Examining the Characteristics of Excellent Teaching and Learning Deputy Heads in Chinese Secondary Schools

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The candidate confirms that the work submitted is her own and that appropriate credit has been given where reference has been made to the work of others.

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Abstract

This study examines the nature of the role of teaching and learning deputy heads (T&LDHs) and the range of characteristics among excellent and typical T&LDHs in Chinese secondary schools. A qualitative dominant mixed methods approach was employed to generate research findings. Drawing on different theoretical perspectives and a substantial database of documentary analysis of 18 T&LDHs' job responsibilities, critical incident interviews with 24 T&LDHs, and questionnaires among eight T&LDHs, eight headteachers and 424 teachers in eight schools, the study reveals three leadership configurations in Chinese secondary schools: 'standard', 'integrated' and 'umbrella'. It shows that the position of T&LDHs is imperative for learning-centred leadership in schools, and their job responsibilities include six dimensions and 16 job functions.

The T&LDHs in the 'typical' group possessed nine characteristics, while 12 characteristics were prevalent among those in the 'excellent' group, involving behaviour, attitudes, knowledge, skills and competencies. This study also suggests that different T&LDHs possess different characteristics. The T&LDHs in the excellent group possessed more skills and competencies than those in the typical group, and these skills and competencies are reflected much more consistently and intensively in the excellent performers' professional practice; however, not all T&LDHs in the excellent group performed better than those in the typical group in all situations.

Effective leadership is found to result from skilfully wielding a range of skills and competencies in a combined way, and lack of one or more necessary skills and competencies in a particular situation is found to result in leadership ineffectiveness. The research findings have relevance to T&LDHs' recruitment and selection, their appraisal and accreditation of their performance, and their training and professional development.

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Chapter 1 Introduction

Educational leadership has become a major focus of educational systems around the world. As key factor and change agents, school leaders play a pivotal role in school effectiveness and development (Brundrett and Crawford, 2008; Jirasinghe and Lyons, 1996; Bush, 2008). Since 'individual and organisational development are not separate and discrete but co-exist in a mutually supportive relationship' (Kydd, 1996, p. 1), individual professional development provides a basis for organisational development. Paying attention to school leaders at different levels and the interaction between them is, therefore, important for understanding school leadership.

In this research project I focus on teaching and learning deputy headteachers (T&LDHs) in Chinese secondary schools, exploring the nature of their role and their characteristics. This chapter explains the purpose, focus and importance of the study.

1.1 The purpose of the study

My study focuses on T&LDHs in Chinese secondary schools, based on a single district in a big city in China. Technically, T&LDH is an important position, responsible not only for teaching and learning but also for teachers' professional development – so in many respects, T&LDHs are the guarantor of a school's teaching quality. In exploring their job functions and the range of characteristics among them, I had three purposes: to reflect on practice, to test theories and to make recommendations.

Reflecting on practice. For more than 20 years I worked in three Chinese secondary schools – as an English language teacher, a subject leader, a teaching director and a T&LDH. My colleagues and I did much to enhance student and teacher development, and overall school development. However, not all our practices were effective. This begs the questions: what is good practice? What is ineffective practice? How can we look at our practices based on leadership and management theories? What makes an excellent instructional leader? All these questions need to be reflected on,

examined and investigated so I can gain better understanding of learningcentred leadership, providing research-based evidence to contribute to my future career as a researcher and trainer on educational leadership and management.

Testing theories. A review of educational leadership and management literature in Chinese indicates that it introduces to China many theories developed by western scholars and researchers - mainly those in the UK and USA. Are these theoretical insights applicable and feasible in the Chinese context? To what extent can they be used to guide research and practice in China? These questions have been my concern for many years. In order to gain pertinent insights, I wanted to apply relevant theoretical frameworks developed in western contexts, in order to re-examine and test these theories. I have accordingly applied several theoretical frameworks, such as Evans's (2008; 2011) conceptual model of the componential structure of professionalism, Hallinger's (1982; 2011a) instructional management conceptual framework and others, to my examination of T&LDHs' job functions and characteristics. It is fair to say that a non-western perspective offers potential for re-examining and developing existing theories. This was the second purpose of my study: to explore whether and how relevant theories developed in western cultural contexts might be used in the Chinese context.

Making recommendations. With the development of its economy and the pressing demands for high-quality education, establishing an effective educational system has become desirable in China. To this end, the government has been undertaking a new round of national curriculum reform since 1999 (Liu and Kang, 2011); to ensure the reform's effective implementation and improve educational quality, it has established a four-level headteacher training system covering all areas of the country. More recently, Beijing, the capital city, began to implement training programmes for middle managers. However, because of the lack of empirical studies on school leaders' professional development needs, inadequate programme content and trainers' limited academic and practical experience, the majority of programmes have fallen short in terms of relevance and efficacy (Chu et

al., 2009; Fan, 2009). Exploration of T&LDHs' job functions and skills and the competencies required of instructional leaders could, therefore, provide policymakers, practitioners, trainers and other researchers with research-based evidence and, ultimately, help improve practice.

1.2 The statement of the problem

Effective job performance results from an integration of different elements, such as job duties and responsibilities, personal values, experiences and abilities, as well as environmental considerations. Different people with different backgrounds and abilities perform the same job differently in the same situation. Meanwhile, there is evidence to indicate that possession of certain characteristics precedes and leads to effective and/or superior performance in a particular job, and effective performers have a range of similar characteristics (Boyatzis, 1982). Therefore, my study aimed to explore the characteristics that equip T&LDHs for effective performance within their job responsibilities.

Given this, the study was designed to seek answers to two research questions:

- 1. What is the nature of the T&LDH's role in Chinese secondary schools?
 In what ways do T&LDHs carry out their roles?
- 2. What is the range of characteristics among T&LDHs? How are these characteristics reflected in their professional practice?

1.3 The importance of the study

The study is important for four reasons. First of all, the implementation of the national curriculum reform expands school leaders' duties and responsibilities, especially T&LDHs' work. However, few studies focus on this constituency, although there is much literature studying instructional leadership from the perspectives of headteachers and subject leaders in a global context. Because a T&LDH's primary job responsibility is to exercise leadership for learning within a school, my study has the potential to enhance understanding of instructional leaders' functions and their

professionalism; moreover, its focus is justified on the grounds of a growing awareness of the importance of leadership for learning, and recognition of the significance of distributed leadership. Additionally, the position of deputy heads is fraught with ambiguity, since they stand between two clearly defined groups – the staff and the head (Kerry, 2000). Examining leadership for learning and distributed leadership in the Chinese context therefore offers a unique angle.

Second, Bush (2008) reviews the limitations of instructional leadership, and argues that school leaders are encouraged to focus on teaching and learning, but little guidance is offered on how they should do so. Dimmock (2012, p. 205) also points out that 'a valuable further research direction in the field of school leadership would be focus on leaders' practices and actions – that is, the "how" questions'. In looking at how T&LDHs exercise their leadership for learning, my study has the potential to contribute to this 'how' question, offering a perspective based on the Chinese school context. Indeed, my study potentially has major national significance in relation to raising the quality of Chinese education because it focuses directly on the core fundamentals within schools – teaching and learning.

Third, in applying to my study several theoretical/conceptual frameworks developed by western scholars and researchers, my purpose was to examine to what extent these theories can be used to guide research in the Chinese context. In the case(s) of those theories revealed to have limited applicability to the Chinese context, I wanted to consider whether they could be modified or better tailored to fit it. My study thus has the potential to provide insights about the application and applicability of western theories to the Chinese context.

Finally, my study focuses on T&LDHs' job functions and competence in Chinese secondary schools. As the T&LDH is a specialised leader in charge of teaching and learning within the school, his or her professional development is of prime importance for improving school efficacy. My research findings have the potential to be utilised in recruitment and selection, appraisal, and accreditation of performance, and school leaders'

training and development. In addition, in order to identify the capabilities required of T&LDHs as effective leaders for learning-centred leadership, my study incorporated some useful techniques in competency studies, primarily derived from studies in non-educational contexts (explained later in the section on literature review). Since, in China, competency studies are in their infancy (Sun and Shi, 2008), my study may provide insights for this field.

1.4 Summary

My study incorporates theories relating to leadership for learning, distributed leadership, school leaders' professional development and competency studies to explore the nature of the T&LDHs' role and their characteristics in the Chinese secondary context. The purpose is to enhance provision for T&LDHs' professional development by providing policymakers and practitioners with research-based evidence. Following this introductory chapter, I present a brief introduction to the Chinese educational background and context.

Chapter 2 The Chinese Educational Context

Since different countries have different educational systems, policies and cultural backgrounds, educational research should be based on a particular context; good practice in one context may not work in another. In this chapter, I give a brief introduction to the Chinese educational background and the Chinese school context as the foundation for understanding issues in China.

2.1 The Chinese educational background

China is one of the largest countries in the world, with 23% of the world's total population. In 1978, economic reforms began in rural areas, and were extended to cities in 1984 (2012, Chinese Government's Official Web Portal). This has resulted in a large-scale reduction in poverty and sustained high-rate economic growth over the past 30 years. However, economic development in China is very uneven: some areas are highly developed, while others are rather under-developed. As the level of economic development greatly affects educational development, different situations exist in different parts of the country. Empirical studies focusing on different areas are needed, and may have more practical significance in the Chinese context.

Education in China incorporates several sectors – basic, higher, vocational and adult education - and different forms of delivery, including face-to-face teaching and distance-learning programmes. Currently. China implementing a programme of decentralisation, which promotes local democracy and greater freedom for schools. The education system has been set up with the government as major investor and social partners as co-investors. Local government plays a key role in compulsory education, while central and provincial governments are dominant in higher education. In vocational and adult education, social partners including industrial organisations, businesses and public institutions play an increasingly important role (2012, China Education and Research Network). Due to extremely unbalanced economic and cultural development, when it comes to investment in, and quality of, education there are wide discrepancies across different parts of the country.

Recently, Cheng (2012, p. 23) summarised Shanghai's education system with a graphical representation that has many parallels with the overall picture of China (though there is an error regarding junior secondary schools, which provide education for students aged 12-14, not 12-13). Below, I have reproduced Cheng's graphical representation, adapted to illustrate the Chinese education system (see Figure 2.1). China's basic education consists of pre-school, nine-year compulsory education, general/regular senior secondary education, special education for disabled children, and education for illiterate people (2012, Chinese Government's Official Web Portal). The six-year primary education and the first three years of secondary education in junior schools are technically compulsory for all Chinese students from ages six to 14. Junior school graduates wishing to continue their education take a locally administered entrance exam, on the basis of which they have the option either of continuing to a general/regular senior secondary school or of entering a vocational/specialised/crafts school. Subsequently, students passing their high-school graduation examination (Huikao) gain a high-school graduation diploma; after sitting the National College Entrance Examination (NCEE: gaokao), they can go to college or university for further study. Universities offer both academic and vocational courses, and many colleges and universities also provide graduates with programmes leading to master's and doctorate degrees. Adult education overlaps the above categories. Learners choose types of education according to their academic levels, purposes and interests (2012, China Education and Research Network).

2.2 The Chinese school context

2.2.1 Types of regular primary and secondary schools

Due to problems resulting from different policies at different political and economic developmental stages, six school types can be seen across the country (Ministry of Education, 2014), as shown in Figure 2.2.

-8-

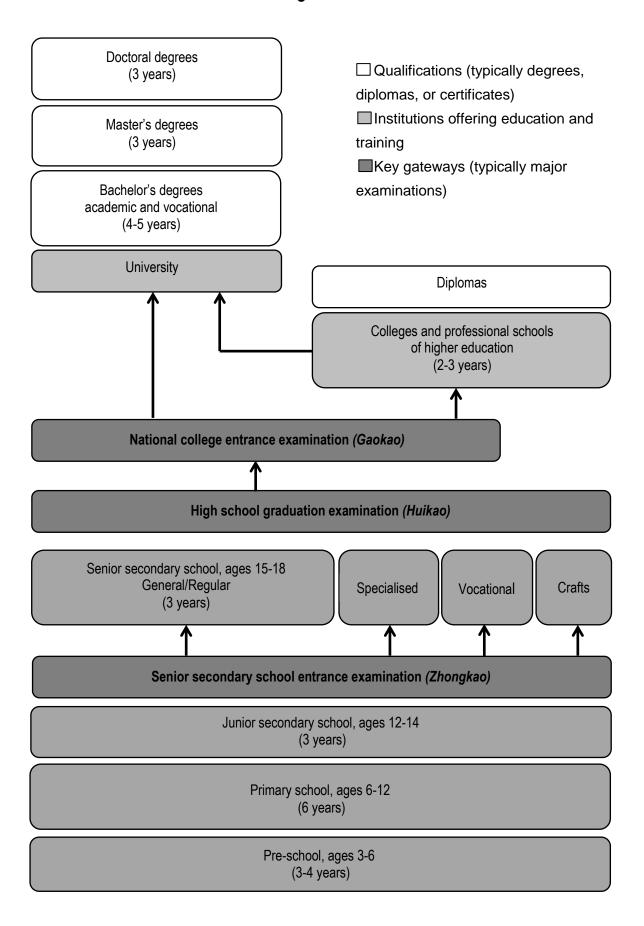


Figure 2.1 Chinese education system (Source: Cheng, 2012, p. 23)

School type	Regular high	Combined secondary	12-year secondary	Regular junior	Nine-year secondary	Primary schools
Stage	schools	schools	schools	schools	schools	
Senior secondary						
education						
(Gaozhong)						
ages 15-18						
Junior secondary						
education						
(Chuzhong)						
ages 12-14						
Primary education						
(Xiaoxue)						
ages 6-11						

□ Senior secondary schools □ Junior secondary schools □ Primary schools

Figure 2.2 Six types of regular primary and secondary schools

My study involves two types of schools: combined secondary schools and regular junior schools. The former are called *wanzhong* in the Chinese context, and provide education for students aged 12-18, combining both junior and senior secondary education. The latter are called *chunchuzhongxiao*, and provide only junior secondary education. All the schools are government or state schools.

Although the appellations of 'city-level key school' and 'district-level key school' were abolished in the 1990s, another set of similar appellations might be recognised to distinguish different schools in many parts of China. For example, in the district I investigated, after the implementation of the senior curriculum reform there appeared to be new appellations for secondary schools that include senior secondary education: 'city-level model senior secondary school' and 'district-level model senior secondary school', corresponding to city-level and district-level key schools, respectively. The other schools were normal senior secondary schools. The higher level the schools, the better facilities and teachers they possessed – so the higher-

level schools had the potential to attract more excellent students than the lower-level schools.

In terms of school size, although 'Urban Primary and Secondary School Construction Standards' have been implemented since 01/07/2002, it is hard to give a clear description of sizes of Chinese schools, because we do not have uniform criteria to define school size. To help the reader make sense of school size in the Chinese context, I have divided the schools into three types according to student numbers: large (more than 2,000 students), medium (1,000-2,000) and small (fewer than 1,000 students). This categorisation is used only in my study; it is not universally applied in China. There are many over-sized and extra-small schools in some areas of China.

2.2.2 Typical management structure of the secondary school

At the policy level, Chinese schools have been implementing 'yizhangzhi', under which the headteacher represents the school as the sole leader and the most important leadership source. The guiding document 'The Decision about Educational Mechanism Reform', issued by the Central Committee of the Communist Party of China on 27/05/1985, states:

Schools gradually implement the headteacher accountability system, in which the headteacher takes overall responsibility for the school's work, and also establishes a School Affairs Committee, comprising a small number of prestigious people as a review body. A Faculty Congress System should also be established to ensure staff members participate in management and supervision in a democratic manner. ... The Party organisation within the school should concentrate on ideological issues, and support the headteacher in exercising authority.

In practice, headteachers and Party branch secretaries, who are appointed by the local government, are regarded as the top leaders within a school. The headteacher takes responsibility for essential affairs, including representing the school in its formal relationships with the local education authority, drawing up the overall aims of the school, and selecting and appointing staff. S/he also organises the implementation of the national teaching scheme, and, among other duties, evaluates teaching and learning

standards. The Party branch secretary is accountable to the Party, assisting the headteacher in managing the school. His/her primary responsibility is ideological-related work, ensuring the school conforms to the Party's and national policies. It is worth noting that, in many schools, a single person is appointed as both headteacher and Party branch secretary, and has absolute authority within the school. Deputy heads, middle managers and teachers are appointed by the headteacher, and staff are deployed across different departments. Key decisions are made through discussion between senior managers, heads of departments and staff delegates.

Nowadays, different schools have different bureaucratic systems according to the school size and the headteachers' school development considerations – but the mainstream management structure of a Chinese secondary school and the roles of leaders at different levels, which I refer to in this study as the 'standard' leadership configuration, are shown in Figure 2.3.

Level		Headteacher & the Part	y branch secretary				
1	Teaching and learning Moral education General servi						
OME		deputy headteacher	deputy headteacher	deputy headteacher			
SMT		(T&LDH)	(MEDH)	(zongwu			
		(jiaoxue fuxiaozhang)	(deyu fuxiaozhang)	fuxiaozhang)			
Level	Headteacher's	1. Dean (jiaowu zhuren)	Moral education	General services			
2	office director	2. Teaching directors	directors	directors			
2	(xiaoban zhuren)	(jiaoxue zhuren)	(deyu zhuren)	(zongwu zhuren)			
Level		Subject leaders	Heads of year				
3		(jiaoyan zuzhang)	(nianji zuzhang)				
Level		Year subject leaders					
4		(beike zuzhang)					
	Clerks	Subject teachers	Class teachers	1. Clerks			
Level	(zhiyuan)	(xueke jiaoshi)	(banzhuren)	(zhiyuan)			
5		2. Clerks (zhiyuan)		2. Workers			
3		3. Lab assistants		(gongren)			
		(shiyanyuan)					

Figure 2.3 The management structure of a Chinese secondary school

From this figure, it can be seen that there are five levels in the hierarchy. The senior management team (SMT) consists of the headteacher, Party branch secretary and three deputy heads. The deputy heads are in charge of teaching and learning, students' moral education and general services, respectively. The Level 2 managers are middle managers. headteacher's office director, mainly in charge of human resources and other affairs relating to the headteacher's activity schedules, reports to the headteacher directly. In each of the other departments, there is one director and one or two deputy directors. The directors are the heads of the departments, taking responsibility for each department's affairs; the deputy directors take on different concerns in each department under the direction of the department heads. Notably, in the teaching and learning department the head can be either the dean or the teaching director. Level 3 includes subject leaders and heads of year. They lead and manage subject affairs and the affairs of their respective years under the direction of the Level 2 middle managers.

The most complicated management hierarchy is that relating to the department of teaching and learning. The teaching and learning deputy head takes responsibility for all the school's academic affairs. There may be two T&LDHs in large-size schools, in charge of junior or senior sections, respectively. The Level 2 dean is mainly in charge of general affairs, such as examinations and laboratories, as well as some teaching matters. Teaching directors are mainly responsible for controlling teaching quality. Under their supervision, Level 3 subject leaders are in charge of classroom teaching and teaching research. Below this level, year subject leaders assume the tasks of lesson preparation and assessment of each grade. Teachers, clerks and workers in each department represent the lowest level. My research was focused on T&LDHs within a district in a big Chinese city.

The moral education department is also important in the Chinese context. Its main duty is to enhance students' minds and their moral, psychological and social development through thematic educational activities and extracurricular activities. As students in Chinese schools are arranged into different classes, a teacher is assigned to each class as class teacher

(banzhuren). Class teachers are managed by heads of years, moral education directors, and the moral education deputy head (MEDH). If a teacher is a subject teacher and class teacher, s/he is managed by two departments: teaching and learning, and moral education. General services departments primarily take responsibility for matters such as cleaning, supplies, inventory and maintenance. Another management channel is the Party system. For example, if a teacher is a Chinese Communist Party member, s/he is led and managed by leaders at several levels, such as the Party general branch, sub-branch and the small group. To sum up, Chinese schools have a highly bureaucratic and hierarchical structure.

2.3 The context of the national curriculum reform

This research was conducted against the background of the recent national curriculum reforms, which have brought about many changes to school leaders' educational philosophies and management practices, as well as to schools' teaching and learning.

Strictly speaking, China has undertaken curriculum reforms five times since the establishment of the People's Republic of China in 1949 (Xie et al., 2013). The most recent was formally implemented in 2001, when *The Guidelines for the Curriculum Reform of Basic Education* (Ministry of Education, 2001) were approved and published. The main goal of the reform has been to comprehensively promote 'quality education', which 'aims for every student's sound development rather than "instilling" and "training" (Zhong, 2006, p. 372). Its concrete objectives involve moving away from pure knowledge transmission to student-centred teaching and positive learning attitudes, and learning to learn in the process of gaining basic knowledge and skills.

For compulsory schools, integrated curricula are advocated in primary schools, while both subject and integrated curricula are encouraged in junior secondary schools. For senior secondary schools, a huge change has taken place. Yin et al. (2014) summarise the main points: decentralization of the educational system and encouraging school-based curriculum development;

granting students the authority to choose courses, and adopting an elective course and credit system; adoption of new approaches to teaching and learning, such as co-operative learning, self-regulated learning, and inquiry-based learning; establishment of a formative student evaluation system, and using development portfolios to assess students' learning in schools. Textbooks, instruction and assessment are required to follow national curricular standards. A shift from a one-size-fits-all educational model to one emphasising individual interests and needs can be observed – which presents challenges for a school's teaching and learning (Tan and Reyes, 2014).

2.4 The district context of the study

The district in which I conducted my study lies in the north of China. More than 430 square kilometres in area and home to more than 3.5 million inhabitants, it is one of the most developed areas of the country in terms of economy and education, with more than 100 primary and about 80 secondary schools.

I chose this district for four reasons. First, I used to work in the district and was acquainted with some of the local educational authority directors and some T&LDHs, making it much easier to gain permission and access to participants. Second, this district is famous in China for its education quality, so it had the potential to illustrate best practice. It was also the most unbalanced district in the city in terms of examination results in NCEE (gaokao) as a sole indicator of educational quality, and therefore arguably offered the richest impressions of T&LDHs and school contexts. Third, this district has a high diversity of school types: schools located in urban, semiurban and rural areas; state schools with public and private funds, and private schools; city- and district-level model and normal schools; and regular junior and combined secondary schools. This provided me with a relatively broad picture of different types of school and led me to scrutinise the complexity of school contexts and analyse the data in a sensible and thoughtful way. Finally, because all the participants worked in the same district, sharing the same policy context and district culture, there were fewer

situational variables, and the factors influencing T&LDHs' job effectiveness could be more closely identified with the individual. This allowed me greater focus on data collection and analysis. In summary, the district provided a rich source for examining characteristics among T&LDHs.

2.5 Summary

In this chapter I have given a brief introduction to the Chinese educational background and the Chinese school context, and provided information on the sample district. It is evident that the structure of the Chinese secondary school is highly bureaucratic and hierarchical, and the position of the T&LDH is very important. To examine the nature of the T&LDHs' role and their characteristics, I now look to gain insights from a range of theoretical perspectives.

Chapter 3 Theoretical Perspectives

Teaching and learning deputy heads (T&LDHs) are specialised leaders who take responsibility for teaching and learning in Chinese secondary schools. Their main job function is to enhance teachers' and students' development. They are one of the sources of leadership among school leaders, teachers, students and parents, and in one sense are central figures within a school's learning-centred leadership. Given their position and functions in schools, their work can be interpreted on the basis of two theoretical models of educational leadership: leadership for learning and distributed leadership. The work of T&LDHs, as change agents, can also be examined from the perspective of professionalism. In this chapter, I look at the literature in these three areas to gain insights and inform my study.

3.1 Learning-centred leadership

Reviewing the literature on learning-centred leadership, research can be divided into two stages: before and after the 2000s. Before the 2000s, it was an interest only among scholars and researchers in North America; later, it became a global focus (Hallinger, 2012). The literature utilises a range of terms in relation to learning-centred leadership, such as 'instructional management' (Bossert et al., 1982; Hallinger, 1982), 'instructional leadership' (Southworth, 2002; Robinson et al., 2008), 'curriculum leadership and management' (Lee and Dimmock, 1999), 'curriculum leadership' (Han, 2007; Kesson and Henderson, 2010; Xu; 2011), 'leadership for learning' (Murphy et al., 2007; Swaffield and MacBeath, 2009; Hallinger, 2011b), 'learning-centred leadership' (Goldring et al., 2007; Rhodes and Brundrett, 2010), and 'pedagogical leadership' (Webb, 2005; Heikka Waniganayake, 2011; Alava et al., 2012). Interestingly, these labels are sometimes built on different conceptual frameworks, examining learningcentred leadership from different perspectives - but the most ubiquitous terms are instructional leadership and leadership for learning. Based on this, my review of the literature consists of three sections: instructional leadership, effective leadership practice for learning, and leadership for learning.

3.1.1 Instructional leadership

Instructional leadership, as 'the longest established concept linking leadership and learning' (Bush and Glover, 2014, p. 556), originally reflects the principal as an instructional supervisor in the American context. Early in the 1870s, St. Louis superintendent William Torrey Harris carried out a plan to turn principals into instructional supervisors (Cuban, 1985). In the 1930s, Gray (1934), who conducted a five-year supervisory experiment, found that superior teaching usually took place in schools directed by capable instructional leaders, and called for adequate instructional leadership from superintendents, principals and supervisors. In the 1950s, Tyler (1953) suggested that effective school leaders needed two sets of concepts to guide their activities: instructional leadership, involving the activities directly associated with curriculum and instruction, and educational leadership, including carrying out a school-wide educational plan, providing resources, promoting cooperation, enhancing communication by providing formal and informal channels, and capitalising on human resources. He argued that one could be an effective school leader only when one integrated the two sets of leadership concepts.

In the 1960s, Bridges (1967) examined views of instructional leadership in which the principal was described as an evaluator, a helper, an integrator and a designer, and argued that the assumptions underlying these roles were invalid. He believed principals lacked some of the knowledge and skills, such as coding skills, required to fulfil their roles as instructional leaders. He proposed an alternative view of instructional leadership: the experimenter. In his words:

The experimenter view of instructional leadership calls upon the principal to establish an 'experimental social system' in which he and other members of the social system continually try different approaches to their problems and examine the consequences of the actions for the functioning of the system. (p. 145)

In the late 1970s and early 1980s, the Effective School Movement in the USA brought about a breakthrough in research into instructional leadership (Hallinger, 2012). Many studies (e.g. Niedermeyer, 1977; Austin, 1979; Edmonds, 1979; Glasman, 1984; Fortenberry, 1985, etc.) explored factors

for positive learning outcomes and identified instructional leadership as an important lever to contribute to student learning. However, research was unable to provide reliable guidance for policymakers and practitioners due to weak research designs and a lack of theoretical models and instrumentations (Hallinger, 2011a). In the 1980s, instructional leadership emerged as a new construct (Hallinger, 2011a). Bossert et al. (1982) reviewed the literature on successful schools and effective principals, and defined the role of the principal involving curriculum and instruction as 'instructional management'. Moreover, they developed 'A Framework for Examining Instructional Management' (p. 40), illustrating the relationship between leadership and organisation.

Another valuable contribution to research on this construct is Hallinger's (1982) instructional management conceptual framework, which interprets the role of the principal as an instructional leader. This framework identifies instructional leadership as having three dimensions: defining the school mission, managing the instructional programme, and developing the school learning climate programme. The three dimensions are further delineated into 10 functions, as shown in Figure 3.1.

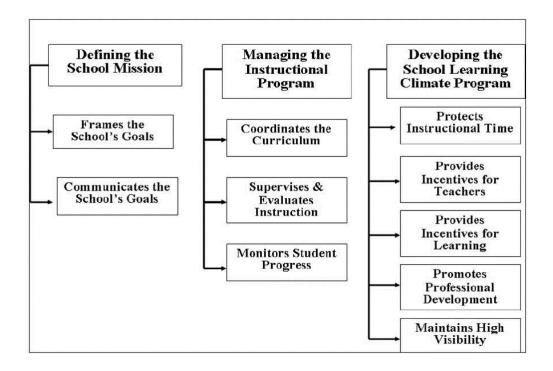


Figure 3.1 Hallinger's instructional management conceptual framework (Source: Hallinger, 2011a, p. 276)

Grounded in this framework, Hallinger (1982; 1990) developed an instrument, the *Principal Instructional Management Rating Scale (PIMRS)*, to evaluate instructional leaders' performance. The instrument has 50 items.

For each item, the rater assesses the frequency with which the principal enacts a behaviour or practice associated with that particular instructional leadership function. Each item is rated on a Likert-type scale ranging from 1 (almost never) to 5 (almost always). The instrument is scored by calculating the mean for the items that comprise each subscale. This results in a profile that yields data on perceptions of principal performance on each of the 10 instructional leadership functions. (Hallinger, 2011a, p. 277)

The validation studies verified that the PIMRS is a trustworthy instrument with high standards of reliability (Hallinger, 2011a). It can be used to evaluate the behaviour of the principal and other actors to provide instructional leadership at the elementary and secondary level or as a part of a professional development programme (Hallinger, PIMRS Manual, 1990). So far, it has been employed by a great many school systems and more than 200 researchers, featuring in published studies and doctoral dissertations relating to principal instructional leadership (Hallinger, 2012). Additionally, PIMRS studies conducted in an Asian context, such as in Malaysia, the Philippines, Thailand, Taiwan and Hong Kong, have also demonstrated its high standards of reliability and validity (Hallinger et al., 1994; Hallinger, 2011a). Although such validation for using the PIMRS in East Asia is tentative, due to limited coverage of regions and a small sample number of studies (Hallinger et al., 2013), it has the potential to evaluate how T&LDHs carry out their roles in China, and my experience as a former T&LDH confirms that evaluation using the PIMRS can essentially reflect what T&LDHs do in their work.

