performance.

On top of the questionnaire survey, I would also like to invite the school principal, the Communist Party secretary, and 2-3 teacher leaders to an individual interview. The interview topics include the interaction between the school principal and the teacher leaders, the principal empowerment strategies, and the best practice of distributed leadership in your school. One interview will last around 30-40 minutes. I will consult the interviewees beforehand if they allow me to take the notes and record the conversations.

With your permission, if the conditions allow, I would also like to conduct the participative observation in the research seminars and the staff meetings in your school.

I assure you that the school name and interviewees' names will remain anonymous in this study. Your personal data will be used only for research purpose. Please feel free to notify me if you wish to keep some information confidential.

Your participation is highly appreciated.
Sincerely,

Meng TIAN
meng.tian@ju.fi
+86-13564954556
Institute of Educational Leadership
University of Jyväskylä, Finland
15.06.2008

Appendix B: Research Cover Letter (Chinese version)

敬爱的校长:

您好!我是田梦,目前在芬兰于维斯屈莱大学的教育领导研究院攻读硕士。目前我正在就“中国学校中的分布式领导”这一主题进行研究,该研究的目的是为我的硕士论文收集数据。我的研究设计要求我在研究学校中进行个体采访、问卷调查以及参与式观察法。因此,我诚挚恳请您批准我将贵校作为我的研究对象之一。

为了收集我的研究数据,我恳请学校安排 20 位教师领导,包括学校校长和党支部书记参与一项问卷调查。该问卷的目的是调查学校中的教师自我效能感水平。参与者将回答 25 个问题,包括个人信息,教师自我效能感评价以及教学表现自我评价。

此外,我还想邀请学校校长,党支部书记和 2-3 位教师领导者参与我的个体访谈。访谈的主题包括学校校长和教师领导者之间的互动,校长的授权策略以及贵校分布式领导的成功案例。每个个体访谈将持续大约 30-40 分钟。我在访谈前会征询访谈对象是否允许我做笔记及录音。如果条件允许并得到您的许可,我非常乐意参与贵校的一些研讨会或员工会议,进行参与式观察。

我向您保证贵校的名称及访谈对象的名字将以匿名形式出现,您的个人信息仅作为研究使用。如果您还要求将某些信息保密,请告知我。

非常感谢您的参与。
此致

敬礼

田梦

meng.tian@jyu.fi

+86-13564954556

教育领导研究院

芬兰 于维斯屈莱大学

15. 06. 2008

Appendix C: Research Questionnaire (English version)

NO.

Questionnaire

Dear Sir/Madam:

I am the Master's degree student from the Institute of Educational Leadership, University of Jyväskylä, Finland. The topic of this questionnaire is distributed leadership and teacher empowerment in relation to the enhancement of teachers' self-efficacy in Chinese schools. The following questionnaire consists of 25 questions. It will take you around 15 minutes to fill in the questionnaire. Your answers are used only for research purpose and your name will remain anonymous.

Your answers are of great importance to my research. Thank you for your participation!

Meng TIAN

meng.tian@ju.fi

Institute of Educational Leadership
University of Jyväskylä, Finland

Basic Information

No.	1	2	3	4
1. Gender	Male	Female		
2. Years of Teaching	0-3 Years	4-6 Years	7-10 Years	> 10 years
3. Present Position	Head of the Year	Subject Coordinator	Principal/ Vice Principal	Communist Party Secretary
4. Grade Level	Grade 1-6	Grade 7-9	Grade 10-12	Other

Choose from 1 to 9 according to your extent of agreement

Efficacy on decision making									
Totally disagree \longrightarrow Strongly agree									
5. I feel I am consulted by the principal in the decision making process.	1	2	3	4	5	6	7	8	9
6. My voice is heard and valued during decision making.	1	2	3	4	5	6	7	8	9
7. I feel I easily get access to the information I need before I make any decisions.	1	2	3	4	5	6	7	8	9
8. I have the autonomy to lead my team without too much intervention from other leaders.	1	2	3	4	5	6	7	8	9
Efficacy on teaching and research									
9. I have influences on choosing the teaching materials and instruments for the teaching groups.	1	2	3	4	5	6	7	8	9
10. I am confident in my abilities to help difficult students.	1	2	3	4	5	6	7	8	9
11. I am willing to participate in continuous professional development.	1	2	3	4	5	6	7	8	9
12. I feel I am able to influence school-based research projects.	1	2	3	4	5	6	7	8	9