In the next two decades, more and more scholars and researchers, dominated by those in North America (e.g. Hallinger et al., 1983; Dwyer, 1985a, 1985b; Mitchell and Cunningham, 1986; Hallinger and Murphy, 1986; Blase, 1987; Murphy, 1988; Heck, et al., 1990; Willis and Bartell, 1990; Lee, 1991; Krug, 1992; Hallinger and Heck, 1996, 1998; Blase and Blase, 1999; etc.), engaged in research on this construct. Some (including the

researchers listed above) suggested principals should fulfil leadership functions as instructional leaders; others (e.g. Cuban, 1985) questioned the image of the principal as an instructional leader. Since the 2000s, research in this area has been a global interest. This has meant, on the one hand, that more evidence on effective leadership practice for learning has been accumulated, and a large body of knowledge formulated; on the other hand, the term 'instructional leadership' has been challenged, and a new term, 'leadership for learning', is gradually being accepted.

3.1.2 Effective leadership practice for learning

With regard to effective leadership practice, Murphy et al. (2007) systematically reviewed the literature on highly productive schools and school districts, and high-performing principals and superintendents, in the American context, and identified effective leadership for learning practice from eight dimensions: vision for learning, instructional programmes, curricular programmes, assessment programmes, communities of learning, resource allocation and use, organisational culture, and advocacy. They present a great number of specific and detailed behaviours in portraying an effective instructional leader. For example, effective leaders emphasise the creation, development, articulation, implementation, and stewardship of a vision of learning by translating the vision into measurable end results. They articulate their vision through personal modelling and by communicating with others in and around the organisation, and monitoring the process to make it a reality. They are knowledgeable about curriculum, instruction and assessment. They are especially skilful in creating learning organisations and fostering the development of communities of learning by nurturing collaborative processes, promoting the exchange of professional dialogue and providing teachers with opportunities to develop their expertise. They are able to understand, respond to, and influence the larger context of schooling to promote the success of all students.

This review presents a great amount of evidence to bring to life the image of an effective instructional leader. Although the review is primarily based on the USA context, many other studies in the global context (e.g. Southworth, 2002; Mulford, 2005; Møller et al., 2005; Wong, K.C., 2005; Gurr et al., 2006; Day et al., 2007; Robinson, 2008; Penlington et al., 2008; Reitzug et al., 2008; Khan, 2009; Louis et al., 2010; Pang, 2010; Robinson, 2010; Tam, 2010; Walker and Ko, 2011; Lai and Cheung, 2013; Law, 2011; Wong, P.M., 2011; Ylimaki, 2012; Odhiambo and Hii, 2012; Mattar, 2012; Hoy, 2012; Sofo, 2012; Webber et al., 2013; etc.), have reconfirmed these findings.

Based on Murphy et al.'s (2007) review, the team behind the 'Vanderbilt Assessment of Leadership in Education' (Goldring et al., 2007; Porter et al., 2006; 2010) identified two dimensions of effective learning-centred leadership: core components and key processes, described as follows.

- Core components refer to characteristics of schools that support the learning of students and enhance the ability of teachers to teach, involving high standards for student performance, rigorous curriculum (content), quality instruction (pedagogy), culture of learning and professional behaviour, connections to external communities, and systemic performance accountability.
- Key processes refer to leadership behaviours related to processes of leadership that raise organisational members' levels of commitment and shape organisational culture including planning, implementing, supporting, advocating, communicating and monitoring. (Goldring et al., 2007, pp. 2-3)

The team developed an assessment system to evaluate principal or collective instructional leadership practice 'defined by the intersection of six core components of school performance and six key processes' (Goldring et al., 2007, p. 3). The advantage of this framework is that it combines instructional leaders' functions and the leadership processes of excellent leaders.

Other reviewers, Leithwood and colleagues (2008), state that almost all successful leaders draw on the same repertoire of basic leadership qualities and practices. They divide them into four categories. The first is *building vision and setting directions*, and relates to the establishment of shared purpose to motivate staff; specific practices include building a shared vision, fostering the acceptance of group goals, and demonstrating high-

performance expectations. The second category is understanding and developing people. Successful leaders develop staff's knowledge and skills by providing individualised support and consideration, fostering intellectual stimulation, and modelling appropriate values and behaviours, and do so with two aims: the accomplishment of organisational goals, and establishment of the dispositions (commitment, capacity and resilience) needed to persist in applying knowledge and skills. The third category is redesigning the organisation. Its specific practices involve building collaborative cultures, restructuring the organisation, building productive relations with parents and the community, and connecting the school to its wider environment; the purpose of doing so is to establish an enabling condition in which staff can make the most of their motivations, commitments and capacities. The last category is managing the teaching and learning programme by staffing the teaching programme, providing teaching support, monitoring school activity and buffering staff against distractions from their work. The aim is also to establish productive working conditions by fostering organisational stability and strengthening the school's infrastructure.

These reviews provide a strong foundation on which to examine instructional leadership. However, the majority of research findings in both reviews are reliant on headteachers and principals, and focus on what effective instructional leaders do to improve students' outcomes; few studies portray what ineffective instructional leaders look like, what causes their ineffectiveness, and what they can do to enhance their performance.

3.1.3 Leadership for learning

Although a large body of knowledge on it has been accumulated, there is no uniform agreed definition of 'instructional leadership'. For example, in their Hong Kong case study, Lee and Dimmock (1999) maintain that the term 'curriculum leadership and management' is often taken to be synonymous with 'instructional leadership' and 'instructional management', while Castle et al. (2002, cited in Mitchell and Castle, 2005) state that their principals 'attached their concern to curriculum leadership rather than to a more general understanding of instructional leadership' (p. 413); for Castle and

colleagues, 'curriculum leadership' and 'instructional leadership' are two different concepts. Marks and Printy (2003, p. 373) suggest the term 'instructional leadership' can be defined from two perspectives: one narrowly defined as leadership functions directly related to teaching and learning, the other broadly referring to all the functions that contribute to student learning – theoretically encompassing everything a principal does to support students' outcomes and teachers' capacities. However, the broader conceptualisation seems hard to distinguish from transformational leadership (Hallinger, 2003; Robinson, et al., 2008; Leithwood and Sun, 2012).

With the development of research on learning-centred leadership across the global context, some scholars have started to question the term. For example, Bush (2011; 2014) raises three issues: first, instructional leadership focuses on the direction of influence, rather than its nature and source; second, it emphasises teaching rather than learning; and third, it focuses on headteachers/principals, to the exclusion of other leaders and teachers. Interestingly, some researchers are questioning whether or not a headteacher or principal should take on an instructional leadership role and whether or not they are instructional leaders in practice. For instance, in a Canadian study conducted by Castle et al. (2002, cited in Mitchell and Castle, 2005), many principals did not regard themselves as the best person to take on the role of instructional leadership, especially if they had been out of the classroom for a long time. Webb (2005) argues that instructional leadership 'stifles teachers' creativity and constrains school innovation' (p. 69), and suggests that 'pedagogical leadership' might be a better term for promoting pupil and teacher learning. Rhodes and Brundrett (2010, p. 59) examine the terms, and state:

In these terms, instructional leadership represents an important advance towards the establishment of inclusive learning-centred leadership. When coupled with the leadership support necessary to empower teachers to become truly engaged with building fertile and sustainable organisational and interorganisational learning environments for both staff and students, then the term leadership for learning becomes more appropriate. Leadership for learning may therefore be seen as subsuming and advancing the goals of instructional leadership by adopting learning-centred leadership approaches capable of

finding positive and potent expression within the experience of all leaders.

Hallinger (2011b, p. 126) also thinks "leadership for learning" suggests a broader conceptualisation that incorporates both a wider range of leadership sources as well as additional foci for action'. Currently, the term 'leadership for learning' has been accepted in England and elsewhere because of its emphasis on 'the need for a distributed approach' and 'balance with its central focus on learning rather than instruction' (Bush, 2015, p. 487).

In a four-year project about leadership for learning led by the University of Cambridge, the researchers explored its definition, generated five principles and formulated a framework for leadership for learning. They define leadership for learning (LfL) as:

a distinct form of educational practice that involves an explicit dialogue, maintaining a focus on learning, attending to the conditions that favour learning, and leadership that is both shared and accountable. Learning and leadership are conceived of as 'activities' linked by the centrality of human agency within a framework of moral purpose. (Swaffield and MacBeath, 2009, p. 42)

Guided by this definition, they developed five principles:

- 1 Leadership for learning practice involves maintaining a focus on learning as an activity.
- 2 Leadership for learning practice involves creating conditions favourable to learning as an activity.
- 3 Leadership for learning practice involves creating a dialogue about LfL.
- 4 Leadership for learning practice involves the sharing of leadership.
- 5 Leadership for learning practice involves a shared sense of accountability.

Figure 3.2 Leadership for learning principles

(Source: MacBeth et al., 2006, cited in Frost, 2009, p. 71)

Frost (2009, p. 71) states that the five principles are 'primarily an expression of pedagogical aims, a set of "tin openers" and a tool for continuing discourse'. They are not isolated, but dynamically interrelated:

A focus on learning and shared leadership are mediated by conditions for learning. Dialogue connects them, and all these four principles are framed by

the fifth principle, *accountability* – to one another and to external groups and agencies that have invested faith and finance in our schools. *Moral purpose* reflects the underpinning essential values, and the outer frame that brings all the elements into a coherent whole is leadership for learning. (Frost, 2009, pp. 71-72)

For each principle, a rubric of exemplar practices is developed to indicate a range of desirable leadership practices for pedagogical aims (MacBeath and Dempster, 2009; Jull et al., 2014). For instance, for the fourth principle on shared leadership, the exemplar practices include five points:

Leadership for learning practice involves the sharing of leadership in which:

- a) structures support participation in developing the school as a learning community
- b) shared leadership is symbolised in the day-to-day flow of activities in the school
- c) everyone is encouraged to take the lead as appropriate to task and context
- d) the experience and expertise of staff, students and parents are drawn upon as resources
- e) collaborative patterns of work and activity across boundaries of subject, role and status are valued and promoted

Figure 3.3 The fourth principle for leadership for learning practice (Source: Waterhouse and Møller, 2009, p. 125)

Connecting the core conceptions, the five principles and the relationship between them, they formulate a framework of leadership for learning that involves interconnected layers of learning, including student, professional, school and system learning, the five principles and the foundation of both leadership and learning as agential activity, all framed by moral purpose and democratic values.

This framework provides an updated notion of learning-centred leadership; in particular, shared leadership describes the actual form of leadership for learning, and is also an important contributing factor to student learning. Similarly, one of 'seven strong claims about successful leadership' disseminated by Leithwood et al. (2008, p. 27) is that 'school leadership has a greater influence on schools and students when it is widely distributed'. Empirically, total leadership, which refers to the combined influence of leadership from all sources – including deputy heads, individual teachers,

parents and students – 'accounts for a significant 27% of the variation in student achievement across schools', and 'the relationship between total leadership and teachers' capacity is much stronger than the relationship between the headteacher's leadership alone and teachers' capacity' (p. 34). Prompted by growing awareness of the significance of such total leadership and shared leadership, in the past 10 years distributed leadership 'has generated substantial interest among researchers, policy-makers and practitioners' (Harris, 2013, p. 544).

3.2 Distributed leadership

Distributed leadership is an opposite model to individual or focused leadership, which makes 'a strong commitment to a unit of analysis consisting of a solo or stand-alone leader' (Gronn, 2002, p. 423). Spillane (2005) makes the criticism that such leadership success stories 'equate school leadership chiefly with an individual leader – typically the school principal' (p. 143). Recently, Bush and Glover (2014) reviewed eight popular leadership models, finding that half of them, including instructional, managerial, transformational, and moral and authentic models, are 'essentially about individual (usually principal) leadership' (p. 559). In some ways, research on leadership at different levels and interaction between leaders is deficient; as an alternative, distributed leadership has recaptured the attention of researchers.

3.2.1 The resurgence of distributed leadership

Originally, the idea of distributed leadership dates back to Gibb (1954, cited in Gronn, 2002), who raised the possibility that several people may assume leadership responsibilities in a distributed way. In recent years, it has resurged and flourished due to four factors. First, 'the popularity of transformational leadership and a revitalization of charismatic leadership' has caused dissatisfaction with focused individual leadership, prompting scholars and researchers to select an alternative way to look at leadership practice (Gronn, 2009a, p. 384). Second, headteachers' leadership and management work is so significant that there is a need to encourage

teachers and other professionals with different skills and expertise to exercise their leadership potential, with the aim of implementing change and improving organisational performance (Hatcher, 2005; Grubb and Flessa, 2009; Hartley, 2010). Third, Bush and Glover (2014) note that distributed leadership fits with the notion that values are supposed to be shared by school staff. Fourth, distributed leadership is actively advocated at the policy level in a number of countries, such as the UK and Scandinavian nations (Harris, 2013). This encourages normative work that 'provides models and rationales for practitioners to improve their practice' (Gunter et al., 2013, p. 563), thereby promoting development of the field. As a consequence, a great amount of research evidence has been accumulated to illuminate the concept of distributed leadership.

3.2.2 Research on distributed leadership

Drawing upon the conceptual foundations of distributed cognition and activity theory and their empirical research, Spillane, a leading scholar in this field, with colleagues (2001; 2004) generates a distributed leadership analytical frame within which to examine school leadership. First, the research suggests that the proper unit of analysis to examine school leadership should be leadership activity, which 'is constituted—defined or constructed—in the interaction of leaders, followers, and their situation in the execution of particular leadership tasks' (2004, p. 10). Second, school leadership is best understood by investigating task-enactment because it 'unfolds from the perspective and through the "theories-in-use" of the practitioner', rather than the 'espoused theories' (p. 15).

Third, the interactions and interdependencies among leaders, followers, and situation are the focus for understanding school leadership. The interactions among leaders are shown to be interdependent in three different ways: collaborated, collective and coordinated distribution.

- Collaborated: leadership is stretched over the work of two or more leaders who work together in place and time to perform the same leadership routine.
- Collective: leadership is stretched over the work of two or more leaders who perform a leadership routine while working separately but interdependently.

Coordinated: two or more activities that have to be performed in a particular sequence. (Spillane and Orlina, 2005, cited in Gunter et al., 2013, pp. 562-563)

Besides these three co-performance forms, there is another form called parallel performance, which means that 'leaders perform the same leadership work in parallel and redundantly, carrying out the same leadership function' (Spillane, 2006, p. 40, cited in Gunter et al., 2013, p. 563). Interactions also occur among leaders and followers in different ways. For example, leaders use their positional authority to support their beliefs and actions, whereas followers draw upon personal characteristics, access to information, or special knowledge or expertise to influence leaders (Bacharach and Lawler, 1980, cited in Spillane et al., 2004). At the same time, interactions also take place between leaders and aspects of the situation including a variety of tools, routines and structures (Spillane et al., 2004; Spillane, 2005).

Apart from Spillane and colleagues' work, many other researchers, such as Gronn (1999; 2002; 2009a, b; 2011), Harris (2003; 2008; 2013) and Timperley (2005; 2009), have also undertaken theoretical and/or empirical studies, and produced different ideas and models for understanding distributed leadership. For example, Mayrowetz (2008) examines the term 'distributed leadership' and analyses its four usages: one is the descriptive, activity theory-based understanding mainly developed by Spillane and colleagues described above, but Mayrowetz argues that 'very few empirical studies actually use this theoretic lens' (p. 427). The other three types, which are not strongly grounded in theory, comprise understanding for improving democracy, school effectiveness and human capacity development. Robinson (2008) examines the concept of distributed leadership from two perspectives: 'distributed leadership as task distribution' and 'distributed leadership as distributed influence processes'. In combination with selected empirical evidence, she argues that distributed leadership research does not have strong links with student outcomes. She suggests integrating the two perspectives in suitably modified form to enhance the linkage between them.

Macbeath (2009) conducted case studies in 11 different-stage British schools, from which he generated six forms of leadership distribution: formally, pragmatically, strategically, incrementally, opportunistically and culturally distributed. Grubb and Flessa (2009) explored different ways in which principal leadership is distributed among a small group of leaders in 10 American schools, such as dual principals, three- or co-principals, eight teachers sharing leadership, and rotating headteachers. Timperley (2005) undertook a distributed leadership study in seven New Zealand primary schools participating in a literacy initiative, and found that the teacher leaders in different schools manifested very different leadership practices, generating totally different results for teachers' teaching and students' learning. However, it is worth noting Gronn's (2009a, b) argument that 'distributed leadership' might not be the best term to illustrate this type of leadership practice described by researchers, based on both theoretical research and empirical evidence, and that the more accurate term should be 'hybrid leadership'.

3.2.3 Hybrid leadership

Gronn identifies three limitations of the term 'distributed leadership'. First, empirical research shows that focused and distributed leadership can co-exist in different formations within an organisation, rather than an either-or distinction (Gronn, 2011), while distributed leadership cannot capture the entire picture of leadership practice (Gronn, 2009a). Second, the centrality of the distributed perspective lies in interdependence among leaders, but 'not all the tasks that have to be integrated to give shape to these activities are accomplished collectively... some tasks are still performed alone' (Gronn, 2009a, p. 389). Third, the patterns in a number of studies pertaining to distributed perspective 'sit rather uneasily beneath the descriptive rubric of "distributed" (Gronn, 2011, p. 74), because individual leaders are still prominent and exert 'significant and disproportionate influence in comparison with other individual colleagues' (Gronn, 2009a, p. 392). Given these limitations, Gronn (2009a, p. 389) states:

If, indeed, the reality of leadership practice in organizations has been

trending ... towards a diversified and mixed combination of solo performance in combination with dyadic, team and other multi-party formations, then 'hybrid' is the most credible term for capturing this complexity and fluidity.

He describes the term as 'a mixture, in which varying degrees of both tendencies (i.e. focused and distributed) co-exist, with the understanding that within the distributed segment of the mix there are, potentially, a range of plural member formations' (Gronn, 2009a, p. 389). In essence, hybrid leadership allows equally significant sources of influence from both focused and distributed perspectives, and can be a more inclusive and broader concept than 'distributed leadership' (Bush, 2014).

Moreover, Gronn (2011, p. 76) suggests the term 'configuration' can be used as the unit of analysis to 'focus on the patterns of aligned and realigned leadership practice'. The term 'configuration' refers to division of labour, which means:

the working practices used to accomplish the totality of the work of an organisation, division of responsibilities encompasses the overall arrangement of authority and accountability, lines of reporting and duty statements. (Gronn, 2009b, p. 27)

Ontologically, to examine the ways in which leadership is configured can lead to better understanding of leadership practice and provide the basis on which to evaluate a particular mode of leadership configuration — and thinking about configuration helps leaders consider 'a holistic totality of learning-directed activity' to improve student learning and school effectiveness (Gronn, 2011, pp. 77-78).

3.3 Learning-centred leadership and distributed leadership: the Chinese perspective

With regard to learning-centred leadership in Chinese-language literature, the earliest paper about curriculum leadership was published in 2002 (Long and Sun, 2012). Examining the literature in Chinese, I identify two foci: exploration of the concept and contents of instructional leadership, and strategies and methods for exercising instructional leadership.

In terms of the conceptual issues, some researchers define instructional leadership as 'a capability', and others as 'a process'. However, they all make mention of teacher and student development. For example, Zhao (2010) describes instructional leadership as 'a capability to carry out instructional innovations, achieve school visions and enhance students' development by influencing teachers and students' (p. 7). Zhang (2011) defines instructional leadership as 'a capability of improving teachers' and students' development through leading a school's instructional activities and instructional subjects' (p. 50). It includes two dimensions: leading ideology and guiding practice. Du (2011, p. 44) cites Li's (2005) work and describes instructional leadership as 'a dynamic process in which school leaders enhance teacher professional development and student growth'. Du further states that instructional leadership has four characteristics: it is a form of principal leadership and a type of professional leadership; it is based on professional and moral authorities; it works on the premise of respecting teachers' professional autonomy; and it reflects a diversity of roles. Zheng (2012) reviews different propositions for the concept in the literature, and puts forward a working definition: 'instructional leadership is a process of influence exercised by the principal on setting a school's instructional vision, leading instructional innovations, and improving teacher and student development' (p. 43). Other researchers (e.g. Chen, 2004; Han, 2007; Jing, 2008; Xia, 2012) also provide views similar to those described above.

A large-scale empirical study in the Chinese mainland context conducted by Zhao and Liu (2010) identified four dimensions of instructional leadership functions, each comprising several tasks:

- guiding instructional organisation: enhancing positive relationships among the teachers, managing instructional organisation, formulating instructional policies and regulations, and co-ordinating instructional work;
- planning instructional activities: leading curriculum arrangements, managing instructional objectives, leading student development, and leading instructional norms;
- providing instructional conditions: mapping out human resources, providing resources for teacher professional development, and developing

positive instructional environments; and

supervising instructional implementation: visiting classrooms, observing and evaluating instruction, giving lessons, etc.

They believe the four dimensions are interrelated. Among them, guiding instructional organisation is the core of instructional leadership, and supervising instructional implementation takes place at all levels. In sum, these studies provide several perspectives interpreting the concept of 'instructional leadership' and its components in the context of mainland China.

When it comes to exercising instructional leadership, many researchers have come up with a range of strategies and methods that instructional leaders ought to adopt to achieve educational objectives. For example, Xu (2008) states that headteachers as instructional leaders should hold their own educational values and beliefs, communicate these within the school, and make them become a school's guiding notion for practice; they should be aware that the purpose of instruction is every student's development and success, and to provide students with a caring, democratic and harmonious learning environment; they should lead the management team to understand the philosophy of teaching and learning in their schools, organise pertinent instructional research activities, capture the requirements of teaching and learning within the context of new curriculum reform, establish new instructional modes, and ensure the implementation of a new curriculum in a correct and healthy way. Most importantly, they should lead teachers to effectively implement the new curriculum reform.

Zhao (2010) suggests headteachers should develop a positive school culture, and regard teachers as foremost among resources. Xu (2011) notes that headteachers should formulate reasonable school-based management policies and regulations, and provide teachers with caring and supportive working conditions. Du (2011) states that there are four strategies through which headteachers exercise instructional leadership: creating a school vision, focusing on the classrooms, improving teacher professional development, and building a middle management team. Chu and Liu (2010) note that a school must establish a complete curriculum system to satisfy

students' needs. They argue that curriculum development cannot depend solely upon teachers' efforts, and headteachers must study the curriculum and exercise curriculum leadership. They (headteachers) also need to research both teachers and students, and plan and organise school-based teacher training programmes aimed at meeting student development needs. They should establish instructional assessment criteria, and give timely feedback to teachers and students.

Wang and Huang (2010) divide instructional leaders into six leadership types: transactional, goal-leading, policy-regulating, resource-ensuring, inspiring and culture-shaping. They state that these six types are different, but one is not superior to another. They can be applied in different school situations with full consideration of three factors: the headteacher's professional competencies, the teachers' maturity and the school organisation's maturity. It is worth noting that the majority of research on learning-centred leadership in Chinese-language literature is based on values, and personal experience and reflection, rather than empirical studies.

With regard to distributed leadership, a Chinese scholar, Feng (2012, p. 31), argues, 'distributed leadership has been advocated in the western context, but it has not been echoed in China because we have already been practising it'. Relevant research is very scarce, except for several articles, such as those by Feng (2012) and Jiang (2013), who give an introduction to distributed leadership as a research tendency and conceptual interpretation in the western context. Thus theoretical and empirical research on distributed or hybrid leadership is needed in the Chinese context.

3.4 Comments on the literature and the focus of the study

This section includes two elements: the limitations of research on learning-centred leadership and distributed/hybrid leadership; and the focus of my study and what I anticipate as its contribution to the knowledge base.

3.4.1 The limitations of research on learning-centred leadership and distributed leadership

The theories and research findings in relation to learning-centred leadership and distributed leadership in the global and Chinese contexts are presented above, and provide a strong foundation to underpin my research. However, three research gaps can be identified. First, the majority of research on learning-centred leadership 'focused on principals/head-teachers, to the exclusion of other leaders and teachers' (Bush, 2014, p. 3). Early in 2002, Southworth cited Ribbins's (1997) words, 'heads are interesting and deputies are not', and pointed out that 'there has been too little empirical work on school leadership at other levels', suggesting research 'needs to be accompanied by studies into deputy headship and other leaders' (p. 74). Over 10 years have passed, and the situation has not changed.

In the context of mainland China, headteachers devote most of their time to acquiring resources, attracting excellent students, and establishing good relationships with local government agencies and others, but they do not spend much time directly influencing learning and student outcomes (Walker et al., 2012). Chu and Liu (2010) even discuss whether or not a 'big' headteacher should enter 'small' classrooms. They cite some headteachers' words: 'I am a "big" headteacher. I should focus on financial responsibility and establishment of connections and relationships. I have a teaching and learning deputy head (T&LDH), who is in charge of classroom observation and instruction supervision. It is sufficient to ask him to observe lessons'; 'Classrooms are too small. My duty is to lead direction, and I do not need to enter classrooms' (p. 4). These words represent the perceptions and beliefs of many headteachers in China. From this evidence, learning-centred leadership research that is too reliant on data generated from headteachers may 'not only be limiting, but may lead to ill-founded conclusions' (Gurr, et al., 2006, p. 373).

The second research gap is that, although an image of an effective instructional leader can be formed based on the research evidence reliant on principals and headteachers, descriptions in such research focus more on the leader's behaviour, rather than providing a well-rounded image of him or her as a professional. Moreover, few studies provide the situations in which these effective behaviours occur (Lai and Cheung, 2013), and the

characteristics of the range or variation of performance that can be expected among school leaders cannot be captured (Louden and Wildy, 1999a). So it is more meaningful to present school leaders' performances, including the ideal performance and the range of relatively weak performances, on a continuum (Louden and Wildy, 1999b) – in this way, desired performance, and the gap between that ideal and actual performance, can be identified.

Third, the research on distributed/hybrid leadership in the global context either emphasises how top leaders work in a distributed way (e.g. Grubb and Flessa, 2009), or how teachers exercise their leadership (e.g. Frost and Durrant, 2003; Timperley, 2005). Sometimes these teacher leaders were positioned in situations in which individual leaders, mostly headteachers, exerted a disproportionate influence on their leadership; in other situations, the headteachers had reorganised their schools' structures to contribute to student learning by adding teaching assistants, flattening the organisational structures and encouraging student leadership (e.g. Harris, 2008). Research considering deputy heads as the main focus from the distributed perspective is rare in the global context. Particularly in the Chinese context, with a large power-distance and collectivist society (Hofstede et al., 2010), it is well worth researching in what modes and in which structures people and power are distributed for learning-centred leadership.

3.4.2 The focus of my study and anticipated contribution to the knowledge base

With respect to the three limitations identified above, my study is intended to contribute to filling these gaps in two ways. First, I have focused my attention on T&LDHs, specialised senior leaders in charge of teaching and learning in Chinese secondary schools. Exploration of what they physically do provides the opportunity to test existing interpretations of the functions of instructional leadership (e.g. Hallinger and Murphy, 1985; Krug, 1992; Zhao and Liu, 2010) dependent on headteachers' or principals' evidence. Although articulating school leaders' 'enacted' functions at different levels is a very basic task, it is imperative for understanding how leadership is distributed in the Chinese context, thereby clarifying how they fulfil their job functions.

Moreover, we need to construct our indigenous knowledge base from a very basic foundation due to a lack of rigorous empirical studies in Chinese education research (Walker et al., 2012). My research focusing on the Chinese mainland context can contribute to augmenting the limited empirical evidence available.

Second, in order to enhance T&LDHs' professional development, policymakers, school leadership trainers and practitioners need to make sense of what both well-developed and less-developed professionals look like, as well as the process of professional development. Indeed, T&LDHs' professional performances are determined by many elements, such as the values and beliefs they hold, their knowledge, skills and competencies, and contextual factors. I wanted to examine the range of characteristics that different T&LDHs possess in a holistic way, since this has the potential to contribute to the formulation of reasonable policies and rational decisions, the design of T&LDHs' training programmes and individuals' assessments for professional development, as well as subsequent improvement actions. To achieve these objectives, I chose to look at T&LDHs' professional practices from the perspective of professionalism.

3.5 Other theoretical perspectives underpinning the study

Examining the range of characteristics that different T&LDHs possess can help inform decisions about research focus and design. Evans's (2008; 2011; 2013) work on professionalism and professional development provides a relevant theoretical basis to the focus I wanted to incorporate into my research. I present details of Evans's work in the next section, where, after introducing her work, I focus on the theories and research findings that have a bearing on my study. I use Evans's three components of professionalism (see below) as an organisational frame and theoretical model to guide my research.

3.5.1 Evans's work on professionalism and professional development

Evetts (2013) reviews a range of authors' interpretations of the term

'professionalism', including as an occupational or normative value, as a mechanism of occupational change in the modern world, as a discourse of self-control, as value system involving expert judgement, expertise, and a reassessment of quality of service and of professional performance in the best interests of both customers and practitioners. In contrast with these interpretations, Evans (2011, pp. 854-855) states that professionalism 'is simply a description of people's "mode of being" in a work context'. Specifically, she defines professionalism as:

practice that is consistent with commonly held consensual delineations of a specific occupational group and that both contributes to and reflects perceptions of the group's purpose and status and the specific nature, range and levels of service provided by, and expertise prevalent within, the occupational group, as well as the general ethical code underpinning this practice. (2013, p. 484)

Moreover, she presents a conceptualisation of professionalism that deconstructs it to reveal its componential structure:

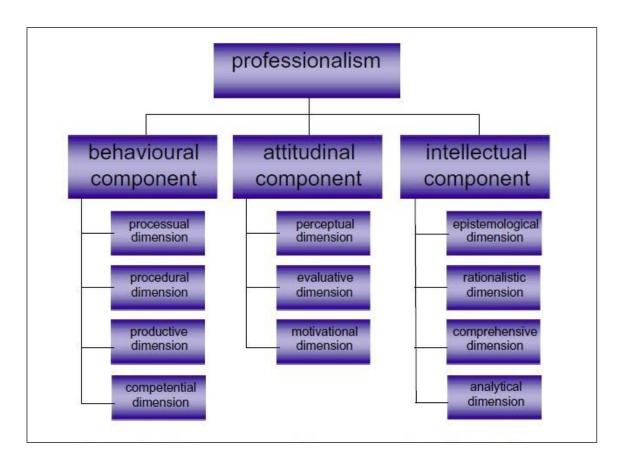


Figure 3.4 The componential structure of professionalism

(Source: Evans, 2011, p. 855)

This structure consists of three main components: behavioural, attitudinal and intellectual. Specifically, the behavioural component relates to what practitioners physically do at work, including the processes and procedures they apply to their work; their output, productivity and achievement, including how much they do and what they achieve; and their skills and competences. The attitudinal component relates to attitudes held, comprising their beliefs, perceptions and views; values; and motivation, job satisfaction and morale. The intellectual component relates to their knowledge and understanding and their knowledge structures, involving what they know and understand, as well as the nature and degree of reasoning and analyticism they apply to their practice. She notes that this model can serve 'as a template for delineating a particular professionalism', and 'the greater the level of detail applied to the depiction of each of these dimensions of professionalism, the more vivid and colourful will be the image conveyed' (Evans, 2011, p. 856).

Furthermore, Evans (2008) references Hoyle's (1975) two hypothetical models of professionality: restricted and extended, at either end of an 'extended-restricted' continuum, which was used in her empirical studies of primary teachers (Evans, 1997), in studies of FE middle managers (Gleeson and Shain, 1999) and of academics (Evans, 2000; 2009). She explains Hoyle's continuum by taking teachers as an example:

The characteristics used to illustrate these two hypothetical models created what may effectively be seen as a continuum with, at one end, a model of the 'restricted' professional, who is essentially reliant upon experience and intuition and is guided by a narrow, classroom-based perspective which values that which is related to the day-to-day practicalities of teaching. The characteristics of the model of 'extended' professionality, at the other end of the continuum, reflect: a much wider vision of what education involves, valuing of theory underpinning pedagogy, and the adoption of a generally intellectual and rationally-based approach to the job. I use the term 'professionality orientation' to refer to individuals' location on the 'extended-restricted' continuum. (2008, p. 26)

Overall, Evans provides a definition of professionalism that easily connects research and practice, an analytical framework that can be used to examine school leaders' characteristics, and a possible means by which to examine

T&LDHs' characteristics by positioning them on the 'extended-restricted' continuum.

In the next three sections I present the theories and research findings in relation to T&LDHs' work using the labels of Evans's three components of professionalism: behavioural, attitudinal and intellectual. Notably, although I draw upon Evans's three dimensions of professionalism, I do not confine myself to her model, but consider other theorists' and scholars' insights.

3.5.2 The behavioural component

Evans's behavioural component of professionalism describes the nature and foci of professionals' work-related behaviour through the processes, procedures and competences that they apply to their practice and through their output (2011). It thus relates to T&LDHs' job functions, and to their skills and competencies.

3.5.2.1 T&LDHs' job functions

Recently, the Ministry of Education of China (2013) issued the first guiding document on school leaders' professional standards, entitled 'Professional Standards for Headteachers in Compulsory Education Schools'. The standards are applied to all heads and deputy heads in compulsory education schools (including primary and junior secondary schools) as basic requirements used in school leaders' appointments, the design of training courses and assessment. The document comprises five basic rationales: (1) moral issues first, (2) developing people, (3) leading school development, (4) focusing on capabilities, and (5) life-long learning; and six main job functions: (1) planning school development, (2) developing educating culture, (3) leading instructional programmes, (4) promoting teachers' growth, (5) optimising internal management, and (6) modulating and adapting to the external environment; as well as suggestions for implementation.

For each job function, there are three types of requirement: professional understanding and awareness, professional knowledge and methods, and professional competencies and behaviours. For example, in the function of 'leading instructional programmes', the description is as shown in Table 3.1.

Table 3.1 Excerpts of professional requirements for heads and deputy heads from 'The Professional Standards for Headteachers in Compulsory Education Schools' issued by the Chinese government (my translation)

Job function	Professional requirements				
Leading instructional programmes	Professional understanding and awareness	 21. Care about every student, tailor teaching in accordance with their aptitudes, and improve education quality comprehensively. 22. Respect educational and instructional principles, and place emphasis on cultivating students' awareness of responsibilities, spirit of innovation and practical ability. 23. Respect teachers' teaching experience and wisdom, and promote instructional reformation and innovation. 			
	Professional knowledge and methods	 24. Master the aims of development and curricular standards for students in different stages. 25. Be familiar with policies on curricular establishment, development, implementation, and assessment, as well as the use of text and teaching materials, and lessons learned about curricular and instructional reform at home and abroad. 26. Master basic principles and methods of classroom instruction and educational information technology application. 			
	Professional competencies and behaviours	27. Coordinate the three-level curricular system effectively, ensure implementation of national and local curricula, and promote the development and implementation of school-based curricula; provide students with rich and colourful curricular resources. 28. Carry out compulsory education curricular standards; reduce students' excessive school work burdens; do not advance the level of curricular difficulty; do not reduce the teaching time of some curricula, such as music and art, etc.; ensure students spend one hour each day participating in sports. 29. Establish a system of classroom observation, discussion and assessment; conduct classroom observations and guide instruction, and fulfil the requirements of the number of classroom observations regulated by local educational authorities. 30. Organise and implement instructional research activities and innovations in an active way; establish and improve educational assessment systems for students' holistic development; do not place undue emphasis on examination scores and the proportions of students entering higher or further education.			

Looking through the items in the standards, many are related to policies and regulations as well as basic and general requirements. Moreover, the standards do not reflect the differences between headteachers and deputy heads; the two positions have different job functions and should have different capability requirements. Thus the standards are limited in their ability to provide heads and deputy heads with pertinent guidance on practice.

With regard to deputy heads' job functions, in a survey study among 21 British college deputy heads conducted by Bush (1983), 13 respondents identified resource management as their main responsibility. They ranked their responsibilities, in order of significance, as: resource management, staff appointment, staff development, curriculum development, external affairs and student affairs. In another study that included as respondents deputy heads in Hong Kong secondary schools, Kwan (2009) found deputy heads had seven job responsibilities: (1) external communication and connection; (2) quality assurance and accountability; (3) teaching, learning and curriculum; (4) staff management; (5) resource management; (6) leader and teacher growth and development; and (7) strategic direction and policy environment. The author argues that deputy heads' responsibilities 'extend across managerial and strategic functions in addition to the traditional pastoral responsibility' (p. 198).

In comparison with job responsibilities fulfilled by deputy heads in many mainland Chinese secondary schools, deputy heads' job responsibilities in these two studies might be assigned to two or three leaders; indeed, we have different leadership configurations in the mainland Chinese context. Unfortunately, I have found no relevant studies, either in English or Chinese, focusing on deputy heads in the context of mainland China.

In addition to these studies, I have referred above to research findings on the principal's job functions as an instructional leader in the American (see p. 18) and Chinese (see pp. 31-32) contexts. From my own experience, Hallinger's (1982; 2011a) instructional management conceptual framework (see p. 19) essentially reflects T&LDHs' job functions and responsibilities in

Chinese secondary schools; in contrast, the studies focusing on deputy heads do not capture T&LDHs' main job functions in the Chinese context.

3.5.2.2 Competency studies

Competency studies are an important means of examining people's abilities in the workplace. In the literature, the two terms 'competence' and 'competency' are used in three different ways. At times, 'competence' refers to functional areas in the UK, whereas 'competency' refers to behavioural areas in the US in relation to the competency movement (Esp, 1993); elsewhere, the two terms are used interchangeably (e.g. Wynne and Stringer, 1997); and sometimes they are used to mean different things (Deist and Winterton, 2005). In my study I followed the second usage. Boyatzis (2008, p. 6; 2009, p. 750), one of the leading researchers in competency studies, defines a competency as a capability or ability, which

is a set of related but different sets of behavior organised around an underlying construct, which we call the "intent". The behaviors are alternate manifestations of the intent, as appropriate in various situations or times.

Influenced by the development of emotional intelligence theory (Goleman, 2004; Goleman, et al., 2012), competency studies over several decades have shown that outstanding leaders, managers, advanced professionals and people in key jobs appear to need two types of ability: threshold and differentiating competencies.

Threshold competencies are those characteristics essential for performing a job, but not causally related to superior performance, including: expertise and experience; knowledge; and an assortment of basic cognitive competencies, such as memory and deductive reasoning (Boyatzis, 2008; 2009). Differentiating competencies are defined as the factors that can distinguish superior from average performers (Boyatzis, 1982; Spencer and Spencer, 1993), and comprise three types of competencies:

an emotional intelligence competency is an ability to recognise, understand, and use emotional information about oneself that leads to or causes

- effective or superior performance;
- a social intelligence competency is the ability to recognise, understand and use emotional information about others that leads to or causes effective or superior performance; and
- ❖ a cognitive intelligence competency is an ability to think or analyse information and situations that leads to or causes effective or superior performance. (Boyatzis, 2008, p. 8)

Specifically, each type can be defined by different competencies:

Emotional intelligence competencies:

- Self-awareness cluster: concerns knowing one's internal states, preferences, resources, and intuitions. The self-awareness cluster contains one competency:
- Emotional self-awareness: recognising one's emotions and their effects.
- Self-management cluster: refers to managing one's internal states, impulses, and resources. The self-management cluster contains four competencies:
- Emotional self-control: keeping disruptive emotions and impulses in check.
- Adaptability: flexibility in handling change.
- Achievement orientation: striving to improve or meeting a standard of excellence.
- Positive outlook: seeing the positive aspects of things and the future.

Social intelligence competencies:

- Social awareness cluster: refers to how people handle relationships and awareness of others' feelings, needs, and concerns. The social awareness cluster contains two competencies:
- Empathy: sensing others' feelings and perspectives, and taking an active interest in their concerns.
- Organizational awareness: reading a group's emotional currents and power relationships.
- Relationship management cluster: concerns the skill of, or adeptness at,

inducing desirable responses in others. The cluster contains five competencies:

- Coach and mentor: sensing others' development needs and bolstering their abilities.
- Inspirational leadership: inspiring and guiding individuals and groups.
- Influence: wielding effective tactics for persuasion.
- Conflict management: negotiating and resolving disagreements.
- Teamwork: working with others toward shared goals, creating group synergy in pursuing collective goals.

Cognitive intelligence competencies:

- Systems thinking: perceiving multiple causal relationships in understanding phenomena or events.
- Pattern recognition: perceiving themes or patterns in seemingly random items, events, or phenomena. (Boyatzis, 2009, pp. 754-755)

Research also suggests that effective leaders are differentiated from other leaders through the exercise of a relatively small range of competencies (Dulewicz and Higgs, 2005), and these competencies can be developed (Boyatzis, 2008). Identifying the differentiating competencies of a particular job is therefore imperative, because it not only provides a criterion model for effective performance of the job, but also a useful framework for training typical performers. Meanwhile, both sets of identified competencies required for a job can be used in the areas of recruitment, appraisal and succession planning (Ouston, 1993; Wynne and Stringer, 1997).

3.5.3 The attitudinal component

Evans's (2008) attitudinal component of professionalism includes people's values; beliefs, perceptions and views; and their motivation, job satisfaction and morale. People's values, beliefs and perceptions are influenced by the social and cultural contexts in which they are operating. In order to understand T&LDHs' work attitudes, it is useful to learn about these contextual elements. Although individuals may have their own values, beliefs

and perceptions, which I explore in this study, the widely accepted value system in a particular cultural background provides a lens through which to view – and understand – individuals' thinking and behaviour. Generally speaking, contemporary Chinese culture includes three major elements: traditional culture, communist ideology, and western values (Fan, 2000). In this section I present Chinese people's values and beliefs, the education ideology advocated by the government, and research findings with respect to school leaders' work attitudes.

3.5.3.1 Chinese people's values and beliefs

When it comes to traditional culture, it is evident that Chinese people's values and beliefs are deeply rooted in Confucianism. The representative character of Confucianism is Confucius (551-479 B.C.E.), a famous educator in ancient China. His main thoughts can be found in the *Analects*. The other three classical texts of Confucianism are *Mencius, Great Learning* and *The Doctrine of the Mean*. In this section, I present Chinese people's values and beliefs, as well as their origins, in relation to education, organisation and management:

First, Chinese people emphasise moral education. Confucius thinks the moral perfectibility of mankind is the only major project worthy of pursuit in one's life (Yang and Sternberg, 1997). The central concept of such moral perfectibility is 'Junzi', which refers to a good person with an ideal personality characterised by 'ren' (benevolence) and 'li' (propriety) (Reagan, 2010). Following this tradition, moral education has been the primary aim of Chinese education, although its content has been constantly changing at different political, economic and social development stages. Currently, according to 'Primary and Secondary Schools Moral Education Regulations' (Ministry of Education, 1998), moral education is defined as political, moral and psychological guidance for students. Meanwhile, an important perception among Chinese people is that 'cognitive knowledge is respected only when it serves the moral aim' (Cheng, 1998, p. 21). Based on this tradition, most secondary schools typically consist of three departments:

moral education, teaching and learning, and logistics.

Second, the Chinese emphasise self-cultivation and self-perfection by constantly reflecting on themselves and improving their morality. Confucius believes all individuals have the potential to be developed, and the ability to cultivate their own morality and self-control (Leung, 2010). Management of the individual self is regarded as the fundamental starting point of management of society (Liu, 1990, cited in Cheng, 1998). One needs to 'guard oneself against all things that are likely to impair one's moral judgement and to deflect one from one's moral purpose, such as the pursuit of self-interest' (Yang and Sternberg, 1997, p. 104). At the same time, learning is viewed as 'a constant modification of self by day-to-day engagement towards a *Junzi* (good person), a process of gradually becoming shining but silent' (Wu, 2011, p. 579).

Third, Chinese people emphasise effort and self-discipline. For Confucius, 'human beings were considered to be malleable, and like clay, subject to molding by the events of everyday life' (Stevenson and Stigler, 1992, p. 97). In their study, Stevenson and Stigler (1992) report that Chinese and Japanese societies consider effort a component of success and allow no excuses for lack of progress in school; the Chinese believe that, regardless of one's current level of performance, opportunities for advancement are always available through more effort. Leung (2010) also notes that several studies have found Chinese mothers and university students refer to 'effort' to explain their children's or their own academic performance. Cheng (1998) argues that such assumptions shape beliefs and perceptions in education, such as inter-student competition and levels of expectations conveyed to students. In the work setting, hard work is seen as an important indicator of one's performance.

Fourth, China is identified as a large power-distance society by Hofstede et al. (2010), who define power distance as 'the extent to which the less powerful members of institutions and organisations within a country expect and accept that power is distributed unequally' (p. 61). At school, the large

power-distance culture is reflected in several perspectives:

Teachers are treated with respect or even fear ... The educational process is teacher centered; teachers outline the intellectual paths to be followed. In the classroom there is supposed to be a strict order, with the teacher initiating all communication... teachers are never publicly contradicted or criticised and are treated with deference even outside school. (p. 69)

Hofstede et al. (2010) also describe the characteristics of such large powerdistance in the work place:

Superior and subordinates consider each other as existentially unequal; the hierarchical system is based on this existential inequality. Organisations centralize power as much as possible in a few hands... The ideal boss in the subordinates' eyes ... is a benevolent autocrat or 'good father'. After some experiences with 'bad fathers', they may ideologically reject the boss's authority completely, while complying in practice... Relationships between superior and subordinates... are frequently loaded with emotions. (pp. 73-74)

These two citations vividly portray perspectives in Chinese society. This tradition originated from Confucius's view about 'wuLun', defined as five basic human relations and the principles affecting each: loyalty and duty between sovereign and subject (or master and follower); love and obedience between father and son; obligation and submission between husband and wife; seniority and role modelling between elder and younger brother; and trust between friends (Fan, 2000). The purpose of following 'wuLun' is to establish a moral social order to ensure a harmonious society. As a result, individuals are organised into a configuration of social hierarchy, by which they gain their identities (Fei, 1947/1985, cited in Cheng, 1998).

Fifth, the Chinese embrace collectivism. Confucius's view of 'wuLun' also greatly impacts people's concept of self, since in Chinese culture social relationships and roles constitute the core of the self (Hsu, 1971, cited in Leung, 2010). Hofstede et al. (2010, p. 114) cite Markus and Kitayama's (1991) view to distinguish the concept of self in the west from that in the east:

Many Asian cultures have conceptions of individuality that insist on the fundamental relatedness of individuals to each other, while in America individuals seek to maintain their independence from others by focusing on the self and by discovering and expressing their unique inner attributes.

Thus 'self', as a term, is an independent self in western individualist cultures, but in collectivist cultures, it connotes interdependence.

Cheng (1998, p. 15) describes the characteristics in this collectivist culture:

Education is viewed first and foremost as a means of socialisation. It is an organised means by which children learn to adapt themselves to the expectations of a larger community. School education is designed to instil in children the norms and expectations of the society. This framework illuminates the extraordinary significance that extrinsic motivation plays in student learning... The strong weight accorded to the group helps to explain the uniformity and conformity that characterize East Asian educational systems. The cultural priority of clearly delineating one's status within the collective leads naturally to an educational system that emphasizes examinations and competition.

In the workplace, collectivist culture suggests that the relationship between superior and subordinates is basically moral, like a family link; management emphasises management of groups; relationship prevails over tasks; and direct appraisal of subordinates spoils harmony (Hofstede et al., 2010).

In the description above, I have summarised five main characteristics of Chinese culture in relation to education, organisation and management. These values and beliefs serve as the foundation to understanding T&LDHs' thinking and behaviour. Aside from these values and beliefs, shaped by China's five-thousand-year history of civilisation, the education values advocated by the government also greatly affect school leaders' leadership and teachers' professional practice.

3.5.3.2 Education values advocated by the government

First at all, some of the virtues widely accepted by Chinese people in relation

to traditional culture – such as patriotism, collectivism and discipline – have been advocated as educational objectives. Secondly, socialist or communist ideology is advocated as guidance for school work. In the document 'Primary and Secondary Schools Moral Education Regulations' (Ministry of Education, 1998), some items clearly reference such socialist or communist ideology:

- Item 3: Primary and secondary moral education work must be under the guidance of Marxism, Leninism, Mao Zedong's thoughts and Deng Xiaoping's theories, and schools must regard the firm and correct political direction as the foremost task.
- Item 5: Primary and secondary moral education tasks aim to develop students to become citizens who love their socialist motherland, possess social morality and civilised habits, and observe disciplines and obey laws; and, based on the above, lead them to gradually have correct worldviews and values, constantly improve their socialist ideological awareness, and lay the foundation of making the excellent students among them firm communists.

Third, western values are mainly reflected in educational notions and pedagogical issues. Some notions and pedagogical methods, such as student-centred, meticulous, analytic, pragmatic and piecemeal approaches to teaching (Cheng, 2011), have been accepted by Chinese educators. However, due to different cultural backgrounds, others advocated by the government cause confusion among school leaders and teachers. For example, during the implementation of the recent senior secondary education curriculum reform, some notions and practices prevalent in the western context were introduced (see Section 2.3). School leaders faced several dilemmas, but the crux of the matter was that, regardless of whether they recognised the importance of the reform for students' all-around development, they had to ensure students' enrolment rates to college and university, which was the sole criterion for schools to meet society's expectations (Yin et al., 2014).

In the Chinese context, people have long regarded education as 'the sole path for upward social mobility' and 'the only hope for an individual's future'

(Cheng, 2012, p. 24). Going to college is the starting point for gaining an honourable job – so school leaders could not jeopardise students' chances of college and university education, the only criterion for entering colleges and university being the NCEE (gaokao) results (although students may select many school-based curricula (if there are many) and gain good results in them, these cannot contribute to their entrance to colleges and universities). Some school leaders were worried the new pedagogical methods might negatively impact on students' NCEE results (Yin et al., 2014), with these policy issues also affecting school leaders' work attitudes.

3.5.3.3 School leaders' attitudes towards the recent curriculum reform

In the same study I cited earlier, Yin et al. (2014) interviewed eight school leaders and one teaching research officer, exploring their attitudes towards implementation of the curriculum reform. They found the school leaders had a 'must-do' attitude, and when they encountered contradictions between the requirements of the curriculum reform and the factual situations, sought compromising solutions. They lamented:

In this centralized, executive-led system, they had historically been 'naturally accustomed' to following orders from a superior. Even if they themselves were experts in some areas, their voice would be unlikely to influence decisions made by a superior. (p. 300)

Wilson and Xue (2013) also reported three problems during implementation of the curriculum reform in Fujian Province, including the frequency of the curriculum changes, lack of stability and much extra work. They identified as one major difficulty the lack of alignment of curriculum reform and the unchanged examination system. These problems brought about significant pressure on school leaders and teachers, and affected their motivation, job satisfaction and morale. Although some of the requirements of the reform were incompatible with the practical situation, school leaders could do nothing but adapt to them, as the government has 'the constitutional power to impose their will' (Bush, 2008, p. 2). China has a very strict national curriculum system and special value and belief systems, and what school

leaders need to do is to effectively implement the policies, regulations and requirements introduced by the government. This is important background to understanding T&LDHs' thinking and behaviour.

3.5.4 The intellectual component

Evans's (2011) intellectual component of professionalism refers to 'people's knowledge, the nature and degree of reasoning that they apply to their practice, what they know and understand, and the nature and degree of their analyticism' (p. 856). This component reflects the knowledge, understanding and cognitive ability that a professional applies in his/her work. Below, I present the relevant literature on two themes: school leaders' knowledge, and a cognitive model of leadership – the WICS approach.

3.5.4.1 School leaders' knowledge

In the 1980s and 1990s, there were a great many studies focusing on professional expertise from a cognitive perspective. One of the important components of expertise is an extensive knowledge base (Ohde and Murphy, 1993). Eraut (1996) draws on Ryle's (1949) knowledge categories and introduces two sets of categories. One includes *public knowledge*, which is necessarily explicit, and *personal knowledge*, which is either explicit or tacit. The other set includes three types: *propositional knowledge* (knowing that), *procedural knowledge* (knowing how), and *images and impressions* (held in the memory but not represented in propositional form). *Propositional knowledge* is also known as declarative knowledge. Making sense of knowledge categories is imperative to researching, evaluating and developing a school leader's knowledge structure.

Ohde and Murphy (1993) reviewed cognitive psychology theories and empirical evidence on the differing performances of experts and novices, and point out that 'a knowledge base that is both extensive and accessible is a necessary requisite for the development of expertise' (p. 76). First, the knowledge base of an expert is highly organised, allowing him/her to quickly retrieve relevant information to solve problems. The theory of the process of

developing a cognitive skill and the concept of schema are helpful to understanding the role of knowledge in an expert's performance. According to Anderson (1982), the process of developing a cognitive skill includes two stages: the declarative stage and the procedural. During the first stage, the declarative knowledge about the skill is interpreted and used to generate behaviour. Then, with practice, the knowledge is converted to a procedural form after a gradual process of knowledge compilation. At the second stage, the knowledge is directly embodied in procedures for performing the skill without the intercession of other interpretive procedures. As a result, experts can automatically invoke the skill to solve problems in actual situations. This process is echoed in Sternberg's (1986) experiential sub-theory of the triarchic theory of human intelligence.

Schema is another useful concept for understanding an expert's cognitive skills. Ohde and Murphy (1993) cite Anderson's (1982) work and define a schema as 'an abstract knowledge structure that summarizes information about many cases and relations among them' (p. 79). They add that schemata, consequently, are organized collections of perceptions, thoughts, action plans or domain-specific problem-solving strategies, providing an expert with an effective means by which the knowledge base can be organised and allowing him/her to respond to the specific demands of the task more sensitively and faster than a novice.

The structure of an expert's knowledge base affects his/her thinking patterns and reasoning abilities in three ways:

First, an expert's declarative knowledge... is better organised than that of novices... permitting the expert to efficiently access and then to apply this knowledge... Second, as more domain-specific declarative and procedural knowledge is acquired and rich schemata are cultivated, patterns of meaningful information are stored and classified... Mental catalogues of patterns, categories, and models enable the expert to classify, compare, and ultimately, apply the appropriate chunk of information during the decision-making process... Finally, domain-specific schemata permit experts to make inferences, especially within novel situations. (Ohde and Murphy 1993, pp. 80-81)

Thus, enlarging school leaders' knowledge base and intensifying application of the knowledge in practice can improve their work performance.

However, there is another type of knowledge – tacit knowledge – which is not considered as 'an automatic response produced from repeated exposures to the same patterns of stimuli' (Cianciolo et al, 2006, p 617). Acquirement of tacit knowledge needs at least two processes: one is that practitioners gain knowledge in practice by forgetting the original rules upon which that practice is based; the other is by incidental learning, which refers to unconscious learning from experience (Jarvis, 1996). Wagner (1993, p. 96) defines tacit knowledge as 'practical know-how that usually is not openly expressed or stated', referencing the Oxford English Dictionary. It can be classified in the light of its content, its context and its orientation: the contents of tacit knowledge include practical know-how about managing oneself, managing others and managing tasks; its contexts, practical knowhow with a local context concerning the short-term accomplishment of a task at hand, and that with a global context considering the long-term accomplishment; and the orientation of tacit knowledge involves practical know-how with an idealistic or pragmatic orientation concerning the quality of an idea. Wagner (1993) points out that the framework can be formulated by considering how contents, contexts and orientations of tacit knowledge overlap. For example, overcoming the problem of procrastination by forcing oneself to spend at least 10 minutes on a task so one can keep working is an example of tacit knowledge about managing self, with a local context (Wagner and Sternberg, 1987).

Wagner's (1993) framework of tacit knowledge is useful for examining school leaders' tacit knowledge and practical intelligence. Some studies show that tacit knowledge has a significant relationship to many diverse demonstrations of expertise (Cianciolo et al., 2006). For example, Wagner (1987) found that tacit knowledge increases with level of professional development. Wagner and Sternberg (1987) revealed performance on the tacit knowledge inventory to be related to the criteria of business managerial success. Eraut (1996) argues that good teachers and school leaders have

'an enormously complex and highly personal knowledge base, constructed from experience but used in a fairly intuitive way', and 'much of this complex knowledge-base was tacit rather than explicit, so that practitioners could not readily articulate what they did and how they did it' (p. 38). Therefore, making tacit knowledge explicit by exchanging knowledge and experience in a shared domain of interest has the potential to contribute to personal and professional development (Cianciolo et al., 2006).

With regard to instructional leaders' knowledge bases, Stein and Nelson (2003) argue that leadership content knowledge is a missing paradigm in the analysis of school leadership. They define leadership content knowledge as the knowledge that 'will equip administrators to be strong instructional leaders' (p. 424). Based on a case study featuring a principal in a K-5 school, they found that the knowledge the principal used in her classroom observations included five aspects: (1) some degree of subject matter knowledge, (2) knowledge of how children learn that subject, (3) knowledge of how to teach the subject, (4) knowledge of how to create and arrange environments to enhance the teachers' learning. Through comparative analysis of three case studies featuring school- and district-level instructional leaders, they found leadership content knowledge was less fine-grained. They therefore suggest instructional leaders should have:

solid mastery of at least one subject (and the learning and teaching of it) and that they develop expertise in other subjects by "postholing", that is, conducting in-depth explorations of an important but bounded slice of the subject, how it is learned, and how it is taught. The purpose of postholing is to learn how knowledge is built in that subject, what learning tasks should look like, and what good instruction looks like. (Stein and Nelson, 2003, p. 446)

At the same time, they found that instructional leaders at different levels required different knowledge according to their functions. Thus identifying what knowledge T&LDHs need to possess for fulfilling their functions is necessary and meaningful for their professional development.