13. Even though there is a lack of parental support; I can still promote students' learning.	1	2	3	4	5	6	7	8	9
14. I believe I can increase students' interest in learning and treat them as independent learners.	1	2	3	4	5	6	7	8	9
Efficacy on interpersonal relationships and cooperation									
Totally disagree \longrightarrow Strongly agree									
15. I believe I can motivate and support my colleagues to achieve their goals.	1	2	3	4	5	6	7	8	9
16. I feel I can competently complete the tasks assigned by the principal.	1	2	3	4	5	6	7	8	9
17. As a teacher leader, I contribute to hierarchical collaborations between senior management team and teachers.	1	2	3	4	5	6	7	8	9
18. As a teacher leader, I know the needs from my team members, and therefore I am able to fulfil their requests.	1	2	3	4	5	6	7	8	9
19. I can establish good relationship with all students by building trust and respect.	1	2	3	4	5	6	7	8	9
20. I believe I win parental support and trust through my excellent work.	1	2	3	4	5	6	7	8	9
Efficacy on school culture									
21. I believe I represent our school culture throughout every day work.	1	2	3	4	5	6	7	8	9
22. I feel everyone in school is treated equally and fairly.	1	2	3	4	5	6	7	8	9
23. I enjoy my job even in difficult situations.	1	2	3	4	5	6	7	8	9
24. I believe I am an irreplaceable part of the school. I can greatly contribute to school's future development.	1	2	3	4	5	6	7	8	9

Self Assessment

25. My self assessment on my performance in the previous semester is	1	2	3	4
	Not satisfactory	Meet the basic requirements.	Meet the requirements and made some progress.	Excellent performance and made great progress.

Thank you very much for your time and answers!

20-06-2008

Appendix D: Research Questionnaire (Chinese version)

No.

问卷调查

敬爱的老师:

您好!我是芬兰于维斯屈莱大学的教育领导研究院的在读硕士生田梦。我的研究问卷主题是“中国学校中分布式领导及教师授权对提高教师自我效能感的关系”。以下问卷一共由 25 个问题组成,将花费您大约 15 分钟的时间,问卷是匿名形式的,您的答案仅作为研究使用。

您的回答将对我的研究具有重大意义,感谢您的参与!

田梦

meng.tian@jyu.fi

教育领导研究院

芬兰 于维斯屈莱大学

基本信息

No.	1	2	3	4
1. 性别	男	女		
2. 教龄	0-3 年	4-6 年	7-10 年	> 10 年
3. 职位	年级组长	教研组长	校长/副校长	党支部
4. 任教年级	1-6 年级	7-9 年级	10-12 年级	其他

根据您的认同程度从 1 到 9 中做出选择

决策效能感									
	完全不同意 强烈同意								
5. 我认为校长在决策过程中征询过我的意见。	1	2	3	4	5	6	7	8	9
6. 在决策过程中我的意见得到了重视。	1	2	3	4	5	6	7	8	9
7. 我认为在做出决策的过程中我能够获得我所需要的信息。	1	2	3	4	5	6	7	8	9
8. 我能够独立领导我的团队,而不受到其他学校领导者的过度干预。	1	2	3	4	5	6	7	8	9
教学和研究效能感									
9. 我对教研组选择教学材料和教学工具的问题上有发言权。	1	2	3	4	5	6	7	8	9
10. 我对教导学习上有困难的学生充满信心。	1	2	3	4	5	6	7	8	9
11. 我愿意参与教师职业发展培训。	1	2	3	4	5	6	7	8	9
12. 我在校本研究课题项目中发挥作用。	1	2	3	4	5	6	7	8	9
13. 即使缺乏家长参与,我仍旧能够很好地引导学生学习。	1	2	3	4	5	6	7	8	9