3.5.4.2 A cognitive model of leadership – the WICS approach

The WICS approach is a cognitive model of leadership developed by

Sternberg (2005; 2007; 2008). Leadership in this approach is defined as 'in large part a matter of how one formulates, makes and acts upon decisions' (Sternberg, 2008, p. 361). WICS is an acronym that stands for wisdom, intelligence, and creativity, synthesized – people need all three components working together to make a highly effective leader. The model is underpinned by meta-components, one of three sets of information-processing components in Sternberg's (1985; 1986) triarchic theory of human intelligence. The fundamental executive processes include:

(a) recognizing the existence of the problem, (b) defining the nature of the problem, (c) constructing a strategy to solve the problem, (d) mentally representing information about the problem, (e) allocating mental resources in solving the problem, (f) monitoring one's solution to the problem, and (g) evaluating one's solution to the problem. (Sternberg, 1997, p. 1031; Sternberg, 2008, p. 361)

Sternberg (2008) explains each component of the model: creativity refers to the skills and dispositions needed for generating ideas and products that are relatively novel, high in quality, and appropriate to the task at hand. Creativity involves both processes and contents. Processes of creativity include a range of skills and dispositions, such as problem redefinition, problem analysis, selling solutions, recognizing how knowledge can both help and hinder creative thinking, and a willingness to take sensible risks, surmount obstacles, tolerate ambiguity, etc. Much of the content of creativity in leadership is provided by stories – the ways in which a leader distinguishes him or herself and the contribution he or she plans to make. Successful stories are characterised by four points: having a story that fits their followers' needs, communicating that story in a compelling way, implementing the story in a way that suggests it is succeeding, and finally persuading followers that the story accomplished what it was supposed to have accomplished. Creativity is necessary, but not sufficient in itself; successful leaders need 'intelligence' to analyse and evaluate their creative ideas.

Intelligence in this model comprises two aspects: academic and practical

intelligence. Academic intelligence refers to the memory and analytical skills and dispositions needed to recall and recognize, and analyse, evaluate and judge information. Leaders retrieve information that is relevant to leadership decisions by using the skills and dispositions of memory, and analyse different courses of action by using the skills and dispositions of analysis. Sternberg (1986) identifies a range of skills for improving analytical ability. For example, one can accurately define the nature of a problem by rereading and reconsidering the question, simplifying the goals, and redefining the goals; and one can effectively select a mental representation by being aware of and capitalising on the pattern of one's own abilities, and using multiple and external representations. Practical intelligence is described as the set of skills and dispositions required to solve everyday problems by using knowledge gained from experience to purposefully adapt to, shape, and select environments. It involves changing oneself to suit the environment, changing the environment to suit oneself, or finding a new environment within which to work. These skills are used to manage oneself, others, and tasks.

Wisdom is largely the decision to use one's intelligence, creativity, knowledge and experience for a common good. It involves balancing intrapersonal, interpersonal and extra-personal (organizational, institutional or spiritual) interests over the short and long term to adapt to, shape and select environments. Sternberg (2008, p. 369) argues that 'no matter how smart or creative a leader is, the leader is unlikely to be effective unless he or she is wise as well'. He argues that unwise leaders often manifest six flaws in their thinking: unrealistic optimism, egocentrism, omniscience, omnipotence, invulnerability and ethical disengagement.

In short, the WICS approach provides a set of cognitive-decision processes to synthesize wisdom, academic and practical intelligence, and creativity as the ingredients of successful educational leadership.

3.6 Summary

In this chapter I have presented many theories and research findings in

relation to the post of T&LDHs. These theoretical perspectives underpin my study in an integrated way, as shown in Table 3.2. Put simply, hybrid and distributed leadership theories offer a lens through which to look at the position of T&LDHs and their leadership practice, and learning-centred leadership theories provide a foundation to allow me to explore the nature of T&LDHs' work and what effective and ineffective T&LDHs look like. Evans's componential structure of professionalism serves as an analytical tool to help me examine T&LDHs' characteristics. Cultural theories provide the contextual information to help understand T&LDHs' thinking and behaviour. Cognitive and emotional intelligence theories offer support to my study from the psychological perspective. Because educational management theories 'tend to be selective or partial in that they emphasize certain aspects of institution at the expense of other elements' (Bush, 1995, p. 20), it is advantageous to borrow insights from other domains, such as psychological and business school theories, to provide a deeper understanding. The theories I have presented in this chapter underpin my study as a synthesis or integrated system of theoretical analysis.

Table 3.2 The integrated system of theoretical analysis underpinning the study

Theoretical	Specific theoretical	Main points underpinning the	Implications in investigating	Implications in investigating RQ 2:	
strands	perspectives	study	RQ 1: T&LDHs' job functions	T&LDHs' characteristics	
	hybrid leadership	- division of labour (leadership	- look at an organisation's	- leaders at different levels require	
	(see Section 3.2.3)	configuration)	leadership configuration, from	different knowledge structures, skills	
Hybrid/		- job functions of different	which an individual's job	and competences	
distributed		leadership positions	functions are investigated		
leadership	distributed leadership	- focus on leadership tasks	- inform the research method: investigate T&LDHs' job functions and		
leadership	(see Section 3.2.2)	- the ways in which leaders,	characteristics from the T&LDHs' stories about their execution of particular		
		followers and the situation	leadership tasks, and pay attention to the interaction of leaders, followers		
		interact	and the situation		
	Hallinger's instructional	- instructional leaders' job	- investigate T&LDHs' job	- the <i>PIMRS</i> is used to look at	
	management conceptual	functions	functions based on instructional	T&LDHs' behaviour-based	
	framework	- the <i>Principal Instructional</i>	leaders' job functions developed	characteristics through the	
	(see Section 3.1.1)	Management Rating Scale (PIMRS)	in the American context	questionnaires among T&LDHs, headteachers and teachers	
	effective leadership	- specific and effective	- pay attention to the similarities and differences between the		
	practice for learning	leadership practice for learning,	headteachers and T&LDHs in relation to their job functions and		
Learning-centred leadership	(see Section 3.1.2) mainly generated from the		characteristics of leadership practice		
		headteachers in the global	- focus on the intersection of core components (e.g. curriculum,		
		context	instruction) and key processes (e.g. planning, implementing, supporting,		
			communicating) of learning-centred leadership		
	leadership for learning	- a broader and more	- understand T&LDHs' leadership practice from five related perspectives:		
	(see Section 3.1.3)	comprehensive understanding	a focus on learning, conditions favourable to learning, dialogues about		
		of learning-centred leadership	leadership for learning, sharing of leadership and a shared sense of		
		- five principles and practice of	accountability, from which the T&LDHs' job functions and different		
		leadership for learning	characteristics can be systematically investigated		
Professionalism	Evans's componential	- three components and 11	- investigate T&LDHs' job	- serves as an analytical framework for	

	structure of professionalism (see Section 3.5.1)	dimensions	functions from their behaviour in practice	the data analysis investigating T&LDHs' characteristics
Culture	educational values and beliefs prevailing in the Chinese context (see Section 3.5.3)	- traditional culture - communist ideology - western values	- provide rich and detailed contextual information, allowing a better understanding of T&LDHs' job functions and their leadership practice	
Psychology	school leaders' knowledge (see Section 3.5.4.1)	 knowledge categories difference in knowledge bases between experts and novices leadership content knowledge 		- pay attention to T&LDHs' knowledge structure, and investigate the different characteristics between excellent and typical T&LDHs
	competency studies (see Section 3.5.2.2)	- 14 competencies that distinguish superior from average performers - competencies can be developed		- provides 14 competencies that can be used to investigate T&LDHs' characteristics - informs the research method: allows performance comparison for excellent and typical T&LDHs
	the WICS approach (see Section 3.5.4.2)	- three leadership traits leading to effective educational leadership		- provides three leadership traits that can be used to investigate T&LDHs' characteristics

Chapter 4 Methodology

The main aim of this study was to investigate the work of T&LDHs in Chinese secondary schools, and acquire better understanding of the nature of their professionalism, thereby contributing to their professional development by providing research-informed evidence. Understanding the nature of T&LDHs' professionalism involves making clear their job demands and the capabilities required of the position. Generally, job demands are prescriptive. However, when I reviewed the job responsibilities, collected during my research, of 18 T&LDHs, I found many of them were general and ambiguous, and lacked clear and concrete expressions of their functions or responsibilities. I therefore determined to explore the nature of the T&LDH's role as one of my research objectives. As for the capabilities required of the position of T&LDH, I highlight very effective T&LDHs in order to explore their characteristics. At the same time, I pay attention to the differences between excellent and typical performers with the aim of identifying the gaps between them. In this way, the points that need to be improved for typical performers can be identified, and further actions to enhance their professional development taken.

With these specific objectives, my study was designed to seek answers to two research questions:

- 1. What is the nature of the T&LDH's role in Chinese secondary schools? In what ways do T&LDHs carry out their roles?
- 2. What is the range of characteristics among T&LDHs? How are these characteristics reflected in their professional practice?

To address the first question, I intended to identify T&LDHs' main job functions, because a clear description of these functions is needed for understanding their leadership practice. The second research question involves all those characteristics that contribute to a T&LDH's job effectiveness, including behaviour, attitudes, and skills and competencies.

In this chapter I highlight the methodological issues, including my research approach, sampling issues, and details of data collection and analysis.

4.1 Research approach

My research questions stemmed from a desire to understand the nature of the T&LDHs' role and their characteristics in their work. To capture the nature of the T&LDHs' role, it was necessary to clarify a school's leadership configuration (Gronn, 2011), from which the T&LDHs' role could be better understood. Specifically, T&LDHs' job functions needed to be identified, so I drew on Hallinger's (1982; 1990) instructional management conceptual framework to explore them. With regard to the T&LDHs' characteristics in their work, I examined them based on three components drawn from Evans's (2011) componential structure of professionalism: behaviour, attitude and intellectuality. The effective or superior leaders' characteristics depicted in Sternberg's (2005; 2008) WICS model, Boyatzis's (2008; 2009) competency model, and Murphy et al.'s (2007) as well as Leithwood and colleagues' (2008) review (see Section 3.1.2) were used as instruments to examine different T&LDHs' characteristics. The Professional Standards for Headteachers in Compulsory Education Schools published by the Chinese government, as well as contextual features (see Section 3.5.2), were considered in the study to help understand T&LDHs' behaviour and thinking.

A qualitative dominant mixed methods approach, defined as the type of mixed research in which one relies on a qualitative view of the research process, with the recognition that 'the addition of quantitative data and approaches are likely to benefit most research projects' (Johnson et al., 2007, p. 124), was applied to the process of answering the research questions. The qualitative methodology was used to explore T&LDHs' job functions and characteristics by investigating their stories; these stories provided me with real-life situations or contexts in which leaders, followers and artefacts interact meaningfully, allowing me to understand their leadership practice (Spillane et al., 2004).

The quantitative methodology was designed to examine T&LDHs' leadership

behaviour through complementary evidence based on the headteachers', the teachers' and the T&LDHs' own voices, using the *Principal Instructional Management Rating Scale* (*PIMRS*) developed by Hallinger (1982; 1990), which I describe and discuss in Chapter 3 (pp. 18-19). On the one hand, the *PIMRS* could make sense of behaviour-based data on 10 job functions from the perspectives of the headteachers, the T&LDHs and the teachers, which could, in part, triangulate and complement the research findings based on qualitative data to enhance validity; on the other hand, a questionnaire was an appropriate method to allow me to gather a large amount of data on the same questions from different constituencies in a short time — so a qualitative dominant mixed methods approach was a suitable and productive solution for my study. Specifically, the research findings were generated from analysis of T&LDHs' job responsibilities, as well as the data from critical incident interviews with T&LDHs and the questionnaires completed by T&LDHs, headteachers and teachers.

4.2 Sampling

The sample comprised 24 T&LDHs from 24 secondary schools, and eight headteachers and 424 teachers in eight schools. The entire sample was taken from a single district in a big city in the north of China.

4.2.1 The T&LDHs sample

A criterion sample design (Spencer and Spencer, 1993) was used to divide the 24 T&LDHs into two groups: excellent and typical. The excellent group provided insight into effective leadership and best professional practice, whereas the typical group served as a comparison group; only by distinguishing their leadership philosophies and behaviours from the excellent group could I identify what was unique or special about the very successful T&LDHs.

My original research proposal outlined two criteria, T&LDHs' annual assessment results and supervisor nominations, that would be used to identify the two groups. Those labelled as excellent performers had to fulfil

two requirements, of which the first was that they were ranked in the top third in their annual assessments, based on their average scores from the last two years. The district in question used a web-based annual evaluation system, in which all staff were required to evaluate all school leaders in their schools from different perspectives; the assessment results therefore reflected the opinions of staff in each school. Second, those categorised as excellent performers had to be nominated by most of the eight leaders in charge of the school leaders' assessment, supervision and training within this district. These district leaders were familiar with the school leaders and knew them very well, and held invaluable information about school leaders that was not available to the public, such as assessment results for school leaders in school inspections, and their training performance and assessment results. This made them the best source to help identify excellent performers. The typical T&LDHs sample, meanwhile, was selected from the bottom half in the annual evaluation system, and not nominated by any supervisors.

However, when I reached the fieldwork stage I found it difficult to obtain information about annual assessment results for all the T&LDHs, for institutional reasons. For the supervisor nominations, eight supervisors were required to separately nominate 15 excellent T&LDHs out of the total of 80 T&LDHs. The result was that a total of 27 people were nominated, 10 by five or more supervisors. I did not think it a sound selection to assign the top 12 T&LDHs to the excellent group based on the number of times they had been nominated, because using a single source as a criterion for a sample would not be considered trustworthy (Spencer and Spencer, 1993).

To better determine the sample, I interviewed the eight district leaders with the purpose of gaining more information. Fortunately, I did make two important discoveries during the interviews. One was that this district was experiencing a temporary shortage of T&LDHs, as several excellent T&LDHs has been appointed as headteachers in the last one or two years; one of the leaders suggested I interview them. The other was that, three months earlier, 11 school leaders had been appointed district-level leading instructional leaders among all the secondary school leaders in charge of

teaching and learning following a very strict process, including presentations, interviews and committee discussion. Most of them were T&LDHs.

I then reviewed the requirements for leading instructional leaders in the district's official documentation, where I found concrete and clear indicators of excellent instructional leaders:

Leading instructional leaders should:

- love our socialist motherland, be loyal to the educational cause, observe the
 professional ethical code for teachers and educational laws and regulations in
 an exemplary way, and have made an outstanding achievement in instructional
 leadership and management;
- possess middle-level professional titles or above, have a minimum of five years' teaching experience and a minimum of three years' instructional management experience;
- actively promote the development of national, local, and school-based curricula
 in a balanced way, study and implement local curricula, develop, construct and
 manage school-based curricula, and effectively promote school-based
 distinction in curricular development;
- 4. possess relatively strong capabilities in instructional leadership and management, effectively promote teaching and learning research and inservice training work, and have seen great achievements;
- implement the school leaders' classroom observation regulations, have the ability to guide and evaluate classroom instruction, and be able to do the classroom observation analysis report within and beyond the school; and
- 6. be committed to doing educational research, possess knowledge of instructional management theories, and in the last three years, have published papers about institutions and organisations at district level or above, or given presentations about best practice of instructional management at district level or above. (XXX District Educational Committee Documents, 2012, No. 8)

These requirements reflected what the local educational authority emphasised as important for instructional leaders, and in my study I made reference to them and incorporated them into the criteria I used to identify excellent performers.

Through a combination of all these sources, 12 excellent and 12 typical T&LDHs were identified. All 24 T&LDHs had been in the position of T&LDH for more than two years, and the ratio between them (1:1) was chosen to ensure both groups could be judged fairly. The excellent group comprised eight T&LDHs and four headteachers; seven of the eight T&LDHs were leading instructional leaders and had obtained supervisor nominations five or more times; one of them was not a leading instructional leader, but was nominated by seven district leaders. The purpose of including four headteachers in the excellent group was to ensure a sufficiently large proportion of excellent T&LDHs for me to identify their characteristics. They had been appointed headteachers less than a year before I interviewed them, and promoted from the position of T&LDHs - and all had been nominated or mentioned as excellent instructional leaders by at least five district leaders in the interviews. It is worth noting that the four headteachers were researched as T&LDHs and responded to my enquiry according to the school contexts in which they held the positions of T&LDHs, so they are described as T&LDHs in my study. The 12 T&LDHs assigned to the typical group were not leading instructional leaders, and did not gain supervisor nominations by any leaders. Information on the two groups is shown in Table 4.1:

Table 4.1 Information on the two T&LDH sample groups

Group	Size	Average	Average	Ge	Gender		School type		
			age	service years	Male	Female	Junior	Combined	
			as a T&LDH			school	secondary		
							school		
Excellent	12	44.08	7.42	5	7	2	10		
Typical	12	44.75	5.25	3	9	1	11		

More details about each T&LDH are presented in Table 4.2, below. For the 'school type' tab, I use acronyms to stand for different types of school: JSS denotes junior secondary school; NCSS normal combined secondary school; DMCSS district-level model combined secondary school; and CMCSS city-level model combined secondary school.

Table 4.2 Biographical information on the T&LDHs sample

Pseudonym	Gender	Age	Service	School	School	Recognised
			year as a	type	size	as a leading
			T&LDH			instructional
						leader? (Y/N)
Ying	F	45	7	JSS	М	Yes
Feng	М	41	2	NCSS	М	Yes
Si	F	40	7	NCSS	М	Yes
Hong	F	54	10	DMCSS	М	No
Ming	М	43	12	CMCSS	L	Yes
Yan	F	38	5	NCSS	S	Yes
Ting	F	45	13	NCSS	S	Yes
Kai	М	47	6	JSS	S	Yes
Wei	М	48	8	CMCSS	L	N/A *
Jun	М	39	8	NCSS	М	N/A *
Li	F	48	4	CMCSS	L	N/A *
Xin	F	41	7	NCSS	М	N/A *
Zhen	F	44	4	NCSS	М	No
Yu	F	46	4	DMCSS	М	No
Ping	F	44	2	CMCSS	L	No
Jin	F	41	3	DMCSS	L	No
Hai	М	40	2	NCSS	М	No
Xia	F	40	11	NCSS	S	No
Hui	М	43	4	NCSS	S	No
Rui	F	51	8	CMCSS	L	No
Lu	F	44	9	NCSS	М	No
Lan	F	43	5	NCSS	М	No
Qing	F	49	6	CMCSS	L	No
Ling	М	52	5	JSS	S	No

Note: The four people with 'N/A *' were headteachers who were researched as T&LDHs.

The sample comprised eight male and 16 female T&LDHs. The top 12 people listed in Table 4.2 were assigned to the excellent group and the rest to the typical group. Their average age was 44, and average service years

as T&LDHs, six. Three came from junior secondary schools, and the remaining 21 T&LDHs were from combined secondary schools. Six T&LDHs worked in city-level model schools; three in district-level model schools; and 12 in normal schools. They came from different sized schools. Seven came from large, 11 from medium, and six from small schools. Ying and Feng were nominated as excellent T&LDHs by all eight district leaders. It is worth noting that all participants in the two groups were treated in the same way during data collection and analysis.

4.2.2 The headteachers and the teachers sample

Eight schools participated in the questionnaire using the *PIMRS* (Hallinger, 1982; 1990) with headteachers, T&LDHs and teachers. The T&LDHs in these schools were equally split between the two groups. More than half of the teachers in each school completed the questionnaires. All the headteachers had worked with the T&LDHs for more than two years, while the teachers had worked with the T&LDHs for no less than a full year. The composition of the sample and the size of the questionnaires are shown in Table 4.3:

Table 4.3 Questionnaire: sample composition and size

Group		Excellent group			Typical group				Total
T&LDH's name	Yan	Kai	Ying	Feng	Lu	Lan	Zhen	Yu	number
Headteachers	1	1	1	1	1	1	1	1	8
T&LDHs	1	1	1	1	1	1	1	1	8
Teachers	49	38	60	60	42	60	57	58	424

4.3 Access and ethical issues

For the T&LDHs sample, my approach combined purposive and convenience sampling. Purposive sampling was applied to recruit excellent T&LDHs, and convenience sampling to recruit T&LDHs in the typical group. In total, 28 T&LDHs were contacted by my colleagues, my friends or me; 25

agreed to be my participants, three refused, and one dropped out mid-way through the study. In the end, 24 T&LDHs participated. Of them, nine excellent and six typical T&LDHs were initially put in touch with me through my colleagues or friends, and were contacted by me later; three excellent and six typical T&LDHs were my acquaintances, and were directly contacted by me. When contacting them by phone for the first time, I first told them how I obtained their telephone numbers (if needed), then informed them of the purposes of my study and how they could contribute to it, and finally asked them to consider for a week if they wanted to participate. Most importantly, I told them it was an independent study for my doctoral degree; participation was voluntary, and anonymity and confidentiality guaranteed. Although most decided to participate when first contacted by me, I checked their intentions again a week later, and set a time for the interviews at their convenience. The interviews with 22 T&LDHs were individually conducted face-to-face, in a quiet office or a meeting room in their schools, or in their homes. The interviews with the other two T&LDHs were separately conducted through a Chinese online chat tool called QQ, because time was too tight to arrange a meeting before I left China.

Before the interviews, I asked the participants for permission to record the interviews, and emphasised that the recording would only be used to fully record their opinions for my research. Those who agreed to be recorded were reminded that they could ask me to stop recording at any time if they wanted to discuss something 'off the record', or did not want to be recorded (Spencer and Spencer, 1993). As a result, the interviews with 15 respondents were recorded with my digital voice recorder. Two of them requested that I switch off the recording in the middle while they went through some specific topics off the record. The other nine were unhappy being recorded, so I took notes during the interviews. There were a variety of reasons why they did not want to be recorded. One felt nervous and could not express him/herself well while being recorded; the other eight T&LDHs did not offer reasons. A possible reason was lack of trust in the assurance of confidentiality, or fear that what they said in the interviews would negatively affect them or their schools. After each interview, the recordings were

transferred to the local disc on my personal computer, which could not be accessed by others. I gave each interviewee a pseudonym, which is how I refer to them in this thesis (see Table 4.2). In sum, all data were anonymised and codified to ensure confidentiality.

With regard to the questionnaire sample, 18 in-service T&LDHs were contacted and invited to distribute the questionnaire among their headteachers and teachers, and to complete it themselves. Twelve agreed. Then their headteachers were separately contacted by me, told about the study and asked for permission to administer the questionnaire in their schools. Although most agreed, due to other reasons only eight schools participated. Because the design of the *PIMRS* incorporates consideration of ethical issues (Hallinger, 1982; 1990), I retained its original form of information collection for respondents. The headteacher form was sent to each headteacher and returned to me by email. The T&LDH and teacher forms were sent to the schools and completed at different times. After data collection, I entered the data into an Excel spreadsheet for analysis.

4.4 Data collection

Three research methods – critical incident interviews, documentary analysis and questionnaires – were used to collect data. The data from critical incident interviews with 24 T&LDHs were used to generate research findings that addressed both research questions. The documents relating to the 18 T&LDHs' job responsibilities fed into my identification of their job functions and exploration of the nature of their work. The questionnaire distributed to eight T&LDHs, eight headteachers and 424 teachers was designed to investigate the difference in leadership behaviour between the excellent and typical T&LDH groups. I present the details of data collection below.

4.4.1 Critical incident interviews

This section comprises three parts: first, I give a brief introduction to the method of critical incident interviews and the reasons I selected it to collect data in my study; second, I present the process of piloting the critical

incident interviews with two T&LDHs and my reflections on it; third, I describe the details of the formal critical incident interviews with 24 T&LDHs.

4.4.1.1 The rationale for critical incident interviews

The method of critical incident interviews (CII) was originally developed by Flanagan (1954), who called it 'critical incident technique'. It is 'a set of procedures for collecting direct observations of human behaviour in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles' (p. 327). Based on critical incident technique, the Behaviour Event Interview (BEI) was developed by McClelland and colleagues at McBer and Company (Spencer and Spencer, 1993).

The BEI method comprises five steps. The first is 'introduction and explanation': the researcher introduces him or herself, and explains the purpose and format of the interview. The second is 'job responsibilities': the researcher asks the interviewee to describe his or her most important job tasks and responsibilities. The third step involves the core technique of this method: behavioural events. The researcher gets the interviewee 'to describe, in detail, the five or six most important situations he or she has experienced in the job – two or three "high points" or major successes, and two or three "low points" or key failures'. The fourth step is 'characteristics needed to do the job': the researcher asks the interviewee for his or her views about how to do the job effectively. The last step is 'conclusion and summary', in which the researcher expresses his or her gratitude to the interviewee and summarises key incidents and findings from the interview (Spencer and Spencer, 1993, p. 119).

Five advantages of the BEI method can be identified. First, it is a unique method of empirically identifying competencies, validating competency hypotheses generated by other methods and discovering new competencies. Second, BEI data are able to demonstrate with precision how competencies are expressed in a specific situation. Third, BEI data can show exactly how outstanding performers deal with specific job tasks or problems. Fourth, the

BEI method has no racial, gender or cultural bias. Fifth, the BEI method can generate valuable data that can be used for assessment, training and career pathing (Spencer and Spencer, 1993). In comparison with traditional interview strategies, the BEI method includes a 'thematic apperception test' function that produces data about interviewees' perceptions, values, and logical ways of thinking and solving problems. My research, which aimed to examine T&LDHs' job functions and their characteristics in work, was very similar to competency studies. Both highlight behavioural, attitudinal and intellectual aspects of a person in relation to his or her work – and the BEI method has established a set of mature procedures to explore people's work-related competencies, strengths and weaknesses. The guidance for each step, including pointers and potential problems and solutions (see Spencer and Spencer, 1993, pp. 114-134), had the potential to enhance my interviewing, so I used the procedures of the BEI method in my interviews with T&LDHs.

However, the BEI method in competency studies is used to collect data for further statistics analysis (Spencer and Spencer, 1993; Boyatzis, 1998). The rationale for competency studies 'is located within a positivist empiricist paradigm' (Braun and Clarks, 2006, p. 97) - for example, Spencer and Spencer (1993) state that 'the basic principle of the competency approach is that what people think or say about their motives or skills is not credible. Only what they actually do, in the most critical incidents they have faced, is to be believed' (p. 115); there are potential reliability-related problems with 'theories or after-the-fact rationalisations of why a person thinks he or she doing something, not actual behaviour' (p. 117). They risk perceiving people as research subjects, who just need to describe their behaviours in a realistic and passive manner so that the researchers can gain information much closer to the truth, while people's interpretations of their values, beliefs, perceptions and situations around them are ignored. Indeed, understanding people's behaviours depends on understanding individuals' interpretations of the world around them from the inside (Cohen et al., 2011). Given this, the procedures of the BEI method, rather than its rationale, were followed in my study.

I valued the participants' behaviours, views and reflection described in their stories. At the same time, I valued my own experience as a former T&LDH in a Chinese secondary school. I am familiar with the national culture, the national educational policies and the school context. On the one hand, this made it easy for me to understand the situation; I could share common languages with my participants and gain a deep understanding of their views and perceptions. On the other hand, my background might give me preconceptions, possibly making me prone to interpreting the situations and events in the light of my own knowledge and experience and overlooking the participants' own ideas. So I reminded myself at all times of the need to listen to my participants carefully, put myself in their shoes, and make judgements by blending two interpretations of emic and etic perspectives (LeCompte and Preissle, cited in Cohen et al., 2011) to ensure my research findings were 'well grounded' and 'supportable' (Webster and Mertova, 2007, p. 4). Given these considerations, I refer to my method, which combined the core of the constructivist perspective of the research process and the format of the BEI method, as 'critical incident interviews', rather than the BEI method. The data collected from critical incident interviews were qualitatively analysed.

4.4.1.2 Piloting the critical incident interviews

Having decided to undertake critical incident interviews to collect data, I prepared an interview schedule (see Appendix 1-1) following the instruction for conducting BEIs (Spencer and Spencer, 1993). In order to ensure the interview schedule's feasibility and suitability, I conducted two pilot interviews through the online chat tool 'QQ'. Both pilot interviewees were inservice T&LDHs. The sample information is shown in Table 4.4:

Table 4.4 Information on the T&LDH sample in the pilot critical incident interviews

Pseudonym	Gender	Age	Years of service	Years as T&LDH
Kong	male	42	21	12
Tang	female	51	29	8

Two weeks before the pilot interviews, the interviewees were given telephone calls and informed about the purposes of my study and the interviews. After they agreed to be interviewed, a time was set to conduct each interview through 'QQ'. I conducted my first interview with Tang. When I asked her, following the instruction for the BEI method (Spencer and Spencer, 1993). to describe three successful/effective and three unsuccessful/ineffective incidents in her work, she could not recall anything initially; she just said that all the incidents had been neither good nor bad. I struggled to obtain useful data from her. To avoid a repetition of this situation, three days before interviewing Kong I told him that I would be asking him to describe in detail three successful/effective and three unsuccessful/ ineffective incidents in his work. During the interview, he managed to recount all six stories, though I kept probing for more details. Later, he told me it took him three days to come up with the recalled incidents.

In light of these pilots, I decided my interview schedule was fit for my research objectives, and generally viable – but required some modification. First, I decided to advise the interviewees of the questions in advance. Second, asking the interviewees to tell six stories seemed to make them stressed; it was evident from the pilot interview with Kong that he was interested in telling stories of successes, and for those could not help offering many details and recalling his thoughts when faced with a difficult situation, but that it was relatively hard for him to share three unsuccessful stories. Only the first unsuccessful story was communicated fully; with the other two he seemed to use vague and general terms and was evidently struggling. So I decided to ask my interviewees at the formal data-collection stage to describe three successful critical incidents and only one unsuccessful incident, rather than six in total. Williams (2008) successfully identified the characteristics that differentiated outstanding and typical principals in the USA by analysing three incidents (two effective and one ineffective) described by each of 20 participants – so my decision was a rational one.

Another consideration was that the interview with Kong had taken about three hours, but I realised it might have been hard for the T&LDHs to free up

three hours at a time, and such a lengthy interview risked tiring them. Even though four, rather than six, stories were now being requested from the interviewees, I decided it was preferable to arrange two shorter interviews for each of the T&LDHs, at their convenience. I also slightly modified my interview schedule, primarily in relation to changing some of the wording in Mandarin, and to add three questions to gain more detailed information (see Appendix 1-2).

4.4.1.3 Conducting critical incident interviews

Critical incident interviews were conducted with the sample of 24 T&LDHs. After they decided to participate in the study, each was sent an interview schedule by email. They were told it was better to be interviewed twice because it would take too long – maybe two or three hours – for one single interview. After negotiation, three of them were interviewed twice and the other 21 T&LDHs once. The longest interview lasted 136 minutes, the shortest 54 minutes, and the average about 90 minutes. The interviews with 15 interviewees were recorded, and transcribed verbatim. The other nine were unhappy being recorded, so I took notes and collated them into a Word document after the interviews. Interviews were all conducted in Mandarin, and the transcriptions of the data and notes totalled about 300,000 words. All the data in Chinese were ready for analysis.

4.4.2 Documentary collection

Even though the method of critical incident interviews is a powerful one for exploring T&LDHs' job functions and their characteristics, it has some limitations. For example, because critical incident interviews focus on critical job incidents, it is possible that the data 'miss less important but still relevant aspects of a job' (Spencer and Spencer, 1993, p. 99). So job responsibilities of 18 T&LDHs whom I interviewed were collected during the fieldwork as a complementary way to explore T&LDHs' job functions. Before or after their interviews, I asked the T&LDHs for written descriptions of their job responsibilities. Fourteen sent me electronic copies by email; four provided hard copies, which I converted into electronic editions. All 18 copies were

saved for analysis.

4.4.3 Questionnaires

This section explains the processes of: the translation and modification of the *PIMRS*, described above in Chapter 3 (pp. 18-19); the face validity test of the instrument; and the questionnaire administration and implementation, respectively.

4.4.3.1 Translation and modification of the instrument

To explore the differences in leadership behaviour between the two groups of T&LDHs, the *PIMRS* was used to collect data among the headteachers, the T&LDHs and the teachers in eight schools. First, I translated the *PIMRS* from English into Chinese. Then, to seek verification on the quality of my translation, both Chinese and English versions were given to three English language teachers, and they were asked to decide on three issues: if the items in the Chinese version accurately reflected what the author meant; if there were any ambiguous expressions, and if so how they could be modified; and if there was any content that would not work within a Chinese context. After discussion, a second version was formulated, in which seven items were modified, as shown in Table 4.5. The second column is the original wording of items in the *PIMRS*; the third column is the modified wording, but I used Chinese when I conducted the questionnaires; and the fourth column explains the reasons for modifying the items.

4.4.3.2 Test of face validity of the Chinese version of the PIMRS

In order to ensure that the items and the sub-scales construct were meaningful to school leaders and teachers in the Chinese context, the face validity of the Chinese-version *PIMRS* was tested in a panel. Nine people (one district leader, two headteachers, two T&LDHs, two teaching directors and two teachers) with different subject backgrounds were invited to help Hallinger et al. (1994), the panellists were given the Chinese version PIMRS to test the face validity of the Chinese version. Following the method used by

Table 4.5: The items modified on the Chinese version of the PIMRS

Item	The English version	The Chinese version	Reasons for being modified
1	Develop a focus set of	Develop a focus set of annual	Due to their job demands,
	annual school-wide	teaching and learning goals.	T&LDHs only need to focus on
	goals.		teaching and learning.
7	Discuss the school's	Teachers participate in	Teachers may have more
	academic goals with	formulating the school's	opportunities to discuss the
	teachers at faculty	academic goals.	school's academic goals through
	meetings.		a variety of methods.
17	Draw upon the results of	Formulate a school-based	The curriculum in China can be
	school-wide testing when	curricular system in light of	divided into three categories:
	making curricular	students' development needs,	national, local and school-based.
	decisions.	school mission and goals and/or	National and local curricula are
		combining school characteristics.	required to be run for a set length
22	Discuss academic	Evaluate teaching results or	of time. Schools have the
	performance results with	identify school-based curricular	autonomy to determine only the
	the faculty to identify	strengths and weaknesses in	school-based curricular system,
	curricular strengths and	light of students' academic	which is valued by the educational
	weaknesses.	performance results.	authority and schools.
38	Acknowledge teachers'	Acknowledge teachers'	Writing memos for their personal
	exceptional performance	exceptional performance by	files is not very common practice
	by writing memos for	different methods (e.g. sending a	in China.
	their personal files.	text, etc.).	
39	Reward special efforts by	Reward teachers' exceptional	It is hard for Chinese teachers to
	teachers with	performance by giving prior	understand what 'special efforts'
	opportunities for	consideration for upgrading their	refer to and how they can be
	professional recognition.	professional titles or being	identified. Also, it is better to
		awarded 'excellent teacher' or	identify professional recognition
		other titles.	and awards.
46	Recognize students who	Recognize students who do	In the Chinese context, honour
	do superior work with	superior work with formal rewards	rolls may not be a very formal
	formal rewards such as	such as being commended as	method to reward students, and
	an honour roll or mention	'three-good students' or	many schools may not have a
	in the principal's	'outstanding student leaders'.	principal's newsletter. Formal
	newsletter.		rewards refer to the awards, such
			as 'three-good students'.

the titles of 10 sub-scales on them, and were asked to read and sort all 50 items into the 10 sub-scales without any discussion. Because they were not told to put five items into each sub-scale in advance, somebody put more in one sub-scale; I immediately reminded them to put five items into each sub-scale. The agreement rate for items on the Chinese version of the *PIMRS* is shown in Table 4.6.

Table 4.6 Agreement rate for items on Chinese version of the PIMRS

Agreement rate	100%	89%+	78%+	67%+	56%+	44%+	33%+	0
	(9/9)	(8/9)	(7/9)	(6/9)	(5/9)	(4/9)	(3/9)	(0/9)
Numbers	8	15	19	24	27	33	36	2

Of the 50 items, there were only eight that all nine people put into the original sub-scales; 27 items were categorised correctly by five out of nine people; and two items were not categorised correctly by anyone. According to Latham and Wexley (1981, cited in Jones, 1987), 'there should be at least 80% agreement among judges when allocating items to categories for the items to be considered valid indicators of a given category', so it was clear that the Chinese version of the PIMRS was not up to standard, and its agreement rate was low. When they were given the correct location for each item according to the PIMRS, they said some items could be sorted into two or three sub-scales - for example, the item 'Pointing out specific weaknesses in teacher instructional practices in post-observation feedback' could be classified into both the third sub-scale, 'supervises and evaluates instruction', and the ninth sub-scale, 'promotes professional development'. The item 'Attend/participate in extra- and co-curricular activities' could be put into the third sub-scale, 'supervises and evaluates instruction', the fifth subscale, 'monitor student progress', and the seventh sub-scale, 'maintain high visibility'. Nevertheless, they said it was easy to understand the meaning of each item, from which a particular behaviour could be identified and evaluated. After categorising activity, we entered the discussion stage, the purpose of which was to look at the limitations of the Chinese version of the PIMRS

used in exploring job functions of T&LDHs and identify other functions that

this instrument did not reflect. I chaired the discussion, which was guided by three questions:

- 1. Do you think this instrument covers all a T&LDH's job functions?
 Which job functions are not included in this instrument?
- 2. Do you think this instrument can evaluate a T&LDH's performance in relation to his or her job functions? Why or why not?
- 3. Which indicators can be omitted? What indicators can be added to the instrument?

While chairing the discussion, I wrote down the key points in my notebook for subsequent reference. Because there was a concern that significant modifications might affect the instrument's reliability and validity, which had been verified in many research projects, the final Chinese version of the *PIMRS* was confirmed after a slight modification. The whole activity, including allocating the items into the sub-scales and the following discussion, lasted about two hours. The discussion provided me with a wider horizon against which to look at T&LDHs' job functions, and led me to analyse the data from critical incident interviews as part of the evidence exploring the nature of the T&LDHs' responsibilities and the critical incident interviews complemented each other when it came to exploring T&LDHs' job functions.

The English version of the *PIMRS* includes the supervisor form, the headteacher form and the teacher form. However, in my study, supervisors were not invited to participate in the questionnaire because 'the validity of the *PIMRS* is based upon the assumption that the respondent has observed the principal's leadership behaviour in a reasonably large sample of situations' (Hallinger, *PIMRS* Manual, 1990, p. 3). From my experience as a teacher and leader in the Chinese context, supervisors know about school leaders' leadership performances from different sources and are able to identify the excellent leaders, but might not have sufficient opportunities to observe T&LDHs' behaviour 'in a reasonably large sample of situations'. Thus only school leaders and teachers in the T&LDHs' schools were

considered for participation in the questionnaire. Support staff were excluded because they might not pay attention to very concrete teaching and learning activities. In this case, the Chinese version of the *PIMRS* including the headteacher form, the T&LDH form and the teacher form with the same rating instrument were prepared for data collection.

4.4.3.3 Questionnaire administration and implementation

The headteachers, T&LDHs and most of the teachers in eight schools participated in the questionnaire stage of data collection. The headteacher form was sent to each headteacher and sent back to me by email. The T&LDH form and the teacher form were sent to the schools by me. The school leaders, except the headteachers, were invited to complete the teacher form. Copies of it were assigned according to the approximate number of teachers, with a brief introduction to the study and instructions for administering the questionnaires. However, the questionnaires were completed at different times and under different conditions. For example, one school asked the volunteer teachers to complete them after the staff meeting, while another school assigned the questionnaires to each grade, and the year leaders administered the questionnaire.

Once completed, I collected the responses and entered the data into an Excel spreadsheet. In total, 437 questionnaires were collected. Four were not completed, and nine had been completed by teachers who had worked with their T&LDHs for less than a full year – so the number of valid questionnaires was 424. All the data were saved on the computer for analysis.

4.5 Data analysis

The data extracted from the T&LDHs' written job descriptions and gathered from the critical incident interviews were subjected to thematic analysis as qualitative data, while the data from the questionnaires was analysed statistically as quantitative data. Data analysis was guided by my two research questions (see p. 60). For the first research question about the T&LDHs' job functions, the data collected from the written job descriptions

and the critical incident interviews were used to generate research findings. For the second research question, the data from the critical incident interviews and the questionnaires were used to explore the characteristics of T&LDHs. I present below the process of analysis for the two types of data.

4.5.1 Qualitative data analysis

In this section I first discuss my method of qualitative data analysis – thematic analysis – and then present the process of data analysis for the first and second research questions respectively.

4.5.1.1 Method of qualitative data analysis – thematic analysis

Thematic analysis was suitable for the qualitative data for three reasons. First, it is an easily accessible approach because it 'does not require the detailed theoretical and technological knowledge of approaches, such as grounded theory' (Braun and Clarks, 2006, p. 81). Second, it provides two different ways to develop a thematic code: deductive and inductive analysis (Boyatzis, 1998), which fulfilled the requirements of my data analysis. Deductive analysis refers to a theory-driven approach in which researchers start from a theory and proceed to develop thematic codes consistent with the theory (Boyatzis, 1998); inductive analysis is a data-driven approach, in which coding the data does not have to fit it into an existing frame or the researcher's analytic preconceptions (Braun and Clarks, 2006). I used the two ways recursively, and present details below.

Third, thematic analysis allowed me to use manifest- and latent-content analysis. Manifest-content analysis refers to analysis of the visible or apparent content of something, while latent-content analysis looks at the underlying aspects of the phenomenon under observation; the use of latent-content analysis enhanced my deeper understanding. The combination of the two methods had the potential to help me interpret visible and invisible elements within the data separately or concurrently (Boyatzis, 1998). Following 'phases of thematic analysis' developed by Braun and Clarks (2006), thematic analysis was conducted on the qualitative data though six procedures: (1) familiarising myself with the data, (2) generating initial codes,

(3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report. In practice, I added more details for some procedures, and adapted others to suit my needs. I describe the process below.

4.5.1.2 Analysis of data relating to the first research question

Analysis of data relating to the first research question involved two foci: a school's leadership configuration and T&LDHs' job functions. I use the term 'leadership configuration' to refer to how formal leadership positions are distributed within a school. The research findings on schools' leadership configurations were generated from the interview question focused on the leadership configuration for the whole school and staffing in the teaching and learning department. I interviewed 24 T&LDHs. Because Jun had served as a T&LDH in two different schools and was a headteacher in one of the schools when I interviewed him, he described three types of leadership configuration from his varied experience. A similar situation occurred with Li, who identified two types. Another T&LDH, Jin, experienced two types in the same school. So in total, the 24 interviewees talked about the leadership configurations in 26 schools. It was easy to divide the data into three categories, because the majority of configurations were the 'standard' type (see Figure 2.3); I labelled the other types 'integrated' and 'umbrella'. Finally, I collated the T&LDHs' comments on the three categories of leadership configuration for my writing. For the T&LDHs' job functions, data analysis entailed three steps: analysis of the written job descriptions, analysis of the critical incident interviews, and searching for and defining the themes based on the first two steps relating to the documentary and interview data analysis.

Analysis of the 18 T&LDHs' written job descriptions

The first research question focused on the nature of the T&LDH's role. Having gone through the T&LDHs' job descriptions and the transcripts of the critical incident interviews several times, I analysed the data using NVivo 10. Hallinger's (2011a) 10 job functions of instructional leaders were used as existing patterns to gather the relevant information so that I could test his

theory in a direct way. Nevertheless, because T&LDHs only need to focus on teaching and learning, the first two functions were modified: 'framing the school goals' was changed to 'framing the goals for teaching and learning', and 'communicating the school goals' to 'communicating the goals for teaching and learning'. I called Hallinger's (2011a) 10 job functions *patterns*, rather than *codes*, because I believed each job function might include different codes, while these codes could be covered by the concept of the pattern. During the data analysis process, I did not completely confine myself to Hallinger's framework, but produced new codes based on the data. These codes were the smallest meaningful units from the raw data, and might be conflated to formulate a new pattern — or an independent pattern might emerge from a particular code to conceptualise the T&LDH's job function.

I started with the T&LDHs' job descriptions, gathering the relevant extracts from the documents and putting them into Hallinger's (2011a) 10 candidate patterns; 36 new codes were generated based on the data. Then I checked each pattern or code by reviewing the items from different sources within a pattern or code to see whether or not they described the same thing. For example, in the code 'leading and promoting teaching and learning initiatives', I obtained 15 references from 11 sources. There were different 'promoting curriculum initiatives', expressions, such as 'organising instructional initiative activities', 'guiding the teachers to engage in instructional reforms', 'leading and organising instructional initiative programmes', 'framing instructional initiative objectives, creating instructional initiative programmes and giving concrete guidance and supervision to the teachers', and 'promoting initiatives in curriculum, teaching methods, learning methods and teaching organisation modes'. Although the expressions were different, the code 'leading and promoting teaching and learning initiatives' covered each of their connotations. For those items with different meanings within a pattern or a code, I either moved them to other suitable patterns or codes, or established new codes.

After that, I looked for patterns among the codes, and formulated 16 new patterns by conflating the codes in light of their common features. For

example, I conflated the codes 'staffing the teachers' and 'appointing teaching and learning directors, subject leaders, year-subject leaders and young teachers' mentors' into one code, 'staffing teachers and leaders within the department'. However, I did not eliminate any codes because coding for as many potential patterns as possible is beneficial for further analysis (Braun and Clarks, 2006). As a result, I produced a list of new patterns, including 18 new ones as well as Hallinger's 10 patterns (see Appendix 2-1). It is worth noting that four patterns/job functions in Hallinger's (2011a) conceptual framework, including providing incentives for learning, providing incentives for teachers, protecting instructional time and maintaining high visibility, failed to emerge from the data; they were not expressed clearly in the T&LDHs' written job descriptions.

Analysis of the critical incident interviews with 24 T&LDHs

I went on to analyse the data collected from the critical incident interviews in the same way. The relevant extracts were gathered and placed into the 28 candidate patterns described above (see Appendix 2-1), and several new codes were generated from the data. Most of the data could be reasonably put into the existing patterns. As a result, 29 potential patterns (see Appendix 2-2) emerged through my reviewing, checking and conflating the codes and patterns, just as described above. The new patterns included 'creating a positive teaching and learning climate' and 'solving conflicts and problems between staff'. Two patterns – 'evaluating the staff's performances' and 'evaluating the departments' and groups' performances' – were conflated into one pattern, 'evaluating the departments', groups' and staff's performances'. Through this step, many interesting stories from the critical incident interviews were gathered for each pattern/job function.

Searching for, reviewing, defining and naming the themes

Searching for themes involves sorting different codes or patterns into

potential themes and collating the relevant coded data extracts within the identified themes (Braun and Clarks, 2006). First, I collated 29 existing patterns (see Appendix 2-2) by further reviewing and checking each pattern, recognising overlapping patterns and conflating and eliminating some patterns. For example, the pattern 'scrutinising and approving expenditures within the department' was conflated into the pattern 'leading and managing instructional supportive affairs'; 'solving conflicts and problems between staff' was conflated into 'coordinating and communicating within and across departments'; and the pattern 'protecting instructional time' involved observing educational regulations and school-based rules, so was conflated into 'formulating, amending, improving and implementing policies and regulations relating to instructional affairs'. For each of three patterns, 'assisting in organising teacher delegator conferences', 'coordinating external relationships' and 'enhancing school's reputation in society', I gained only one reference from one source; they were not, in my experience, main job functions of T&LDHs, nor were they very relevant to teaching and learning, so they were eliminated from the list. The pattern 'creating a positive teaching and learning climate' was too general as a function, and the pattern 'leading and managing moral education' applied to only three T&LDHs who assumed the positions of both T&LDH and moral education deputy head (MEDH), so I eliminated both. Another four patterns -'observing educational laws and regulations', 'providing incentives for learning', 'providing incentives for teachers' and 'maintaining high visibility' -I regarded as T&LDHs' job requirements rather than their job functions, so eliminated them from the list.

To articulate the meaning of each theme, I then reconsidered the 'essence' of what it was about and renamed it (Braun and Clarks, 2006). For example, 'evaluating the departments', groups' and staff's performances' was modified to 'evaluating the performances of the subordinate departments and staff'; and 'implementing and reflecting the plans' to 'implementing and reflecting on goals for teaching and learning'. As a result, 16 themes or job functions were identified, which I categorised into six dimensions. My research findings are presented in Chapter 5.

4.5.1.3 Analysis of data relating to the second research question

Analysis of data relating to the second research question involved only the data collected from the critical incident interviews with 24 T&LDHs. I describe the analysis process below.

Familiarising myself with the data and generating the codes

The second research question focused on the range of characteristics among the T&LDHs. Research findings were generated from the critical incident interviews with 24 T&LDHs. The interview(s) with each T&LDH included four stories and other information. After transcribing and analysing them in relation to the first research question, I was already very familiar with these data when I analysed them for the second question. There were 96 stories in total, recounting the T&LDHs' successes and failures. Through them, the recurring themes that represented the T&LDHs' behaviours, values, priorities, concerns, interests and experiences could be identified (Yoder-Wise and Kowalski, 2003, cited in Webster and Mertova, 2007), and their characteristics extracted. In addition, each T&LDH provided information in a non-story format about his or her beliefs and perceptions, which served to corroborate the research findings generated from story-type data, while enriching my understanding.

At the beginning, six units of analysis (three excellent and three typical T&LDHs) were used to generate initial codes inductively, with the aim of generating unique codes in the Chinese context that were not overly influenced by the theoretical frameworks presented above in the literature chapter. Before outlining this process, it is important to distinguish two terms: unit of analysis and unit of coding. According to Boyatzis (1998), the former is 'the entity on which the interpretation of the study will focus' (p. 62), and the latter 'the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon' (p. 63). In my study the units of analysis are the 24 T&LDHs, and the units of coding those pieces of codable information within the interview-generated

data. Based on the units of coding, I summarised the codes for the units of analysis, each T&LDH, using the process described as follows.

First, Evans's (2008; 2011) componential structure of professionalism (see p. 37) was changed into a usable table as an analytical framework for each unit of analysis, as shown in Table 4.7.

Table 4.7 The framework for data analysis based on Evans's (2008; 2011) componential structure of professionalism

Name:		Ana	Analysis			
		Topic for	Topic for	Topic for	Topic for	for other information
		CII 1	CII 2	CII 3	CII 4	
	Processual					
 Behavioural	Procedural					
Denavioural	Productive					
	Competential					
	Perceptual					
Attitudinal	Evaluative					
	Motivational					
	Epistemological					
Intellectual	Rationalistic					
Intellectual	Comprehensive					
	Analytical					
Features (Ini	tial codes)		1	1		1

The first line comprised three sections: the interviewee's name, analysis for critical incident data and analysis for other information. Within the section of analysis for critical incidents, there were four sub-sections for the topics or main content of four critical incidents described by the interviewee. The middle lines contained the content (including three components and 11 dimensions) of the componential structure of professionalism, which served as an analytical tool for data analysis. The last line displayed the interviewee's characteristics generated from the data. In other words, these characteristics were initial codes for further formulating the themes for each

sample group. Each table held information on one T&LDH, so 24 tables were developed in total.

Table 4.8 contains the analysis for Ping's critical incident interview data. I use Ping's first story, 'evening session for Senior 3 students', to illustrate the analysis process. After reading the whole story, I made sense of its topic, which was about extending study time for final-year senior students, aimed at improving NCEE results, and named the story as above. The purpose of the action described in the story was to develop a good learning climate, and encourage students' commitment to studying under teacher supervision. I then analysed the story on the basis of evidence of Evans's 11 dimensions, using the framework shown in Table 4.8. In the 'processual' dimension, I outlined what Ping did in practice: following the headteacher's proposal, she arranged a two-hour after-school session for the final-year senior students. First she carried out surveys among the students and parents, and found they supported this action; next, she discussed her idea with the teaching and learning directors and drew up an action plan. Then they communicated with the teachers and achieved a consensus. After that, they started to implement the action plan (there were a great many details). In the implementing process, they constantly adjusted details such as the deployment of the teachers and teachers' and students' requirements. Finally, the action was successfully carried out. Through filling in the 'processual' section, I captured the outline of the story, and reduced it to a manageable size (Boyatzis, 1998).

In relation to the 'procedural' dimension, since the evening session was arranged after school, it was important to seek parental consent, and ensure safety and security. Ping investigated the parents' and students' demands, sought advice from them, and fully considered the safety and security issues.

In relation to the 'productive' dimension, Ping said, 'the school had positive feedback from students and parents. The results of the national college

Table 4.8 Analysis of Ping's critical incident interview data using Evans's componential structure of professionalism

Name: Ping			Analysis for critic	al incidents data		
		Evening session for senior 3 students	Annual research conference	Senior 1 students' welcome conference	Research on teaching effectiveness	Analysis for other information
		the head's proposal to	framing the objectives,	reflection on the previous	identifying research	paying attention to
		extend studying time for	systematic thinking	welcome meetings, raising a	focus, modifying	details
		improving examination	(coverage of subjects and	new idea (in a collegial way),	repeatedly,	
		results, questionnaires	teachers, time, outcomes,	training the year head,	implementing,	
	Processual	among students and	etc.), drawing up an action	discussing things with year-	changing research	
		parents, drawing up an	plan, implementing,	subject leaders (identification	directions and	
		action plan, achieving a	summarising	of the students' knowledge	procedures from time	
		consensus among the		deficiencies, the features of	to time	
Behavioural		teachers, implementing,		senior school life, assignment,		
		adjusting		parents' participation), meeting		
				preparation, and test		
		seeking parental consent,			carrying out formal	
	Procedural	and ensuring safety and			research in a	
		security			systematic way	
		positive feedback from	activating teachers'	positive feedback from	doing a lot, but less	
	Productive	teachers, students and	motivation, enhancing	teachers, students and	productive; without	
		parents	cohesion, and gaining trust	parents	fitting well with the	

					school work	
		adaptable (flexible);	having an awareness of	having basic coaching skills,	empathetic	maintaining good
		leading by example;	others and their situations	understanding new year		relations with others
	Competential	empathetic, teamwork,		leaders' situations; coaching		
		having organisational		and mentoring		
		awareness				
		extending studying time for	valuing research; a good	improving examination results	trying to do well, and	self-assessment:
		improving examination	opportunity to present	starts from the starting grade	pleasing superiors;	lack of confidence;
		results; holding an	research outcomes; a way		feeling guilty and	introverted;
	Perceptual	examination-centred	of developing teachers;		helpless; lack of	struggling to grasp
		rationale; attributing	attributing success to both		confidence;	theory; proud of the
		success to both internal	internal and external		respecting experts'	school and the
		and external elements	elements; lack of		views	teachers
			confidence in research			
Attitudinal		emphasising harmony and	activating teachers'	valuing work effectiveness	valuing research	valuing harmony
	Evaluative	affection between people	motivation through		outcomes	and affection
			recognition and awards			between people
		improving examination	finding good models, and	improving examination results;	carrying out a quality	high morale due to
		results; support from the	recalling and summarising	enhancing work effectiveness;	research project;	the headteacher's
	Motivational	teachers and others;	what they did for the whole	achievement orientation	achievement	trust, mentoring and
	Wollvalional	maintaining very high	year; recognising and		orientation	support, and
		morale; set a high	encouraging teachers;			teachers' support;
		expectation for herself;	achievement orientation			high job

		achievement orientation				expectations for herself		
	Epistemological				lack of knowledge on	lack of theory		
	Lpistemological				research			
	Rationalistic	rational	rational	rational				
Intellectual	Comprehensive		lack of competence of	reflective, creative	lack of expertise in			
intenectual	Complehensive		judging research outcomes		research			
		analytical; investigative	analytical	analytical	being analytical in			
	Analytical				managing the			
					research process			
		1. being adept in organising activities and events (♠); 2. having empathy for others (♣); 3. being reflective (♠); 4. a good communicator (♣);						
		5. having an awareness and basic skills to coach others (♥); 6. holding an examination-centred rationale (♠ ♪); 7. valuing research, but						
		lacking expertise and skills to lead and manage research (♠ ♣); 8. valuing harmony and affection between people (♠ ♣); 9. emphasising						
		work effectiveness (♣); 10. having very high morale (♣ 戊); 11. setting high job expectations for herself (♣ 戊); 12. lacking confidence (♠ 戊);						
Cha	racteristics	13. adopting a rational appr	oach to practice (♣); 14. being	analytical (♣); 15. setting herself	an example to others (♥);	16. making good use		
		of structure (♣); 17. having an awareness of power relations (♥ 戊); 18. being frequently productive (♥); 19. paying attention to details (♠ 戊);						
(III)	itial codes)	20. being loyal to the school	l and headteacher (♠ ♪); 21. at	tributing success to both internal	and external elements (♣	♪); 22. attributing		
		failure to internal elements ((♥ ♪); 23. knowing her own inte	rnal states, preferences, resource	es and shortcomings (♥ ♪); 24. paying attention		
		to procedures and common	sense (asking parents for cons	sent, and ensuring safety and sec	curity) (♥); 25. being creati	ve (♥); 26. acting in a		
		collegial way (♠); 27. being	investigative (♥); 28. having go	ood relationships with others (🏝 🖍); 29. negotiating with other	ers, not commanding		
		them (♥); 30. respecting superiors' and experts' views (♠ ♪).						

entrance examination were very good. Although we could not attribute it all to this, the evening session certainly provided the students with a positive learning environment.'

When it came to the 'competential' dimension, I identified Ping's characteristics from this story as having several aspects: having empathy with others, being adaptable or flexible, being sensitive to power relationships, working with others as a team, and doing by way of example. Ping said:

I was afraid that the teachers would not be happy with this. Most of the teachers in this grade were mothers, and had to take care of their children and families after work. So when I discussed it with the teachers, I articulated the purpose of this endeavour, and listened to what they had to say. To my surprise, we very quickly achieved a consensus. All the teachers were willing to overcome their own difficulties and support the school's work. Even so, when it came to the teachers who had young kids or old parents, I asked them individually what time was suitable for them to be on duty, and tried not to bother them with too much.

Ping's description shows her ability to put herself in others' shoes. So as not to tire them, she adjusted the requirements of teachers on the basis of maintaining the students' experiences after the initiative was on track. This showed her empathy with the teachers and her flexibility in handling things. Moreover, she knew that asking colleagues to extend their working day was an imposition. When discussing the proposal with one of her peers from another department, she began, 'following the headteacher's proposal...' In this way, the colleague felt that s/he was fulfilling the headteacher's requirements rather than Ping's - referencing the headteacher's authority made the communication smoother and more effective. This demonstrated her awareness of power relations. Meanwhile, because of her effective coordination, the leaders, teachers and support staff from different departments were able to work as a team to ensure the initiative's successfully implementation. During the process of setting it up, Ping was on duty more often than the others, indicating her willingness to set an example to others – a quality greatly valued in Chinese society.