14. 我相信我可以提升学生的学习兴趣，并将他们视为独立的学习个体。	1	2	3	4	5	6	7	8	9
人际关系和团队合作效能感									
完全不同意 强烈同意									
15. 我相信我可以激励和支持我的同事，帮助他们达成目标。	1	2	3	4	5	6	7	8	9
16. 我认为我可以成功地完成校长布置给我的任务。	1	2	3	4	5	6	7	8	9
17. 作为一名教师领导者，我在促进学校高级管理层和普通教师间的沟通中发挥作用。	1	2	3	4	5	6	7	8	9
18. 作为一名教师领导者，我了解团队成员们的需求，并尽力满足他们的合理需要。	1	2	3	4	5	6	7	8	9
19. 我通过培养信任和尊重与所有学生建立起良好的人际关系。	1	2	3	4	5	6	7	8	9
20. 我相信我的工作赢得了家长们的支持和信任。	1	2	3	4	5	6	7	8	9
学校文化效能感									
21. 我相信在日常工作中我代表学校文化。	1	2	3	4	5	6	7	8	9
22. 我认为学校中的每个人都得到了公平和公正的对待。	1	2	3	4	5	6	7	8	9
23. 即使在逆境中我仍旧热爱我的工作。	1	2	3	4	5	6	7	8	9
24. 我相信我是学校中不可替代的一份子。我能为学校的未来发展作出重大贡献。	1	2	3	4	5	6	7	8	9

自我评价

25. 我对自己在上学期的教学表现评价是	1	2	3	4
	不满意	达到基本要求	达到要求并取得一定进步	表现优异，取得很大进步

非常感谢您的时间和答案!

20-06-2008

Appendix E Interview Questions for School Principals (English version)

1. Would you please introduce your school in brief? (Location, size, history) What are the characteristics of your school?
2. Would you please introduce yourself in brief? (Career development, experience as a school principal) What are your main responsibilities as a school principal?
3. As a school principal, would you please use 2 to 3 phrases to describe your leadership style? How do you practise your leadership style in your daily work? Can you give me a few examples?
4. How are the teacher leaders selected in your school? What are the key qualities for the teacher leaders?
5. How do you motivate the teachers? From your point of view, what are the effective school empowerment strategies? How do you use these strategies in your daily work? Can you give me a few examples?
6. Have you noticed any informal leaders among the teachers? How do you perceive the role of these informal leaders? Are there any conflicts? Do you empower them when their expertise is needed? Can you give me some concrete examples?
7. Are there any critical incidents during your principalship in this school? Would you please tell me the story? Have you made any difficult decisions? What was the decision making process?
8. How do you communicate with your teachers, students and parents? What kind of information do you deliver to your teacher leaders and top management team? Why?
9. How do you evaluate your teachers? What kind of feedback do you give to the teachers? How do teachers take your feedbacks?
10. What are the challenges your school is facing now? As the school principal, what are the challenges you are facing now?

Thank you very much for your answers!

20-06-2008

Appendix F Interview Questions for School Principals (Chinese version)

访谈提纲（校长）

1. 能否请您简要介绍一下您的学校？（位置，规模，历史）贵校有什么办学特色？
2. 能否请您简要介绍一下您自己？（职业生涯，担任校长的工作经历）作为学校校长，您的主要职责是什么？
3. 作为学校校长，请您用简单的 2 到 3 个词汇形容您的领导风格。您如何在日常工作中实践您的领导风格？能否请您给我举几个例子？
4. 在贵校教师领导是怎样选拔的？教师领导者的核心素质是哪些？
5. 您如何激励学校中的教师？从您的角度看，有效的学校授权策略有哪些？您如何在日常工作中运用这些授权策略？能否请您给我举几个例子？
6. 您是否注意到了教师中存在非正式领导？您是如何看待这些非正式领导者的？您是否在需要的场合授权他们领导团队？能否请您给我举几个例子？
7. 在您担任校长期间是否遇到过一些非常棘手的案例？您能否给我详细描述一下整个过程？您是否做出过一些非常艰难的决定？决策过程是怎样的？
8. 您是如何与教师、学生和家长们沟通的？您对教师领导者和学校高层领导团队分别传递一些什么信息？为什么？
9. 您是如何对学校教师进行评价的？您通常给教师一些什么样的反馈意见？教师们对您的意见反应如何？
10. 学校目前面临着哪些挑战？作为校长，您个人面临着哪些挑战？

非常感谢您的回答！

20-06-2008

Appendix G Interview Questions for Teacher leaders (English version)