The 'attitudinal' component of Evans's model comprises three dimensions. With regard to the 'perceptual' dimension, Ping agreed with the headteacher's idea of trying to improve examination results through extending studying time; she believed 'good examination results in the national college entrance examination are the lifeline of a school' (Ping's words), indicating an 'examination-centred' rationale to her management. In relation to the 'evaluative' dimension, which Evans explains as being about values and the things that are important to people in their work and that they like and dislike, Ping emphasised harmony and affection between people when she persuaded the teachers to support the initiative. She attempted to negotiate with the teachers by articulating its purpose and listening to, rather than commanding, them. In relation to the 'motivational' dimension, she derived very high morale from the headteacher's trust and the teachers' support. She said, 'the headteacher trusts me, the teachers are supportive, and I don't have any excuse for not doing well'; 'if I take this position, I must do well.' She set high expectations for herself, and managed to do her job well.

As for the intellectual component, it comprises four dimensions: epistemological, rationalistic, comprehensive and analytical. From the description presented above it is evident that Ping was analytical, investigative and rational. For example, when the headteacher proposed the evening session for the final year senior students, Ping did not implement it immediately, but surveyed students and parents to assess whether they needed it. After that, she drew up a detailed action plan, and implemented it successfully, adjusting the requirements on teachers to reduce their burdens. These actions indicated her ability to set priorities on a rational basis, and identify suitable timeframes, which demonstrated her analytical skills. However, in relation to 'epistemological' and 'comprehensive' dimensions, no suitable codes were generated from this story.

I have used Ping's story to illustrate how I analysed data from the critical incidents using Evans's componential structure of professionalism as an analytical frame. The non-story type data, although segmented and unstructured, provided much useful information through which to better

understand the T&LDHs' actions, values, beliefs and perceptions, and the positive and negative environmental factors affecting their job effectiveness, and once again I take Ping as an example (see the section 'Analysis for other information' in Table 4.8) of how I analysed this kind of data. Ping said in her interview:

We have a good reputation in society. Why is that? We have an impressive history, and a really good team of teachers; many of them are excellent committed and dedicated - and totally committed to the students. [We have] an enabling and comfortable school culture. The headteacher trusts me, backs me and supports me. When there was an important event, she discussed it with me, told me how I might plan for it, what procedures to take, what resources I might need, removed the obstacles for me and recognised my commitment and achievement. I have very good relations with the other department heads and the teachers. I think it's very important to have a harmonious atmosphere, and we care about each other. Perhaps, this is because of my headteacher's personality. She's that kind of person: good. So I should be happy and satisfied. If I couldn't do my job well, or if I was a bad leader, it would be terrible. So I must demonstrate I can do well. I just want to do well, very much. ... I have some weaknesses. For example, I don't know how I can integrate theory into practice. Yes, I've read some books, but I find it hard to put them into practice. I'm introverted, I lack confidence, and I'm not good at establishing external networks. ... My biggest problem is my ability to learn and understand. I'm fine when I know how to do something, but sometimes I struggle to reach agreement with people – like those experts in our research programme.

Ping's narrative reveals several of her characteristics. For instance, she enjoys good relationships with her colleagues, which was demonstrated in her stories – so I categorised 'maintaining good relations with others' as an example of the 'competential' dimension (in Table 4.8). She made assessments about herself that included lack of confidence, being introverted, and struggling to grasp theory, and described her perceptions about her school and colleagues. I categorised these perceptions as examples of the 'perceptual' dimension of her professionalism. I categorised 'valuing harmony and affection between people' as relating to the 'evaluative' dimension, and 'very high morale due to the headteacher's trust, mentoring and support, and teachers' support' and 'high job expectations for herself' to

the 'motivational' dimension. In addition, in order to easily return to the raw data from which the codes were generated, I wrote the titles of the dimensions, such as 'processual', 'evaluative', and 'social', on the transcripts.

Finally, based on the analysis described above, I created initial codes for Ping as a unit of analysis, shown in the 'Characteristics (Initial codes)' section in Table 4.8. I marked the features differently according to the frequency with which they emerged in a T&LDH's stories: if a characteristic emerged three or four times in the four critical incidents, I marked it '&'; if twice, I marked it '♠'; if once, I marked it '♥'. If a characteristic was corroborated by the non-story type evidence, I added a 'J' beside it. If a characteristic emerged more than once in any one critical incident, I recorded it only once to ensure its comparability among the four critical incidents described by each of the T&LDHs. During this process, I followed three principles. First, I coded for as many potential patterns as possible (Braun and Clarks, 2006) for further analysis. Second, I coded both positive and negative characteristics, rather than only positive ones, because I wanted to see a full picture of the individual and the spectrum of different T&LDHs' performances within a theme. For instance, almost all the T&LDHs valued research, but they had different expertise and skills in leading and managing research activities and programmes. Third, I scrutinised comprehensively and ensured all the codable data were inclusive. As I looked for the codes from several stories and the non-story type information for each unit of analysis, some evidence overlapped, corroborating other evidence. To make it readily available for further analysis, the T&LDHs' characteristics were transferred to a spreadsheet. In this way, I completed data analysis for six T&LDHs, as shown in Appendix 3.

Having analysed the data from the critical incident interviews with the six T&LDHs, I found that many characteristics fitted well with the intellectual component of Evans's (2008; 2011) model of the componential structure of professionalism, with Boyatzis's (2008; 2009) model, and with Sternberg's (2005; 2007; 2008) WICS model of leadership presented in Chapter 3. To avoid being overwhelmed by too many codes based on these models and theoretical perspectives, I reviewed, checked and collated the codes that

involved T&LDHs' capabilities and competencies, and formulated 19 patterns, comprising (1) analyticism, (2) rationalisation, (3) creativity, (4) investigation, (5) reflection, (6) emotional self-awareness, (7) emotional selfcontrol, (8) adaptability, (9) achievement orientation, (10) positive outlook, (11) self-confidence, (12) empathy, (13) organisational awareness, (14) coach and mentor, (15) inspirational leadership, (16) influence, (17) conflict management, (18) interpersonal skills, and (19) teamwork. Among them, 'investigation' means a T&LDH is willing to examine the facts of a situation, event or problem; 'reflection' is described as being reflective and thoughtful about his or her work; 'self-confidence' refers to 'having a strong sense of one's self-worth and capabilities' (Goleman, 2004, p. 26); and 'interpersonal skills' refers to communicating well and maintaining good relationships with others. Apart from these four patterns, the definitions and meanings of the other 15 patterns can be understood from Evans's, Boyatzis's, and Sternberg's models presented in Chapter 3 (see p. 37; pp. 42-44; and pp. 54-56). This process deepened my understanding of the models and theoretical perspectives, and of the data, as well as making the subsequent analyses more effective.

In addition to the 19 patterns described above, codes such as 'lacking expertise and skills to lead and manage research' were retained. They were used as existing patterns or codes to analyse the data generated in the interviews with the other 18 T&LDHs. Nevertheless, I did not confine myself to the codes and patterns based on the six T&LDHs, but coded other new characteristics among the T&LDHs based on new data. For example, the new codes included 'lacking knowledge about how to evaluate the teachers' and 'lacking knowledge about the curriculum', etc. For the other characteristics involving T&LDHs' behaviour and attitudes, I generated the codes as described above. In this way, I completed all the interview data analysis, collated the initial codes for each T&LDH, and formulated a list of 71 characteristics in total (see Appendix 3 as an example).

Searching for, reviewing, defining and naming the themes

Searching for themes involves categorising the codes into potential themes. The characteristics relating to T&LDHs' capabilities and competencies are underpinned by several established theoretical models; most of the concepts represent independent characteristics, and each could be regarded as a potential theme for identifying T&LDHs' characteristics. This being the case, I dealt with them in the following way: if a characteristic or competency emerged more than twice in a T&LDH's four critical incidents, it was considered one of the individual's 'steady' characteristics; if a steady characteristic was evident in more than eight of the 12 T&LDHs in each group, it was regarded as a steady *feature* of the whole group. For example, when 'organisational awareness' was found as a steady characteristic of 10 of the 12 T&LDHs comprising the typical group, and nine of the 12 T&LDHs in the excellent group, the feature was considered to be demonstrated consistently and extensively among both groups of T&LDHs; and when the characteristic 'empathy' emerged as a steady characteristic of only five of the 12 typical T&LDHs, but of all 12 excellent T&LDHs, it was considered to be demonstrated consistently and extensively among only the excellent T&LDHs. As a result, a range of characteristics or competencies were respectively identified for the two groups. The research findings are presented in Chapter 6.

With regard to the other characteristics, 46 codes in total were used. I sought the themes recursively by comparison and contrast between the two groups, so that I could better understand the differences between them. During this process, I first focused on one group. When a potential theme emerged I reviewed and checked the relevant data extracts to identify the theme; once identified, I switched to the other group to see if the same theme could be identified there. For example, in the code list for the excellent group were some codes about curriculum and pedagogy. Under the code 'developing school-based curricula to improve students' development', the T&LDHs did different things. Ying developed, with colleagues, an integrated curriculum to improve classroom effectiveness; Hong tutored teachers in curriculum development; Feng developed a three-year curriculum plan; Wei established a humanities base; Li referred to

herself as 'a curriculum player' to demonstrate she enjoyed work relating to school-based curriculum development and implementation; Ming cooperated with several companies and institutions to provide the students with practice-based curricula, etc. Under the code 'promoting pedagogical initiatives', Xin led teachers in employing a self-study approach to developing students' learning; Ting encouraged teachers to apply an inquiry-based approach to their classroom teaching; Hong advocated student-centred teaching, etc. Among them, some were effective while others only reflected a kind of philosophy. In the interviews, the T&LDHs in the excellent group talked about these practices with enthusiasm, and showed they were receptive to and actively implemented the rationale for national curriculum reform.

However, they failed to demonstrate critical thinking about the reform's requirements and feasibility. For instance, based on the rationale for national curriculum reform, Wei developed a web-based student assessment system in which teachers were required to write comments on each student from time to time - but this system could not be implemented smoothly because many teachers did not have the time and energy to do it. Some history, music and art teachers in his school taught more than 300 students, and could not comment routinely on students' performance, so it was an unrealistic requirement. Yan embraced the rationale for curriculum reform, but her school did not have room to build professional classrooms, and the teachers struggled with the national curriculum and lacked the ability to develop school-based curricula. She felt guilty and upset about their implementation of the reform. Based on the above evidence, I identified a theme for the excellent group: being receptive to and actively implementing the rationale for national curriculum reform, but lacking critical thinking about its requirements and feasibility.

I then turned my attention to the typical group to see if the same theme emerged. When I searched for this theme within the codes, I found that only three T&LDHs had led their teachers in pedagogical initiatives, and there was no evidence of the same theme in the group. When I checked the raw data relating to the theme, I found they were reactive to, and passively implemented, the rationale for curriculum reform. For example, one school

asked the teachers in the martial arts school nearby to provide courses to satisfy education authority requirements; another school asked the teachers to tutor the students after class rather than rely solely on delivering the national curriculum during the normal school day. Thus, although some commonalities were evident, different themes emerged in the two groups.

In this way I developed several themes for each group, and renamed them to clearly and conveniently convey the nature of each. The research findings in relation to the T&LDHs' characteristics are presented in Chapter 6.

4.5.2 Quantitative data analysis

The purpose of employing a quantitative approach was to examine T&LDHs' leadership behaviour and identify the characteristics of the T&LDHs in the two sample groups. The data collected from the questionnaires completed by T&LDHs, headteachers and teachers in eight schools were used to generate the research findings. Data analysis comprised three steps: reliability and validity analysis of the Chinese version of the *PIMRS*, examination of the consistency of teachers', headteachers' and T&LDHs' perceptions of T&LDHs' leadership behaviour, and examination of the differences in leadership behaviour between the two sample groups.

4.5.2.1 Reliability and validity analysis of the instrument

The reliability and validity of the Chinese version of the *PIMRS* were first tested following the methods employed by Hallinger et al. (1994) in their study of Thai headteachers' instructional leadership. The purpose was to see if the Chinese version of the *PIMRS* had the potential to provide reliable and valid measures of instructional leadership performance among Chinese T&LDHs. Reliability was tested through analysis of the inter-rater reliability of teachers' responses (Ebel, 1951, cited in Hallinger et al., 1994) because validation studies in previous studies had demonstrated that the Englishversion *PIMRS* form for soliciting teachers' perceptions offered more valid data than the other two forms (Hallinger, 2011a). One-way analysis of variance, ANOVA, across the eight sample schools was conducted, as shown in Appendix 4-1. According to Ebel's formula for testing inter-rater

reliability: Rx=(Mx-M)/Mx (Rx: the reliability; Mx: the between-groups variance; M: the within-group variance), the reliability coefficient for each subscale was obtained (Hallinger et al., 1994), as shown in Appendix 4-2. All 10 subscales exceeded 0.80, which meant a high degree of reliability for the teacher form of the instrument.

Two methods were used to test construct validity, which concerned the extent to which a test was able to differentiate between the performance of subjects on the desired criterion (Hallinger et al., 1994). First, a one-way analysis of variance, ANOVA, ran to determine the ability of the Chinese-version *PIMRS* to differentiate the instructional leadership behaviours of the T&LDHs being rated among teachers' perceptions (see Appendix 4-1). When the variance in teacher ratings of T&LDHs within schools was compared with those across schools on each of the subscales, it was found that all the subscales measured greater than within school variance, indicating that the instrument was a valid measure of performance.

Second, the inter-correlation between pairs of subscales was compared with each subscale's reliability coefficient (see Appendix 4-3). It could be seen that the inter-correlation between subscales was lower than the subscale reliability coefficients, which suggested that the subscales measured distinguishable constructs – that is to say, the items grouped conceptually as subscales belong together and measure different job functions. In conclusion, the test of the reliability and validity of the Chinese-version *PIMRS* demonstrated it was a trustworthy instrument that could be used to evaluate the differences between the two sample groups regarding their performance.

4.5.2.2 Differences across the three rating groups

To check the consistency in the perceptions of the teachers, headteachers and T&LDHs concerning T&LDHs' leadership behaviour, analysis of variance and the Scheffe test for each subscale were used to compare the ratings among the three groups. The result was that no difference was statistically significant, at the level of 0.05, as shown in Appendix 4-5. Thus it is certain that there was no significant difference in perceptions across the

10 subscales using the Chinese-version *PIMRS* among the three rating groups.

4.5.2.3 Differences between the two sample groups

Teachers' ratings were used to compare the differences between the two sample groups. The hypothesis was that the excellent group exercised more active leadership than the typical groups in most job-function subscales. An independent-samples t-test was used to check the differences between the two sample groups. The research findings are presented in Chapter 6.

4.6 Summary

In this chapter methodological issues about the empirical investigation, including sample selection, ethical issues, data collection and analysis details, have been presented and discussed. The study employed the qualitative dominant mixed methods approach (Johnson et al., 2007) to explore the nature of the T&LDHs' role and the range of characteristics among the T&LDHs in the two sample groups. The nature of the T&LDHs' role was examined by exploring their job functions, and the T&LDHs' characteristics were examined in relation to three dimensions: behavioural, attitudinal and intellectual. Documentary analysis of 18 T&LDHs' job responsibilities and the critical incident interviews with 24 T&LDHs contributed to the exploration of the nature of the T&LDHs' role, and the interview data were also used to generate the research findings about the T&LDHs' characteristics. Supplementing this data collection, questionnaires completed by eight T&LDHs, eight headteachers and 424 teachers in eight schools contributed data that were used to identify T&LDHs' leadershiprelated characteristics. The research findings are presented in Chapters 5 and 6.

Chapter 5 Research Findings in Relation to Research Question One: the Nature of the T&LDHs' Role

This chapter highlights the nature of the T&LDHs' role and explores how they carry it out in Chinese secondary schools. Since the T&LDH role is associated with what I refer to as a school's leadership configuration, I first present three categories of leadership configuration from the data analysis so that the reader may make sense of Chinese secondary schools' organisational structures. I then present details of T&LDHs' job functions. Due to space restrictions, I present only brief descriptions of the majority of functions, which are either consistent with Hallinger's (1982; 2011a) instructional management conceptual framework or easily understood. I focus in more detail on three functions that are either excluded from Hallinger's (1982; 2011a) framework or possess features unique to the Chinese context to show how the T&LDHs exercised their leadership. I conclude the chapter with a brief summary.

5.1 The leadership configuration in Chinese secondary schools

Three categories of leadership configuration emerged, which I labelled 'standard', 'integrated' and 'umbrella'. I outline the nature of each below.

- Standard refers to the leadership configuration presented in Chapter 2 (see Figure 2.3). The T&LDH takes responsibility for managing teaching and learning within the school.
- ❖ Integrated refers to the leadership configuration in which the positions of T&LDH and Moral Education deputy head are combined (see also Figure 2.3). This position is called moral education plus teaching and learning deputy head (deyu jiaoxue fuxiaozhang), and is held by the senior leader of two departments: moral education, and teaching and learning.
- Umbrella refers to the leadership configuration in which the headteacher represents the 'shaft' (of an umbrella), which connects to

the 'ribs', representing the deputy heads with responsibility for things such as school-based curriculum, instruction, teaching and learning within a grade, or the IT centre, etc.

Jun spoke of the three leadership configurations he had experienced:

The 'umbrella' configuration needs a powerful headteacher who has the energy to pay attention to the work in all fields. We had nine deputy heads at that time, and I was in charge of the school-based curriculum. Each deputy was able to do many things in one field - dig deeply and achieve. However, often the headteacher had an overview of what the deputies were doing, but we ourselves didn't know what our fellow deputy heads were doing. Each deputy head delegated work to the teachers, without knowing what other deputies were asking them to do, so the teachers found themselves facing a bigger workload than they could manage. Also, there was no opportunity for the deputy heads to develop themselves by doing overall school management. Then in this school, when I was a T&LDH, we implemented the standard leadership configuration. I found there was some conflict and overlap between the teaching and learning department and the moral education department. For instance, the two departments were at times doing different tasks in the same period. There was conflict of time, and between people ... messy... Now in my school I only have one deputy head covering teaching and learning, and moral education. School work is integrated, not separate. Teaching and learning is the core work. (Jun, from the excellent group)

Another T&LDH, Jin, experienced both the 'umbrella' and 'standard' types in the same school. They had previously employed the 'umbrella' type, and there were seven deputy heads in her school; she took responsibility only for teachers' professional development. Then the headteacher retired, and a new head arrived, who thought Jin was the traditional teaching and learning deputy head, and asked her to organise students' monthly tests. As a result, the year heads were unhappy and refused to obey her because, in the past, such an order had been given by the head, rather than the deputy. Jin believed the 'umbrella' type suited her better because she preferred to focus on just one area and do it well.

Although there were three models of leadership configuration, the mainstream one was the 'standard'. In those schools where the 24 T&LDHs

described their critical incidents, 20 schools employed 'standard', three 'integrated' and one the 'umbrella' configuration. Nevertheless, I focus in this study only on the deputy heads in charge of teaching and learning. The three deputy heads, Yan, Ting and Zhen, whose schools applied the 'integrated' model were required to respond to my enquiry as T&LDHs, not as moral education *plus* teaching and learning deputy heads. Ming, whose school employed the 'umbrella' model, took responsibility for research on teaching and learning and teachers' professional development, and indeed did some of the work carried out by those in the 'standard' schools. Regardless, all of them exerted learning-centred leadership as senior managers within their schools.

5.2 T&LDHs' job functions

Based on Hallinger's (1982; 2011a) instructional management conceptual framework, T&LDHs' job functions were reflected in six dimensions: goals, curriculum, instruction, people, research and supportive work. For each dimension, there were several specific job functions, 16 in total, as shown in Table 5.1. In Table 5.1 the job functions presented in non-italicised font denote those listed in Hallinger's (1982; 2011a) instructional management conceptual framework, while those in italics denote new functions that I generated from my data. The interpretations of the first, second, seventh, eighth and tenth functions are consistent with Hallinger and Murphy's (1985) description of the principal's functions as instructional leader. The fourth function – coordinating the curriculum – involves coordination of national, local and school-based curricula in China. Because schools are encouraged by the educational authorities to develop school-based curricula and gradually formulate distinctive curriculum systems, the fifth function - developing and evaluating the school-based curriculum – is put forward as an independent job function. The ninth function - staffing - involves assigning teachers to teaching jobs, and designating subject leaders and year-subject leaders as well as mentor teachers. The eleventh function - recruiting teachers and students - includes two tasks. One is recruiting teachers by identifying the school's needs, interviewing and observing candidates' teaching, and making a final decision with the headteacher; the other is recruiting students

through meeting parents and students, organising open days and other activities.

Table 5.1 T&LDHs' job functions in Chinese secondary schools

No.	Dimensions	Job functions
I	Goals	1. framing the goals for teaching and learning
		2. communicating the goals for teaching and learning
		3. implementing and reflecting on goals for teaching and
		learning
l II	Curriculum	4. coordinating the curriculum
••		5. developing and evaluating the school-based curriculum
	Instruction	6. leading and promoting pedagogical initiatives
Ш		7. supervising and evaluating instruction
		8. monitoring student progress
IV	People	9. staffing
		10. promoting professional development
		11. recruiting teachers and students
V	Research	12. leading and managing research activities and
•		programmes
	Supportive work	13. formulating, amending, improving and implementing
		school-based policies and regulations relating to teaching
		and learning
		14. coordinating and communicating within the department
VI		and across the departments
		15. leading and managing administrative affairs for
		teaching and learning
		16. evaluating the performances of the subordinate
		departments and staff

With regard to the dimension 'supportive work', the thirteenth function involves creating an ordered learning environment by formulating and implementing school-based policies and regulations; the fourteenth function refers to the T&LDH's role as a mediator to resolve conflicts and problems

within and across departments, and ensure the school operates smoothly; the fifteenth function involves all the administrative tasks such as timetabling, purchasing textbooks and teaching materials, and organising examinations, etc.; the last function – evaluating the performances of the subordinate departments and staff – is an unavoidable duty as a senior manager. T&LDHs need to evaluate individual and departmental performances, including subject departments, year-subject groups, different level leaders, and teachers, lab assistants and clerks within the teaching and learning department. In the next three sections, I highlight the third, sixth and twelfth job functions to demonstrate how T&LDHs carry out their role.

5.2.1 Job function 3: implementing and reflecting on goals for teaching and learning

In Hallinger's (1982, 2011a) instructional management conceptual framework, one of the dimensions is 'defining the school mission', which comprises two sub-functions: framing the school's goals, and communicating the school's goals. To better match the nature of T&LDHs' work, I changed these to 'framing the goals for teaching and learning' and 'communicating the goals for teaching and learning'. These two functions were identified in the T&LDHs' work. However, based on my data, the third function might be added as the third sub-function: implementing and reflecting on goals for teaching and learning.

I will use Hong's story as an example. Hong was a T&LDH in a combined secondary school with about 150 staff and 1,600 students. She had been a T&LDH for about 10 years when I interviewed her. As an example of a 'successful' story, Hong gave a detailed description of her role in enhancing teachers' professional development through inquiry-based learning. It can be summarised as follows: when checking the teachers' classroom observation notes¹ during the summer holiday, she found that most teachers gave vague

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¹ In Hong's school, the teachers were required to observe at least 10 lessons each school year. For each lesson, the teachers needed to take notes and give comments as evidence.

and general comments. She recalled a similar situation after classroom observations in term time, and it occurred to her that many teachers did not know how to collect evidence and give feedback to the observed teachers. After obtaining the headteacher's approval, she decided to change this situation.

Hong identified as one of the teaching and learning work goals for the next school year, 'to give valuable feedback to your colleagues after classroom observation'. To achieve this goal, she took three steps. First, she organised a teacher training programme, in which a professor was invited to the school, and a classroom observation tool called the Low Inference Self-Assessment Measure (LISAM)² was introduced to the teachers. Second, the teachers were required to use the LISAM to observe their colleagues' lessons within each subject department, and give feedback to the observed teachers, and every observed teacher then produced a 800-word essay reflecting on his or her lesson, based on the data collected from colleagues. Third, the teachers were asked to develop their own classroom observation instruments according to the purposes of the lesson observation, and give concrete and practical feedback to colleagues.

At the end of the school year Hong found the action had been successful, for four main reasons. First, the goal was defined on the basis of the teachers' problems, and improved their expertise to judge a lesson. Second, the teacher training programme provided them with an evidence-based, easy-to-operate tool. Third, the observed teachers reflected on their lessons better than before, in light of the data gathered from other teachers, and produced excellent essays; it was verified that evidence—based feedback was valuable. Fourth, inspired and stimulated by the LISAM, the teachers developed classroom observation instruments which were more specific and easier to use than before. In addition, Hong emphasised the importance of reflecting

² Low Inference Self-Assessment Measure (LISAM) is a six-item audiotape self-analysis coding instrument developed by Freiberg (1987); it can provide teachers with accurate information about their teaching behaviour from six angles.

on the goal in the process of implementing the new system:

After the training programme, the teachers were unhappy, since it would take a lot of time to use this self-evaluation instrument [if used as a self-evaluation tool]. Actually, our purpose was to observe lessons purposely and give valuable feedback to colleagues, rather than just use this instrument, and we didn't want to demotivate the teachers – so we used this instrument as a tool for lesson observation among subject department colleagues, rather than just as a self-evaluation tool. When they found it useful, some teachers began to use it as a self-evaluation instrument. Gradually, they developed their own classroom observation instruments... simply because we had stood on the side of the teachers, analysed our goal, the teachers' situations and the instrument, and then taken the right actions for success. That's why it's important to hear teachers' opinions and reflect on and test the feasibility of your actions. (Hong, from the excellent group)

Looking through Hong's story, the whole process appears logical and reasonable. Her action included not only framing and communicating the goal, but also designing the action plan, monitoring the whole process, reflecting and adjusting the necessary actions for achieving the goal. Both implementing and reflecting on the goal were essential measures for producing an effective event. Implementing the goal is a process involving changing ideas to actions; without it, good ideas cannot bring about outcomes. Reflecting on the goal involves reviewing, rethinking and redefining the goal, and can help leaders take the right direction, promote an efficient process and productive outcomes. This view is consistent with Leithwood et al.'s (1992, p. 35) observation:

Effective schools make their goals effective tools for decision-making: this was done by having written goal statements, using goals as the basis for communicating to others, insisting that priorities fit goals, and using data to monitor progress toward goals and to refine and redefine goals.

In their article, Murphy et al. (2007) unpack leadership for learning into eight dimensions. One is 'vision for learning', including four related functions: developing, articulating, implementing and stewarding vision. They point out that 'master leaders are especially well versed at translating vision into operation...and stewarding the school's vision' (p. 182). Goldring et al. (2007)

note that effective instructional leaders focus their efforts on six core components through six key processes (see p. 21). Polikoff et al. (2009, p. 667) argue that effective instructional leadership 'is at the intersection' of the core components and key processes. Hence, it can be seen from the literature and empirical evidence that leading and managing the process of goal achievement is an indispensable component of learning-centred leadership.

5.2.2 Job function 6: leading and promoting pedagogical initiatives

Even based solely on the data collected from 18 T&LDHs' job responsibilities, 11 sources identified that leading and promoting pedagogical initiatives was T&LDHs' key job function. Including the critical incident interview data, 40 references from 31 sources involved this function (see Appendix 2). T&LDHs led and promoted pedagogical initiatives in different ways. Some were inclined to give direction, create an ethos, and promote and support teachers' practices; others implemented fixed teaching patterns to promote pedagogical initiatives. The majority of them focused on the transformation from 'teacher-centred' to 'student-centred' classroom teaching. Both successful and unsuccessful critical incidents involving pedagogical initiatives were recounted in the interviews. Below, I give an example of how a T&LDH fulfilled this job function.

Yan is a T&LDH in a disadvantaged combined secondary school with fewer than 1,000 students. The teaching pattern in her school was called '201010 teaching mode', in which the teachers were required to assign 20 minutes of each lesson to their own lectures, 10 minutes to students' reading and 10 minutes to giving feedback to students. Yan described the implementation and outcomes of this approach:

At the beginning, the teachers wouldn't accept it – especially the 10 minutes' feedback. It was very difficult to take it forward. Gradually, they became interested in the 10 minutes' reading – so later this programme, in fact, focused on how to develop students' reading ability. During the programme, we surveyed the students. According to them, it was best to sit there without doing

anything. If they had to read something, they found it better to have outlines and pictures; they hated reading lots of words. We realised that we had to lead them to read. So the teachers had to ensure that the 10 minutes' reading occurred in each lesson, even if they didn't meet the other two requirements. We've done this for about three years. I think it's a success... First, it helped the students get into the habit of reading – which is good. It was a good start for our students to sit there and read. Second, they learned reading techniques and methods, such as marking key words and writing down questions, etc. Third, it improved their thinking. Last month a physics teacher showed me several completed exam papers. The students had to read several hundred words for a physics question. You could see in the papers that our students marked a lot using the methods we taught. Even though they failed to solve the physics problem, the reading must've enhanced their thinking. (Yan, from the excellent group)

I do not want to comment on whether Yan's practice was right or wrong here. What I would like to say is: like Yan, many T&LDHs in my study were following the rationale for national curriculum reform by attempting to promote pedagogical initiatives as an important job function.

5.2.3 Job function 12: leading and managing research activities and programmes

'Leading and managing research activities and programmes' is a job function that does not feature in Hallinger's (1982, 2011a) conceptual framework. However, based on my data, two types of research in Chinese secondary schools emerged: routine teaching and learning research activities, and formal research programmes. The former refers to the events and activities organised by different leaders (T&LDHs, subject leaders, etc.) for the purpose of enhancing teaching and learning practice. The outcomes may or may not lead to knowledge production. The latter refers to conducting a research project in which teachers need to follow formal research procedures for the purpose of generating new knowledge. The two may overlap.

For routine teaching and learning research activities I refer to an example given by Si, an excellent T&LDH from a secondary school with about 1,200 students, to illustrate a school-based research activity:

For the last two years, we've done research on the initial lesson, which was the students' introduction to their course. For those in Junior 1, all the courses were considered new because they'd just entered a new stage of learning. For Junior 2 students, they were taking physics as an independent course for the first time, so it was the introductory lesson. For junior 3 students, they had a new course chemistry. The purpose of the research was to discover good ways to stimulate the students and make them interested in the new courses. We researched a lot, including how to draw up learning objectives, how to design the procedures and how to evaluate the introductory lesson, as well as how the teachers introduced themselves, etc. For each subject we had a public lesson that the teachers were encouraged to observe live or on the school website. Then each subject department selected one or two lessons, discussed them, and made comments. The teachers who'd given the public lessons collected these comments, reflected on them, and wrote reflective essays. Finally, as a type of teaching resource, all the materials were kept as examples that every teacher could review. It was valuable research. A Chinese saying has it that: a good start is half of success. The teachers paid more attention to the quality of the introductory lesson than before. It was very important for them to give a good impression to the students, which would benefit their subsequent work. The most valuable part was where the teachers shared different views and learned from each other, and gained lots of practical skills.

This is a very typical teaching and learning research activity in Chinese secondary schools. It has three features: specific goals, school-led method and participation by all the teachers.

In some schools, they formulated an operation mechanism for such research:

We have a theme each school year. The theme of last year was 'changing the teaching and learning approach to create student-centred classrooms'. In light of this theme, we identified four research directions and 12 research points. Research directions included 'learning objectives', 'questioning for improving understanding', 'teaching skills' and 'students' motivation'. ... Then each year-subject team was required to select a research focus according to their interests after the discussion, and fill in a suggestion form. Later, they submitted their research proposals and implemented their research. During the process, two teachers in our research office provided help whenever it was needed. Mid-term, we had an assessment; the team that did well would share their research at the staff conference. At the end of the school year they were able to submit different

outcomes, such as research reports, papers, teaching designs and teaching aids. (Hong, from the excellent group)

The teachers at the subject and year-subject levels also carried out research. I present two examples of this. One was from a history department in Hong's school, where the teachers studied how to use videos to improve teaching effectiveness. Each of the five teachers in the department selected a lesson suitable for using videos and made a lesson plan based on discussion within the department. Then they observed each other's lessons and made comments. After that, they compared the lesson that had used the videos with the same lesson without using video, as previously given, and wrote reflective notes. Finally, they produced an essay in which they used the views of each teacher as their research findings for the school year. This essay could be used as a piece of evidence in their running for annual excellent subject department in their school.

The other example is from year-subject level. In most Chinese schools the teachers in a year-subject team typically attend a formal meeting each week, and have informal discussions on many occasions, as needed. They are required by the school to discuss teaching objectives, teaching methods and homework, as well as assessment issues. Aside from these things, teachers in many schools are encouraged to conduct research, sometimes following the requirements of the school and their subject departments, and sometimes to meet their own needs. Research within the year-subject is more specific and practical, though it sometimes produces research-based findings.

In her interview, Ying gave me a brief introduction to their research into Chinese teaching approaches at the level of year-subject. Based on several years' research, they had developed three mature teaching approaches: 'quality reading', 'effective reading combining inside and outside the classroom' and 'cycling writing practice', and they were undertaking a research project on 'case studies in Chinese teaching'. Ying's school was one of the top schools and boasted high scores in the senior school entrance examinations. She believed research contributed much to the high

quality of their teaching, and emphasised that a T&LDH should have the ability to lead and support this type of research and pedagogical initiatives spontaneously from the teachers. Other T&LDHs such as Wei, Li, Zhen and Ming shared this view. Wei added that a T&LDH should be able to form an accurate judgement of teachers' practice, give timely guidance and monitor their teaching.

As for formal research projects, there were different-level ones conducted by each school: national-, city-, and district-level, as well as school-based. An institution entitled 'XXX District Educational Research Institute' took responsibility for research projects at district level and above. Sometimes some schools had the opportunity to participate in quality research projects by collaborating with professional associations or research institutes.

In her interview, Ping, a T&LDH in a district model secondary school, talked about a national-level research project that had thwarted her:

This has been the most unsuccessful experience for me. We are currently running a three-year research project about effective classroom teaching, which is a national curriculum reform experimental programme. Our research proposal was modified many times by experts in the district and the city... We've been doing this project for two years. I'm a very hardworking person. Although I've developed good habits over many years - like learning from others, following experts' suggestions, discussing sufficiently with my team and monitoring the whole implementation process, this time nothing's working... For example, we divided a lesson into several procedures, and analysed which were effective or ineffective, and why, as well as how to improve them. But the experts didn't agree with us... Why do I think it unsuccessful? First, I couldn't interpret the research topic well. It might be that I've not found the right direction and the right ways to do the research. Second, our methods didn't always correspond with those that the experts identified. Third, I don't know how to combined this research with our teaching; they seemed to be two different things. We'll submit our research findings next year, but I know it won't be what I wanted. (Ping, from the typical group)

From the evidence above, it is fair to say that leading research is an unavoidable task for T&LDHs in Chinese secondary schools. In their interviews, the majority of T&LDHs were of the mind that research should be

part and parcel of teachers' work. If this is the case, leading research should be an essential part of T&LDHs' jobs.

5.3 Summary

I have presented my research findings in relation to the nature of a T&LDH's role. From hybrid and distributed leadership perspectives, three models of leadership configuration were found: 'standard', 'integrated' and 'umbrella'. Out of the 24 schools in my study, 20 were organised according to the 'standard' model, three were "integrated', and only one was 'umbrella'. Each model's features are described on pages 103-104. I summarise their strengths and weaknesses in Table 5.2, below. Overall, the 'standard' model represents a traditional hierarchy that is dominant in Chinese secondary schools. The reorganisation of the school management structure is mainly dependent on the headteacher's views on, or considerations about, the school's development.

As leaders in charge of teaching and learning, T&LDHs fulfil work responsibilities relating to six dimensions and 16 specific job functions, as shown in Table 5.1. In comparison with Hallinger's (1982; 2011a) instructional management conceptual framework, my research extends the understanding of instructional leadership, reflecting the features of learning-centred leadership in the Chinese context. For example, two job functions, reviewing and reflecting on goals, and leading and managing research programmes, do not feature in Hallinger's work, yet they are a key component of the dimension of defining the school mission, as described in Section 5.2.1. Leading and managing research programmes is a unique feature of teaching in the Chinese context (see Section 5.2.3). Different contexts have their own features. In Section 7.1.4, I present my perspective on the application to the Chinese context of the *Principal Instructional Management Rating Scale (PIMRS)*, grounded in Hallinger's work.

Table 5.2 The strengths and weaknesses of three models of Chinese secondary school leadership configurations

Model	Strengths	Weaknesses
	- The workload of the deputy	- Bad communications
	headteacher is appropriate.	between deputy
		headteachers may
'Standard'	- Each deputy headteacher is in	increase teachers'
Otanaara	charge of a professional field, which	workloads from time
	equips him/her to be an expert in one	to time.
	field, such as teaching and learning	
	or logistics management.	
	- The work is more focused on	- The combined
	teaching and learning.	workload of the moral
	The manual advantion of a teaching	education and
'Integrated'	- The moral education <i>plus</i> teaching	teaching and learning
	and learning deputy headteacher can	deputy headteacher
	coordinate the work of two	role is excessive.
	departments and balance teachers'	
	workloads.	
	- The deputy headteacher can focus	- A strong
	on a small part of the management	headteacher is
	work, digging deeply and achieving a	needed to balance the
	lot in his/her field, such as teachers'	school work.
	professional development.	Dad a service tions
'Umbrella'		- Bad communications
	- The deputy headteachers normally	between deputy
	assume teaching tasks that provide	headteachers may
	them with an opportunity to develop	increase teachers'
	both as teacher and leader.	workloads from time
		to time.

Chapter 6 Research Findings in Relation to Research Question Two: T&LDHs' Characteristics

This chapter focuses on the characteristics of T&LDHs in Chinese secondary schools. My overall research findings relating to T&LDHs' characteristics, based on qualitative and quantitative data analysis, are presented in Section 6.1, and the evidence from the qualitative and quantitative analysis in Sections 6.2 and 6.3, respectively. As my study focuses on very successful T&LDHs and aims to identify which of their characteristics are different from those of typical T&LDHs, in my writing I have emphasised the descriptions of excellent performers' characteristics. Since critical incident interviews were used to collect data and many interesting stories with plots, characters and contexts relating to personal experience are not 'easily summarised or condensed into data tables' (Webster and Mertova, 2007, p. 87), I draw upon selected complete stories to provide evidence. The disadvantage of this is that the selected stories may not provide sufficient evidence for some of my research findings. To address this potential problem, I supplement the stories with more relevant evidence, while also highlighting excellent T&LDHs' unique characteristics, to enrich the image of them presented.

6.1 Research findings on T&LDHs' characteristics

The range of T&LDHs' characteristics was generated from qualitative and quantitative data analysis (see Table 6.1). The findings presented in Table 6.1 may be summarised as follows:

- Different T&LDHs possess different characteristics.
- ❖ The T&LDHs in the excellent group possess more cognitive, emotional and social intelligence competencies than those in the typical group, and these competencies are reflected much more consistently and intensively in the excellent T&LDHs' professional practice. However, not all T&LDHs in the excellent group perform better than those in the typical group in all situations.

Table 6.1 Research findings: characteristics of T&LDHs in the two sample groups

	The typical group of T&LDHs typically	The excellent group of T&LDHs typically
	1. values research, but lacks the expertise and skills	1. values research, and is adept at leading and
	to lead and manage research	managing research
	2. struggles to perceive the connectedness of ideas	2. integrates ideas, actions and results well, and
	and actions, and lacks oversight of processes	emphasises process involved in action
	involved in action	
	3. ignores or is unable to make good use of different	3. makes good use of structure and mechanism, and
Qualitative data	functions of leaders at different levels, and cannot	serves as the leaders' leader; creates enabling
analysis-	trigger interaction among leaders and teachers	environments to encourage teacher leadership
generated	4. is easily fazed when facing difficult times or	4. adopts a positive attitude when facing difficult times
characteristics	potentially problematic situations	or potentially problematic situations
	5. is reactive and passive in implementation of	5. is proactive in implementation of national curriculum
	national curriculum reform	reform, and receptive to its rationale, but struggles to
		think critically about its requirements and feasibility
	6. attributes success to both internal and external	6. attributes success to both internal and external
	elements while attributing failure only to external	elements while attributing failure to internal elements
	elements	more than external elements

	7. consistently and extensively demonstrates two	7. consistently and extensively demonstrates a range of
	cognitive intelligence competencies:	cognitive intelligence competencies, including
	investigativeness and reflectivity	analyticism, rationality, creativity, investigativeness and
		reflectivity
	8. consistently and intensively demonstrates two	8. consistently and intensively demonstrates a range of
	emotional and social intelligence competencies:	emotional and social intelligence competencies,
	achievement orientation and organisational	including achievement orientation, adaptability, empathy,
	awareness	organisational awareness, coaching and mentoring
		capacity, and inspirational leadership
	9. tutors students or provides direct instruction to	9. ensures that in-service activities attended by staff are
	classes	consistent with the school's goals
Quantitative		10. encourages teachers to use instructional time for
data analysis-		teaching and practising new skills and concepts
generated		11. points out specific weaknesses in teachers'
characteristics		instructional practices in post-observation feedback
		12. meets individually with teachers to discuss student
		progress

Effective leadership results from skilfully wielding the characteristics identified among those excellent leaders in a combined way; lack of one or more necessary skills and competencies in a particular situation results in leadership ineffectiveness.

I provide qualitative and statistical evidence in sections 6.2 and 6.3.

6.2 Evidence from qualitative data analysis

In this section I first present four distinct stories to illustrate the prevalence in the excellent T&LDHs' professional lives of the features listed in Table 6.1. I then select three sets of stories, each comprising two stories for comparison on a similar topic, as further evidence for the three summative findings presented above.

6.2.1 Characteristics of excellent T&LDHs

All four stories in this section have been selected from the T&LDHs in the excellent group. Through these stories, the characteristics exhibited by excellent T&LDHs are examined in the context of different professional situations.

6.2.1.1 Wei's story

Wei had been a T&LDH in two different secondary schools for about eight years, and had just become a headteacher when I interviewed him. In his interview he related several stories of when he had been a T&LDH in one of the best schools in the district. His story, regarded as a successful case, is about developing the school's distinctive feature.

You see, we had many advantages, including our school's history, environments – both geographical and cultural – as well as our reputation in society. But our students were not as excellent as those in XX high school (referring to the best school). How could we change this situation? We *had* to change it! I thought about it for a long time, and had an idea, which was to develop our distinctive features. We may not have been able to win when it came to numbers of awards in maths and science competitions – or in the overall NCEE (*gaokao*) scores –

but we could do something different. My idea was to develop humanistic education as a distinctive feature in our school, since it might not require very high intellectual capacities and so the students might find it easier to get high marks in the NCEE. So I went to my headteacher and told her my idea, and was pleased that she supported it. I successfully applied to the educational authority for a school distinctive programme in humanistic education. We developed a variety of humanistic curricula and got excellent results in the NCEE and other activities, which secured the school's good reputation over several recent years. Currently we're number one in the district and in the top three in the city for humanistic education. Also, we've just become a national humanistic education base school!

Wei was proud of his ideas and the distinctive feature programme, and felt that good ideas, careful planning and excellent curricula had put their school on the distinctive development path, and otherwise helped it become the best school in the district.

From this case, it can be seen that Wei was a strategic leader. He was able to think about his work from the perspective of whole school development and put forward an idea that enhanced the school's reputation. He analysed their resources, their strengths and weaknesses, as well as external factors, and worked out what they could do to take their school forward in an innovative way. This demonstrated his cognitive intelligence competencies, such as creativity, analyticism, rationality and reflection. Although he recognised the school's weaknesses in comparison with the competition, he still sought opportunities to enhance its development, reflecting his powerful achievement orientation and positive outlook. His words 'How could we change this situation? We had to change it!' demonstrate his determination. Moreover, he was aware that any good idea would need support from the headteacher – the decision-maker. Thus he sought the headteacher's permission before starting the application process, which shows his organisational awareness. Simply because he possessed and used such a range of competencies in a combined way, he was effective.

Additionally, regardless of whether Wei was good as a coach or mentor, influencing or inspiring others, he did not need to draw upon these competencies in this case. If, when Wei had discussed his ideas with his

headteacher, the headteacher had not agreed with him, he might then have needed to use persuasion, demonstrating the competency of influencing others. The fact was, as Wei said, 'I was pleased that she supported my idea' – so it was enough, in this particular situation, for Wei to draw upon the competencies referred to above. The competency combination required by leaders clearly varies according to the specific situation.

One of Wei's unique characteristics is that of working proactively, putting forward innovative ideas and supporting the headteacher's efforts to develop the school. Many other T&LDHs, in comparison, demonstrated no original ideas of their own and served only as implementers. The following quotes illustrate this tendency:

- ❖ 'The T&LDH must understand the headteachers' notions and ideas, and this is the condition under which a T&LDH works well. If the headteacher asks you to do something, even though you don't understand it, you just do it. After all, your headteachers look further and higher than you. If you say you don't understand why you should do something, you're over [meaning that you are not qualified]' (Ming, from the excellent group)
- 'I think I am responsible. Whether I understand [what the headteacher suggests] or not, if he [the headteacher] says something, I do it for him.' (Lu, from the typical group)
- 'You don't know what the headteacher wants to do. Today, he wants to do this; tomorrow, he wants to do that. You have to follow him all the time and adjust constantly.' (Xia, from the typical group)

For T&LDHs in my study, working passively under their headteachers' guidance seemed to be more common than thinking about their work independently.

6.2.1.2 Hong's story

As an example of her success, Hong told a story about a pedagogical initiative, which I describe below. Through lesson observations, Hong found her colleagues' classrooms to be typically teacher- rather than student-centred, since most of the teachers kept lecturing while the students had to sit and listen passively. After discussing it with the headteacher and subject

leaders, as a starting point to implementing a pedagogical initiative she organised a teacher training programme, in which she introduced the Learning Pyramid³. Meanwhile, a book about the research underpinning the Learning Pyramid was given out to every teacher for reference. Then they put up an image of the Learning Pyramid on the wall of each classroom, for two purposes: first, to encourage teachers to try more participatory teaching activities; second, to help students make sense of this theory and actively participate in classroom activities.

Hong also devised a new classroom observation instrument, focusing on evaluating students' participation — for example, how many students participated in the activities, and how actively they were engaged. It was also used as one of the indicators in a 'Young Teachers' Basic Teaching Skills' competition, as well as other classroom observation activities aimed at improving teaching. In addition, at the end of the school year, teachers were required to produce an essay on 'a successful/unsuccessful student activity design' to enhance their reflection and refine their practice. The best essays were presented at the school's annual teaching and learning research conference.

It was evident that Hong attempted to lead and promote pedagogical innovation by giving direction, fostering the right kind of ethos and promoting effective teaching. First, she drew a conclusion based on lesson observation: that lessons in their school were teacher-centred. It was a type of investigation. She was determined to change the situation because she realised, through rational reflection, the disadvantages of teacher-centred approaches. That aside, she could maintain the status quo, and did not need to look to change. Then she actively communicated with her superior and subordinates to achieve consensus, reflecting her organisational awareness.

³ According to the book published in China, the Learning Pyramid, researched and produced by the National Training Laboratories in Betel, Maine, USA, illustrates the percentages of retention in the 24 hours after teaching using different methods. Based on this research, a lecture is the least effective method, and teaching others is the most effective; it is best for teachers to design lessons with participatory teaching methods, thereby ensuring students' active engagement in the learning process.

It was a good way to ask for advice and complement her possibly ill-thoughtout considerations, and it also demonstrated that she was fulfilling her purpose, as the leader of subject leaders, of guiding and influencing them. The consensus laid a good foundation for subsequent improvements, since the headteacher was able to foster the kind of culture that supported the initiative, and the subject leaders would be advocators and implementers at subject level. Support from her superior and subordinates would lead to synergy in the initiative.

Furthermore, she used theory as a persuasive tactic, which reflected her aim of helping teachers recognise the drawbacks of teacher-centred approaches, and providing an alternative direction to change from a theoretical perspective. This demonstrated her to employ rationality, rather than simply intuition. The teacher training programme, the book, the figures in the classrooms and the modified lesson observation evaluation instrument, as well as the reflection-based essays, reflected her multiple competencies: being analytical and creative, thinking systematically, and mentoring and influencing others through a variety of methods. Additionally, asking teachers to present the best essays at the school's annual teaching and learning research conference was a means of encouraging reflection, consolidating practical wisdom and inspiring teachers, thereby supporting their professional development.

Implicitly, Hong elaborately planned and implemented each procedure to contribute to her objective, demonstrating her achievement-orientation. In other words, though she did not articulate this, she set herself high standards and strove to meet them. In addition, she arranged discussions with the subject leaders before implementing the initiative, illustrating her empathy, to some degree, because she took an active interest in their concerns. In contrast, many T&LDHs discussed important issues only with the headteacher, and made decisions without communicating with their subordinates. Overall, in this case Hong displayed many competencies that contributed to her effective leadership, though these competencies might not necessarily be equally important in another situation.

6.2.1.3 Ting's story

The third story is from Ting, a T&LDH in a combined secondary school with about 1,500 students. When I interviewed her she had been a T&LDH for 13 years – the longest of all the T&LDHs interviewed. As an example of her success she told me an unusual story:

We recruited a new teacher. I liked her very much because she seemed from her trial lesson to have the potential to be a good teacher. Then the new school year came. She was assigned to teach maths for two classes in Junior 1, and as a class teacher of one of those classes. However, nobody expected what happened next. After the new school year began, many students from different grades came to her class, talked and took photos with her, and asked for her signature. Later we worked out the reason: during the summer holiday, there had been a TV talent show called 'Super-girl'. One of the overnight hit girls was much like this teacher in appearance — so she became a superstar in some students' hearts. The school did some work to guide the students, and gradually things seemed to quieten down.

However, her students came to regard her as their best friend, and also a superstar. She got so close to and familiar with the students that she found it very difficult to control them. The students talked freely and didn't observe discipline, and her first term's exam results were the worst in that grade. Then parents started to complain. We did some work, such as talking with her, providing peer support and classroom observations, but the parents kept complaining and hoped another teacher would be assigned to their children. The headteacher wanted to dismiss her. I thought that we shouldn't write off a young teacher so readily, and told the headteacher that I would try to help her; if she was indeed not qualified to teach, we could ask her to leave. Then I started to observe her lessons – so as to witness the actual conditions in class, without informing her in advance. I found again, by virtue of my experience as a maths teacher and a classroom observer for many years, that she had the potential to be a good teacher. For example, she really cared about the students, and was conscientious; she expressed things so clearly that the students could easily follow her; she tried to motivate the lazy students; she worked hard. When I talked about her strengths after observing the lesson, she seemed grateful, and even struggled to believe what I said. I told her, 'You really did do well!' Then I gave her some practical suggestions to help manage the classroom.

She had a mentor, assigned to help her with her teaching. I spoke with her

mentor and asked her to pay great attention to the teacher's classroom management approach and give her advice about how to get along with the students. However, once again her two classes didn't do well in the final exam. When we discussed whether she should be dismissed in the school leaders' meeting at the end of the school year, I persuaded my headteacher to keep her. I was grateful to my headteacher for taking my advice. The second year, I transferred her to the new Junior 1, and assigned her the same tasks as the previous year. This teacher was bright, and she learned from the lessons and did quite well. Now she's a district-level leading maths teacher and recently won first prize in a city-level teaching competition!

At the end of her story, Ting added, with satisfaction:

As a T&LDH, first, you should develop a sharp eye for discovering able people, and seeing the nature of someone or something from their appearance by using your reasoning; second, you should care about teachers as individuals, not always as a collective; third, you are the closest school leader to the teachers, not the headteacher. You must have the courage to persuade your headteacher, rather than always being obedient.

In this example Ting demonstrated many competencies explicitly and implicitly. When the young teacher's poor examination results, the parents' complaints and the headteacher's dissatisfaction all pointed to dismissing her, Ting chose to collect more information through lesson observation, and made the decision by comparing her judgements on two occasions. These actions reflected Ting's investigativeness, analyticism and rationality. Moreover, Ting inspired and mentored the young teacher by herself and with another teacher, demonstrating her qualities as a mentor, motivator and team member. Additionally, Ting underpinned her skills of persuasion through applying professional knowledge and judgement; based on her judgement of the young teacher, she persuaded the headteacher not to dismiss her. When the headteacher agreed with her, she expressed her gratitude to the headteacher, who accepted the subordinate's advice - showing she was clearly aware of the power relationship between her and the headteacher. Implicitly, Ting showed her empathy and positive outlook in her behaviour towards the young teacher, whose achievements in the end vindicated Ting's assessment. As described above, Ting exercised her competencies in a

combined and appropriate way, enhancing her professional effectiveness.

Ting's most striking quality is that she did not follow her headteacher blindly, but persuaded him with evidence – unlike many other T&LDHs, whose comments are presented below:

- ❖ 'Sometimes you might think the headteacher has agreed to something, and begin to do it; but when you've done a lot, you find the headteacher doesn't like it. You have to backtrack. Indeed, you might have assigned some tasks to teachers, and then have to retract them in a strange way.' (Yan, from the excellent group)
- 'Suddenly, one day, my headteacher said we should pay attention to the teaching quality during each period [40 minutes] and asked the teachers in Junior 3 and Senior 3 to provide assessment results for each. We all knew this was unscientific, but the headteacher wanted them, and we had a duty to provide them. So I required the teachers to assign five minutes to evaluate teaching quality in each period, marking the test papers after class and sending the results to me before school was over every day.' (Qing, from the typical group)
- 'Every time I talked to my headteacher I felt very nervous. Sometimes, for instance, I had five things that needed qingshi [asking superiors for advice and permission to do something]. When I talked with my headteacher, I felt so nervous I often forgot two or three things, and after I came out of my headteacher's office, I remembered them. So I try to limit the times I discuss things with my headteacher.' (Lan, from the typical group)

In comparison with the T&LDHs above, Ting's rationality, self-confidence, courage, and ability to influence others and deal appropriately with a superior seem exceptional characteristics.

6.2.1.4 Feng's story

The fourth story is from Feng, a T&LDH at a combined secondary school with about 1,600 students. His story involves young teachers' professional development.

The number of young teachers below 35 accounts for more than 35% of the total in my school, and several hold higher degrees. They attended many training programmes organised by the district and the school – however, most of them were lectures, and the teachers just sat there and listened passively. I

wanted to encourage these young teachers to learn actively. The young teachers in my school have several characteristics: many of them hold very high expectations of themselves, and the training programmes couldn't meet their demands; some have master's or doctorates, and are knowledgeable about research and have research skills; others demonstrate excellent quality at points. How could I play to their strengths, and enhance their growth...? In the end, I decided to set up some young teachers' research and learning groups.

Then an innovative initiative was introduced. First, 33 teachers aged below 35 were asked to identify the skills they wanted to improve for the new school year, and three groups were established accordingly. Three young teachers were appointed group leaders, in charge of group activities.

I didn't make many rules and regulations. Instead, I told the teachers to do anything they could to improve themselves. My duty was to help them to coordinate something if needed. The young teachers were so powerful. For example, one of the groups wanted to make their teaching language clear, concise and easily understood. What moved me was that, to help one young teacher improve her language, they transcribed all the language she and the students used in a lesson, and then they analysed which language was effective, and which ineffective. What were the pet phrases she kept repeating in class? What could be improved? And how could the teacher improve? You see, over 10 teachers were researching teaching language. They had knowledge about research methods that we didn't. You can imagine their power... Because they learned more, reflected more, and published more essays about teaching, they improved more quickly than the other teachers. This year, one third of teachers in this group were named district-level key teachers. You know, they are very young.

Feng's story illustrates a range of the same characteristics as the other excellent T&LDHs: innovativeness, analyticism, reflection, mentoring, being research-focused, and having a positive outlook towards young teachers. An important feature of his story was that he established a mechanism to realise the young teachers' potential. He encouraged teacher leadership, and helped them maximise their strengths and compensate for their shortcomings by collaborating among themselves.

The practice of creating an enabling environment to encourage subject and

teacher leadership was prevalent among the excellent T&LDHs. For example, Wei positioned himself as the leader of subject leaders, and led them and prestigious teachers to organise other teachers to discuss each subject's school-based standard for good lessons. Yan organised subject leaders', year-subject leaders' and teachers' forums to share best practice. Ying appointed two teacher leaders as group leaders to design an integrated curriculum, involving history, geography, politics and biology, to improve curriculum effectiveness. Li asked a special-grade teacher to mentor a young teacher to prepare her teaching design for the district-level teaching competition; meanwhile, Li suggested two other young teachers participated in their mentoring process, so all three teachers could improve. The teacher agreed and did it very well.

Overall, the T&LDHs in the excellent group demonstrated positive characteristics consistently and extensively, as shown in Table 6.1. In the next section I focus on what ineffective practice looked like.

6.2.2 Effective or ineffective leadership?

In this section I present three sets of stories about pedagogical initiatives, teachers' professional development and teachers' assessment. Each set includes two stories: one perceived as successful by T&LDHs, the other as unsuccessful. My aim is to provide comparable situations to help make sense of the quality among T&LDHs. At the same time, I want to illustrate how lack of necessary competencies in a particular situation results in leadership ineffectiveness.

Noticeably, not all the T&LDHs in the excellent group performed better than those in the typical group in all situations; they also made mistakes, and were sometimes ineffective, so not all the successful stories are from the excellent group. Indeed, different T&LDHs possessed different skill and

⁴ In China, the top professional title for teachers is Senior Teacher. Among Senior Teachers, there is a group of teachers called *'teji jiaoshi'*, who have accomplished outstanding achievements in teaching and learning, as well as in leading teaching and learning as teacher leaders; they enjoy a special government allowance. *'Teji jiaoshi'* translates as 'special-grade teacher'.

competency repertoires, and performed differently in different situations, though more positive characteristics were reflected more consistently and intensively in excellent T&LDHs' professional practice. Additionally, for the third set of stories, because the two examples seemed a little extreme, I provide information from other cases to represent the range of practices among T&LDHs.

6.2.2.1 Set 1: Different implementations of the same teaching approach

The T&LDHs in this set are Zhen and Hai, both from the typical group. Their stories involved promoting teaching initiatives. The teachers in both schools practised the same teaching method, called 'effective teaching by guiding learning plan', which was tested and found to be an effective and successful approach by a school in another province. The philosophies underpinning the approach are 'teaching less and learning more' and 'learning before teaching'.

Before class, the students were given a guiding learning plan and asked to learn by themselves according to its requirements. During the lesson, the teachers assigned different tasks to each group, and the students discussed and then prepared to present in front of the whole class. After 15 or 20 minutes the students were asked to present group by group, while the audience, including the teacher and other students, commented. Focusing on their learning outcomes, they would identify the problems the students had not solved and try to clarify their misunderstandings. After class, the students were given homework to evaluate what they had learned. The two schools implemented this approach differently.