11. Would you please introduce yourself in brief? (Career development, position, experience as a teacher leader) What are your main responsibilities as a teacher leader?
12. As a teacher principal, would you please use 2 to 3 phrases to describe your leadership style? Can you introduce your team in brief? (team members, role in the school) How do you practise your leadership style in your daily work? Can you give me a few examples?
13. How were selected as a teacher leader? Can you introduce the teacher leader selection process in your school? How do you comment on this process?
14. How do you perceive your workload? How do you balance your work and private life? Can you give me some examples?
15. As a teacher leader, how often do you communicate with your principal? What do you communicate during your meetings with the school top management team? How much autonomy do you have in your work? Can you give me some examples?
16. From your point of view, does your principal empower the teachers? How do teachers perceive the empowerment? Can you give me some concrete examples?
17. Have you met any critical incidents? Would you please tell me the story? Have you made any difficult decisions? What was the decision making process?
18. How do you interact/cooperate with other teachers, students and parents? What you have achieved as a teacher leader? Can you give me some concrete examples?
19. What kind of support you received from your principal? Are there any other supports you expect from your principal? Why?
20. What are the challenges your school is facing now? As a teacher leader, what are the challenges you are facing now?

Thank you very much for your answers!

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Appendix H Interview Questions for Teacher leaders (Chinese version)

访谈提纲（教师领导者）

1. 能否请您简要介绍一下您自己？（职业生涯，职位，担任教师领导者的经历）您的主要职责是什么？
2. 作为一名教师领导者，能否请您用简单的 2 到 3 个词汇形容您的领导风格？请您简要介绍一下您的团队（团队成员，学校中的角色）您如何在日常工作中实践您的领导风格？能否请您给我举几个例子？
3. 您是如何被选拔为教师领导者的？能否请您介绍一下贵校教师领导选拔的过程？您如何评价这个过程？
4. 您如何看待您的工作量？您如何平衡工作和私人生活？能否请您给我举几个例子？
5. 作为一名教师领导者，您通常多久向校长汇报工作？您向学校高级管理层汇报的工作大致内容是什么？您认为在目前的工作中，您的自主权有多大？能否请您给我举几个例子？
6. 从您的角度看，学校校长对教师进行授权吗？教师们如何看到校长的授权？能否请您给我举几个例子？
7. 您在工作中遇到过什么棘手的案例吗？您能否给我详细描述一下整个过程？您是否做出过一些非常艰难的决定？决策过程是怎样的？
8. 您如何与其他教师、学生和家长们互动和合作？作为一名教师领导者，您至今取得了哪些成绩？能否请您给我举几个例子？
9. 您从校长那里获得了哪些支持？您还希望获得哪些支持？为什么？
10. 学校目前面临着哪些挑战？作为一名教师领导者，您个人面临着哪些挑战？

非常感谢您的回答！

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Appendix I Correlations in the Three Schools

Correlations among Teachers' Self-Efficacy Scale Subscales in the Sunshine School

Sub Scale	DM	TR	RC	SC	SA
-Efficacy on Decision Making (DM)		.665(**)	.597(**)	.802(**)	.437
-Efficacy on Teaching and Research (TR)			.933(**)	.900(**)	.715(**)
-Efficacy on Interpersonal Relationship and Cooperation (RC)				.837(**)	.682(**)
-Efficacy on School Culture (SC)					.622(**)
-Self Assessment (SA)					

** Correlation is significant at the 0.01 level (2-tailed).

Note: Scale was 1-9 (1=Totally disagree and 9=Strongly agree)

Correlations among Teachers' Self-Efficacy Scale Subscales in the Redbrick School

Sub Scale	DM	TR	RC	SC	SA
-Efficacy on Decision Making (DM)		.491(*)	.472(*)	.591(**)	.131
-Efficacy on Teaching and Research (TR)			.986(**)	.947(**)	.218
-Efficacy on Interpersonal Relationship and Cooperation (RC)				.959(**)	.155
-Efficacy on School Culture (SC)					.000

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Note: Scale was 1-9 (1=Totally disagree and 9=Strongly agree)

Correlations among Teachers' Self-Efficacy Scale Subscales in the Ocean School

Sub Scale	DM	TR	RC	SC	SA
-Efficacy on Decision Making (DM)		.234(***)	.485(*)	.536(**)	.(a)
-Efficacy on Teaching and Research (TR)			.695(**)	.515(*)	.(a)
-Efficacy on Interpersonal Relationship and Cooperation (RC)				.706(**)	.(a)
-Efficacy on School Culture (SC)					.(a)

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

*** Sig. (2-tailed) = 0.322

(a) Cannot be computed because at least one of the variables is constant.

Note: Scale was 1-9 (1=Totally disagree and 9=Strongly agree)