Zhen's story

In her interview Zhen told me her story as an example of successful practice. She called their overall approach 'Y+Z Modes'; 'Y Modes' referred to existing approaches that had been tested and verified as effective practice, and 'Z Mode' referred to the approach described above. 'Z Mode' was required to be implemented in one period each week in the senior sector, and two periods each week in the junior sector, by each teacher. However, when the content in some weeks was very difficult to fit into 'Z Mode', teachers had the

freedom to choose other teaching approaches. Zhen summarised 'Z Mode' as involving four steps: learning independently, learning within a group by discussing, raising problems, and solving problems.

In order to research this teaching approach, the school appointed more than 10 teachers as classroom observers. They observed lessons, took full notes and made comments, and discussed the approach in the staff meeting every two weeks. Zhen said with pride:

Over one and a half years of practice, it has become one of our most successful teaching approaches. The action took place at a good time; we knew we had to change, but nobody knew how, so we took our teachers to another school where they were implementing this approach. The teachers were very surprised that other schools had already gone further, leaving us behind. So we had to do something. We drew up a careful implementation plan. The teachers couldn't wait to do something, and devoted themselves to this teaching approach immediately. Also, we did a lot of research. We kept observing, identifying its strengths and weaknesses, adjusting, listening to students' opinions, learning by doing and summarising... (Zhen, from the typical group)

Hai's story

In Hai's school, the headteacher wanted to do something different to improve teaching quality. Hai, as a T&LDH, was assigned to investigate three famous schools in which the teachers had made great achievements in pedagogical innovation at school level. Hai discovered the useful teaching approach described above, and suggested their school adopt it as an initiative. Then the teachers were divided into several groups and each group spent three days in a famous school. They received training, observed lessons and discussed things with the teachers. After that, from the new school year they began to use this approach for each lesson for most of the subjects, except music, P.E. and art courses.

Having applied this approach for two years, Hai considered it unsuccessful, because examination results were lower than before its adoption. There were other reasons for Hai's unfavourable assessment. First, most maths, Chinese and English-language teachers felt so busy that they did not have

time to prepare a guiding learning plan for each lesson, since they normally had to teach new content every day. Second, many students did not prepare well before class, and needed to be taught some factual knowledge before starting discussion. Third, students did not know how to pace their presentations, and the teachers were not allowed to teach directly, resulting in ineffective teaching.

When he was asked why they did not adjust and make changes during the implementation, Hai said:

The headteacher likes to do something different – something eye-catching. Almost all the teachers had problems implementing this mode, but most of them followed the school's requirements. Some said in front of me that it was ineffective practice, and in front of the headteacher they said it was good practice. The headteacher heard a lot of good things, and she didn't know the facts. Now, she's realised the problem, and some teachers have begun to teach directly in class. It seems that almost all the teachers are changing. You know, I value 'moderation'; I don't like to force others to do anything. (Hai, from the typical group)

By 'I don't like to force others to do anything', Hai meant he did not want the headteacher to do what she did not want. In other words, though he had realised the current problem, he was reluctant to suggest changes, and hoped the headteacher would resolve the problem by herself.

These examples of different implementations of the same teaching method led to totally different results. The common factor between the two schools was that the teachers received training before commencing using the teaching approach; however, Zhen drew up a mandatory policy with some flexibility and an action plan to guarantee the implementation of the approach, whereas Hai, with the encouragement of his headteacher, made it a rule that the teachers adopted the approach for almost every lesson. The latter risks undermining teachers' educational principles – and in any case, putting a fixed teaching approach into a new context without adaptation and implementing it across the whole school without allowing for trial and error was inadvisable. Moreover, it was impossible for a particular teaching approach to accommodate all students' learning across all areas of

knowledge and skills. Thus irrationality, lack of expertise and the expectation of quick results may have led to the failure at Hai's school.

Zhen's success stemmed from her competence. First, the teachers were taken aback by the teaching they saw in the school they visited and this motivated them to change. Zhen was sensitive to the teachers' emotional currents and drew up a reasonable and flexible agenda for introducing change. Second, she was careful not to overturn what they had done in the past, and managed to integrate the old with the new in their practice, which encouraged the teachers' buy-in. Third, she went about it in an inquiry-based way, collecting data from teachers and students, arranging time for discussion and making adjustments to accommodate students' needs. Fourth, Zhen appointed lesson observers, organised discussions and fostered a supportive climate to sustain high morale. Fifth, as a good manager, Zhen monitored the whole implementation process and made appropriate modifications to ensure the initiative's success. Overall, she led the reform in a rational, investigative, reflective, adaptive and systematic way. She valued research, and was adept at leading and managing change. Implicitly, her strong achievement orientation and inspirational skills contributed to her effectiveness.

In contrast, several problems led to Hai's failure in leading pedagogical reform. First, he adopted an intuitive approach to practice without investigating and analysing the prevailing conditions, and he followed others' practice blindly. Second, he put too much emphasis on the power relationship between him and his headteacher, and maintained a relatively large distance from the head; he dared not speak his true views to his headteacher, and bent to her will. Third, to some extent, he was irresponsible and unreliable. Though he had identified the problems, he did not provide his head with the correct information to help her make a decision. Fourth, he lacked the ability to manage or control the implementation of the initiative, and did not intervene in a timely manner when problems occurred. Fifth, he dithered when the initiative was in trouble, did not reflect on the problems and blamed the unfortunate situation entirely on external factors, such as the headteacher and the impact of some

teachers' disingenuousness. Sixth, he did not interpret his duties and functions as a T&LDH clearly, was governed by unaccountable negativity and made excuses for his dereliction of duty. It is worth noting that the headteacher's irrationality and a negative school culture contributed to the failure – but in relation to assessing the T&LDH, Hai performed with a lack of competence in this particular case.

6.2.2.2 Set 2: Different approaches to improve teachers' growth

The T&LDHs in the second set are Jun and Yu. Jun comes from the excellent group, and Yu from the typical group. Their stories were about improving teachers' professional growth by enhancing their reflective ability.

Jun's story

Jun had been a T&LDH at a disadvantaged secondary school with about 1,600 students. He had become the school's headteacher when I interviewed him. He related the following story:

I'm a Chinese-language teacher. When I was a T&LDH, I continued teaching senior high-school Chinese. I had a habit at that time - that is, I kept a diary about the things that impressed me most days, such as good conversations with students, good teaching design, and students' ideas I hadn't thought about. Later, when I read the diary, I found it a great help. I put materials on the same topics together, thought about them, and drew practical lessons from them. I wrote, and then some of my articles were published. By observing our teachers' work, I found most of them paid attention to how many lessons they taught, what homework was supposed to be assigned to the students, and whether they checked the homework, but they never reflected on their work. So I determined to encourage them to reflect on their teaching by writing a reflective diary. But how could I do it? I found it very hard. If the teachers hadn't developed the habit, they would consider it a burden; if you ordered them to do it, if they didn't think it was good for them – even though it was a good thing, and very useful – they'd still be resistant to it. So I took several steps. The first was persuading. I took my diaries out and asked the teachers to analyse their contents. They couldn't help discussing what they were supposed to do when they encountered the situations I described. The teachers found them very useful. I'm a teacher of Chinese, so the things I wrote about related to my subject. Then I asked the subject leaders to lead the teachers in relating similar examples of their own, from their experiences, and to present the best ones at the staff meeting. The teachers found they had examples from their own teaching, that were valuable cases but the kinds of thing that are easily overlooked. So then I suggested that each teacher identified one case a week, wrote it down in very simple language, shared it within the subject group, and then at the end of term they could choose some of them and write a paper on them... A lot of teachers got their papers published, and so they had no concerns about not being awarded Senior Teacher status on the grounds of no publications. Writing weekly diaries not only improved their teaching, but also their research awareness.

Yu's story

Yu was a T&LDH at a secondary school with about 1,500 students. She successfully organised her school's supervision and assessment, developed a web-based teaching and learning management system, and in the monthly staff meetings praised and appreciated the teachers' commitments. She told me this story as an example of an unsuccessful experience:

I have an unsuccessful case, which is the research about lesson types in our school. I don't know why it's such hard work. We have a policy that every teacher must give a public lesson every two years. I think public lessons should have two functions: one is teaching, and the other research. For the teaching function, you must have teaching objectives and achieve them; for the research function, you should research something as a lesson case. The teachers, including those who both give and observe lessons, can improve their research capability through observing and discussing; that's how I see it. So, since last year I've asked the teachers to research lesson types. Until now, none of the subject departments has had a particular teaching approach for any lesson type. The teachers think it's too much trouble to do research. The subject leaders don't want to do it, either.

When asked the purpose of this research and what the outcomes would be, Yu replied:

One was to generate research findings through public lessons; the other was to provide a template for new teachers... It should include the procedures of each lesson type. The new teachers could give lessons following the basic model for

each lesson type, and the other teachers could suggest improvements to it.

Yu thought it did not operate well because of the teachers' lack of research knowledge, and she was determined to move it forward by nagging and persuading them.

Comparing the two cases, both T&LDHs knew clearly what they wanted to do and achieve, but they achieved different outcomes. Jun focused on process, integrating his ideas, actions and results perfectly. He persuaded the teachers by sharing his reflective diary with them, making them aware of the value of reflection. Indeed, this was a process of coaching and mentoring, through which the teachers learned how to reflect on their teaching, and the subject leaders how to lead the teachers. Then Jun asked the teachers to focus on their own subjects and practise their reflective skills.

In contrast, Yu did not manage to persuade very well. Seeing no value in the research topic, the teachers considered it a waste of time. Moreover, Yu adopted a hands-off approach: she just assigned the task and then, without offering any guidance, waited for research findings to appear. Without reflecting on the reasons for it, she simply attributed the teachers' apathy to lack of research experience. Yet the teachers might have failed to understand what was required of them; had one of the subject departments worked under Yu's – or someone else's – guidance, they could have produced something that might have served as an example to the rest. Or it could have been the subject leaders who were the problem; they may have been acculturised over the years within their school towards a reluctance to show leadership.

The description and analysis above reveal Jun to have demonstrated a range of characteristics: analyticism, reflection, rationality, inspirational leadership, and effective deployment of subject leaders to create group synergy in achieving goals, as well as acting as mentor. Yu did not show such characteristics. Jun and Yu both picked up on emotional vibes among the teachers. When he saw that the teachers had grasped the importance of reflection and mastered the relevant skills, Jun suggested that they did it themselves. However, faced with teachers' reluctance to do research, Yu

seemed at a loss to know how to address the problem. Moreover, Jun took an active interest in the teachers' concerns; for example, he was worried that the exercise would become a burden to teachers if they had not developed the habit of reflecting on and writing about their teaching, which showed his empathy. Jun came across as self-confident and adept at influencing others. Yu, in contrast, failed to demonstrate competencies such as reflection, rationality, coaching and mentoring, and inspirational leadership, which undermined her effectiveness. Her lack of expertise in, and skills for, leading and overseeing research activities or programmes also contributed to her ineffectiveness.

6.2.2.3 Set 3: Different approaches to inspire teachers

The T&LDHs in the third set are Lan and Feng. Lan comes from the typical group, and Feng from the excellent group. Their stories were about motivating teachers by recognising and rewarding their efforts.

Lan's story

When I was interviewing Lan – a T&LDH at a combined secondary school with about 1,300 students – a young teacher knocked gently at the door. After being told to come in, she entered and gave Lan a very small piece of paper with thickly dotted Chinese characters on it. With a smile, Lan took it, and placed it on her desk. The young teacher said 'goodbye' and quietly left. After a while, when I asked Lan to relate her successful stories, she asked me to look at what the young teacher had written. It was a record of what the teacher had done, such as helping the students with their lessons for an hour at noon on both Monday and Tuesday, and helping the head of year organise the students' meeting on Thursday. Lan explained:

As a successful story, I will share with you my approach to motivating teachers. You know, everyone needs to be motivated; teachers are no exception, and I'm always thinking about how best to motivate them. I find most teachers aren't motivated by money, and few are given bonuses for their work, yet they crave recognition from their leaders – in fact, they just want others to know they do a lot. So I had an idea; I called it a 'points system'. It works by the teachers reporting, every week, all the extra work they do. Routine work – like taking

lessons, marking homework, staff meetings and subject meetings – isn't included. I assess what they've done on the basis of the task's difficulty and complexity on a scale of three grades: 1, 1.5 or 2. I list the teachers' scores every week and announce them on our internal website the following Monday.

Lan then asked me to look at a spreadsheet that recorded the teachers' weekly and total scores. She continued:

I find it a good way to motivate teachers. It shows them that their leaders have seen what they've been doing and recognise their commitment. Those with low scores one week have the chance to do more the next week... I haven't added it to the teachers' assessment results yet – though it might have potential to be an appraisal indicator... I don't have any motivation theories, but I believe if something works it must be good!

Feng's story

An extreme example came from an excellent performer, Feng, who shared this unsuccessful story:

I feel a bit sick when I recall this story. You know, according to the district requirements, 14% of teachers were evaluated as excellent and were reported to the district every year. I was thinking: we have more than 160 teachers, yet only 23 teachers are excellent. Too few! So I discussed it with my headteacher, and decided 50% of teachers could be elected as representing the excellent level. The top 23 would be reported to the district, but all of the top 50% could be recorded as excellent in their assessment files. The aim was to motivate more teachers. Then we identified the criteria and implemented the election process within the year departments. After that, the names of those excellent teachers were announced on the school's internal website.

The next day, some angry teachers came to the headteacher's and my offices. There were several reasons for their anger. One said, 'If only 23 teachers are excellent I don't mind not being voted excellent. If 60 or 70 teachers are excellent and *I'm* not excellent, that makes me very angry. I did very well this school year; why wasn't *I* voted excellent? You have a problem with your criteria.' Another said, 'I did very well, but I'm not an excellent teacher; those lazy teachers are excellent. So I won't be a class teacher any more.' An old teacher said, 'I'm the only person who wasn't voted excellent in my subject

department. Can you please tell me why? What did they do better than me?' ... All in all, it was a mess, and we took steps to sort it out... Still, it cast a dark shadow over subsequent work. For example, some teachers who were not elected as excellent refused to take on difficult tasks... We were well-intentioned, but it backfired on us.

It was a complex case. Feng reflected, and attributed it to lack of theoryguiding, experience and systematic thinking. He said:

Neither my headteacher nor I knew what was the optimal proportion being awarded in an organisation. 14% across the district might be the figure according to some theory —we didn't know, and we'd never considered it. Besides, both my headteacher and I were novices; we were inexperienced, and we got it wrong. Also, we should have thought systematically; this assessment was really important for the teachers, and it was a holistic and summative assessment. It was a big thing for the teachers. We shouldn't have changed the district-level assessment game rules. This wasn't the only means of motivating teachers — there are lots of different ways of doing that.

Examining the two stories, it is clear that both T&LDHs were trying to motivate teachers by recognising their work. However, both evidently encountered problems. Lan's story illustrated her intention to encourage the teachers to devote themselves to school work and spend more time in tutoring students. Although she identified the story as effective practice, I am sceptical about its effectiveness. Lan encouraged the teachers to do extra work to demonstrate their commitment, which might lead them to prioritise additional work over their routine work. Moreover, publicising such information might cause some teachers unnecessary anxiety. Evans (1999) notes that 'features of management perceived as positive by managers may be perceived negatively by the "managed" (p. 72). Since I did not collect data from teachers, I do not know whether this practice motivated them.

Feng's story was one of unanticipated failure. Despite reflecting on it, he seemed unclear about the real reasons for his failure; his lack of knowledge about and experience of the assessment system in his district might be part of the story.

Both examples in this set represent somewhat extreme cases. Yu's practice

is perhaps more common in China:

Teachers like to save face. My 'rule of thumb' for staff meetings is: praise good performers in public, and point out specific problems and negative behaviour, but never name names. Then those subject leaders or teachers who weren't praised or were associated with poor performance can come and explain themselves, or say they will improve... (Yu, from the typical group)

Yu praised good performers publicly and made them feel appreciated, which also provided teachers with a model to follow. For poor performers, Yu improved them through identifying specific problems and drawing attention to them without naming individuals – a practice that preserved self-esteem and encouraged improvement. Yu's story might be representative of Chinese school leadership practice.

Notably, many T&LDHs find it hard to motivate teachers, as the following quotes from interviewees indicate:

- ❖ 'Motivating some individuals is too hard because you don't know what they want.' (Lu, from the typical group)
- 'The biggest problem for me is motivating middle-aged teachers. They have what they want: senior teacher professional titles and higher salaries than other teachers. They're experienced, and carry out their basic tasks without problems. But their mind-sets may be outdated; they're stuck in their ways. You don't have any leverage when it comes to motivating them.' (Ting, from the excellent group)
- 'Motivating teachers is hard. They compare themselves with their friends; if their friends are in model schools or university high schools, they earn much more money than the teachers in my school. Our teachers might think: I'll only do a little work for so little money. Besides, those teachers in good schools have more opportunities for training because their schools aren't short of money and they have more school-based training programmes. Also, their students are better, and teaching is more interesting. They get their fulfilment much more easily.' (Jun, from the excellent group)
- 'I'd like to know the theories about how you evaluate teachers. But teachers need to be motivated through appraisal, without any negative side-effects. Would you please recommend some to me?' (Ping, from the typical group)

Overall, motivating teachers was difficult for many of the T&LDHs

interviewed. Although some external factors – such as different level schools, disparity in salaries and student quality – influenced teachers' job satisfaction, morale and motivation, the difficulties they experienced may stem from their lack of knowledge of, and skills in, motivation and people management. Feng's practice revealed this to be the case. Lan's approach might encourage teachers to do more work, but different teachers have different perceptions; doing extra work might not interest some. The most important thing is to tap into what incentivises teachers intrinsically, rather than depend on external incentives. From these cases, it can be seen how misguided actions may effect short- or long-term negative influences on a school's work if the leaders lack relevant knowledge, skills and competencies in a particular situation.

6.3 Evidence from quantitative data analysis

Based on Hallinger's (1982, 2011a) *Principal Instructional Management Rating Scale (PIMRS),* I generated research findings from the data collected among 424 teachers in eight schools. In Chapter 3 (see pp. 18-19) I describe the *PIMRS* and its underpinning theoretical framework. To help the reader better understand the instrument, I present the following five-point scale as an example:

To what extent does your principal ? I. FRAME THE SCHOOL GOALS					
	Almost l	Vever	Aln	nost Al	ways
1. Develop a focused set of annual school-wide goals	1	2	3	4	5
2. Frame the school's goals in terms of					
staff responsibilities for meeting them	1	2	3	4	5
Use needs assessment or other systematic methods					
to secure staff input on goal development	1	2	3	4	5
4. Use data on student academic performance					
when developing the school's academic goals	1	2	3	4	5
Develop goals that are easily translated into					2002
classroom objectives by teachers	1	2	3	4	5
From PIMRS - Teacher Form 1.3 (Hallinger, 1983, p. 2)					

Figure 6.1 Sample *Principal Instructional Management Rating Scale (PIMRS)* rating subscale: teacher form

(Source: Hallinger et al., 2013, p. 276)

It is worth noting that while the sample above presents the format of the

instrument, I have modified several items to fit the Chinese context (see p. 76). The details about my translation and modification of the *PIMRS* are presented on pages 75-76. The reliability and validity of the Chinese-version *PIMRS* were tested, demonstrating it to be a trustworthy instrument for evaluating the differences in leadership behaviour between the two sample groups (see pp. 98-99). Teachers' ratings were used to compare the differences between the sample groups. The hypothesis was that the excellent T&LDHs exercised more active leadership than the typical T&LDHs in most job function sub-scales. An independent-samples t-test was used to check the differences between the two sample groups, but no statistically significant difference was found across all 10 sub-scales at the two-tailed 5% level, as demonstrated in Tables 6.2 and 6.3. When an independent-samples t-test was used within each sub-scale, there were statistically significant differences in five items (see Table 6.4, and Appendix 4-4 for all the items).

According to Table 6.4, the excellent group demonstrated more active leadership in four items:

- Item 15: Pointing out specific weaknesses in teacher instructional practices in post-observation feedback;
- Item 21: Meeting individually with teachers to discuss student progress;
- Item 29: Encouraging teachers to use instructional time for teaching and practicing new skills and concepts; and
- Item 41: Ensuring that in-service activities attended by staff are consistent with the school's goals.

In contrast, the typical group did better in only one item:

Item 35: Tutoring students or providing direct instruction to classes.

Examining the T&LDHs' information, four in the excellent group and eight in the typical group provided direct instruction to classes. Among the eight T&LDHs whose schools participated in the questionnaire phase of the study, all four T&LDHs in the typical group and only one in the excellent group provided direct instruction. Thus Item 35, 'Tutoring students or providing direct instruction to classes', was verified by their personal information. Item 21, 'Meeting individually with teachers to discuss student progress', and Item 41, 'Ensuring that in-service activities attended by staff are consistent with the school's goals', could be corroborated by the qualitative evidence such as Ting's case (see pp. 123-125) and Hong's (see pp. 105-107). Items 15 and 29 could not be verified by the qualitative evidence. However, they were a beneficial complement to the research findings.

6.4 Summary

In this chapter a range of T&LDH characteristics has been identified. Since the qualitative evidence was presented in story form, some findings may not be fully illustrated by the stories selected. For example, one of the research findings – that the excellent group typically 'makes good use of structure and mechanism, and serves as the leaders' leader' - needs further explanation. It mainly reflects two issues: first, there were subject leaders at two levels and subject departments in every school. The excellent T&LDHs focused on their functions, created enabling conditions and assigned suitable tasks to them, thereby achieving collective goals, while the typical T&LDHs often ignored their functions and only regarded them as a channel to pass on leaders' orders and report back to leaders. Second, the excellent T&LDHs were very aware of the work done by mentoring or coaching teaching directors and subject leaders. For example, Feng coached his directors to be able to articulate their work objectives and plans in five minutes, and Ying enhanced subject leaders' abilities by mentoring them to make plans and term summaries.

The characteristics among the T&LDHs – especially those of the excellent performers – are explicitly or implicitly reflected in the stories presented above. My research findings have not only tested some theories developed in the western context, but also have the potential to inform policies and practice in the Chinese context. I discuss these issues in the next chapter.

Table 6.2 Group statistics – the differences between the two groups across all 10 sub-scales

				Std.	Std. Error
Subscale	Group	N	Mean	Deviation	Mean
Subscale 1: Frames the goals	Typical group	217	4.5300	.60513	.04108
for teaching and learning	Excellent group	207	4.5159	.49275	.03425
Subscale 2: Communicates	Typical group	217	4.2157	.73152	.04966
the goals for teaching and learning	Excellent group	207	4.1797	.62920	.04373
Subscale 3: Supervises and	Typical group	217	4.4304	.65856	.04471
evaluates instruction	Excellent group	207	4.5285	.48181	.03349
Subscale 4: Coordinates the	Typical group	217	4.4258	.69394	.04711
curriculum	Excellent group	207	4.4580	.55749	.03875
Subscale 5: Monitors student	Typical group	217	4.2562	.70735	.04802
progress	Excellent group	207	4.2908	.61963	.04307
Subscale 6: Protects	Typical group	217	4.4765	.62941	.04273
instructional time	Excellent group	207	4.4908	.49841	.03464
Subscale 7: Maintains high	Typical group	217	4.2507	.64220	.04360
visibility	Excellent group	207	4.1961	.74128	.05152
Subscale 8: Provides	Typical group	217	4.2747	.77779	.05280
incentives for teachers	Excellent group	207	4.2705	.75315	.05235
Subscale 9: Promotes	Typical group	217	4.4710	.65173	.04424
professional development	Excellent group	207	4.5729	.50823	.03532
Subscale 10: Provides	Typical group	217	4.4046	.67562	.04586
incentives for learning	Excellent group	207	4.4077	.56897	.03955

Table 6.3 Independent samples test (teachers' rating) – the differences between the two groups across all 10 sub-scales

		Levene's Te		t-test for Equality of Means									
									95% Confidence Interval of the Difference				
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Lower	Upper			
Subscale 1	Equal variances assumed	4.745	.030	.261	422	.794	.01401	.05374	09162	.11964			
	Equal variances not assumed			.262	411.947	.793	.01401	.05348	09112	.11915			
Subscale 2	Equal variances assumed	5.350	.021	.541	422	.588	.03596	.06640	09457	.16648			
	Equal variances not assumed			.543	417.593	.587	.03596	.06617	09411	.16603			
Subscale 3	Equal variances assumed	19.046	.000	-1.744	422	.082	09809	.05626	20867	.01249			
	Equal variances not assumed			-1.756	395.758	.080	09809	.05586	20790	.01173			
Subscale 4	Equal variances assumed	8.759	.003	525	422	.600	03216	.06131	15267	.08834			
	Equal variances not assumed			527	410.248	.598	03216	.06100	15207	.08774			

Subscale 5	Equal variances assumed	3.912	.049	535	422	.593	03460	.06470	16178	.09258
	Equal variances not assumed			536	418.994	.592	03460	.06450	16139	.09219
Subscale 6	Equal variances assumed	2.950	.087	259	422	.796	01432	.05530	12303	.09438
	Equal variances not assumed			260	408.310	.795	01432	.05501	12245	.09381
Subscale 7	Equal variances assumed	5.593	.018	.811	422	.418	.05456	.06726	07766	.18677
	Equal variances not assumed			.808	407.403	.419	.05456	.06749	07812	.18723
Subscale 8	Equal variances assumed	1.241	.266	.055	422	.956	.00412	.07441	14213	.15038
	Equal variances not assumed			.055	421.904	.956	.00412	.07435	14202	.15027
Subscale 9	Equal variances assumed	9.786	.002	-1.791	422	.074	10198	.05694	21390	.00995
	Equal variances not assumed			-1.801	406.119	.072	10198	.05661	21327	.00931
Subscale 10	Equal variances assumed	2.877	.091	051	422	.959	00312	.06080	12264	.11639
	Equal variances not assumed			052	415.663	.959	00312	.06056	12216	.11592

Table 6.4 Independent samples test – the differences between the two groups across each of the sub-scales

		Levene's					4445	. F !!4	M				
		Equality of	variances	t-test for Equality of Means									
						Sig. (2- Mean	Sig. (2-	Sig (2-	Sig (2. Mean	Std. Error	95% Confidence Interval of the Differen		
		F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper			
Item 15	Equal variances assumed	28.215	.000	-3.573	422	.000	235	.066	365	106			
	Equal variances not assumed			-3.601	390.963	.000	235	.065	364	107			
Item 21	Equal variances assumed	1.471	.226	-2.399	422	.017	204	.085	371	037			
	Equal variances not assumed			-2.410	414.274	.016	204	.085	370	038			
Item 29	Equal variances assumed	11.996	.001	-1.982	422	.048	129	.065	256	001			
	Equal variances not assumed			-1.996	396.910	.047	129	.064	255	002			
Item 35	Equal variances assumed	26.436	.000	4.830	422	.000	.552	.114	.328	.777			
	Equal variances not assumed			4.798	382.780	.000	.552	.115	.326	.779			
Item 41	Equal variances assumed	11.053	.001	-2.963	422	.003	189	.064	315	064			
	Equal variances not assumed			-2.976	413.225	.003	189	.064	314	064			

Chapter 7 Discussion and Application

Recalling the purposes of my research in the introductory chapter, I listed them as 'to reflect on practice', 'to test theories' and 'to make recommendations'. In this chapter, I return to these purposes to discuss two issues: one, the application of theory to my research; the other, how my research findings inform research and practice. The latter is addressed by combining reflection on my previous practice as a T&LDH in a Chinese secondary school, my research and its findings, and the current school leadership preparation/training agenda in the Chinese context.

7.1 Reflection on the use of theories in my research

Several theoretical perspectives, including Evans's (2008; 2011) conceptual model of the componential structure of professionalism, Hallinger's (1982, 2011a) instructional management conceptual framework, Sternberg's (2005; 2008) WICS approach to leadership, and Boyatzis's (2008; 2009) competency model, were used to underpin my research. As for the definition of 'theory', different researchers have different interpretations. Thomas (2007, p. 27) draws on Chambers' (1992) typology, and classifies the uses of 'theory' in education into four groups:

- theory as the obverse of practice;
- theory as generalizing/explanatory model;
- theory as developing bodies of explanation, embracing the broadening bodies of knowledge developing in particular fields; and
- scientific theory.

According to this categorisation system, the theoretical/conceptual frameworks I used in my study pertain to the second or third categories: theory as generalizing/explanatory model, or developing bodies of explanation in leadership. They provide different perspectives to underpin my research in a complementary way. Their common feature is that they were developed in the western context, so how applicable are they to the Chinese context?

On the one hand, my study has demonstrated their capacity for offering explanations of leadership practice or individuals' competence in the Chinese school context; on the other, I encountered some problems in applying them to my research. In my thesis I do not intend to discuss what theory is and whether or not the theoretical/conceptual frameworks I used in my study constitute theory; rather, I confine my discussion to their usefulness to my research. I identify, and discuss below, four uses: providing analytical tools, conceptual explanations, evaluative criteria and evaluative tools.

7.1.1 Providing analytical tools

It is evident that Evans's (2008; 2011) conceptual model of the componential structure of professionalism served as a principal analytical tool in my research. Using this model offered three advantages. First, it provided a systematic framework through which to examine T&LDHs' leadership practices: concrete content that I could focus on when analysing the data. Second, it proved flexible in two ways. First, it can be used to examine the professionalism of an individual, a group of people who hold a common job role or position, or an entire profession – for example, while I used the model to examine my research participant Ping's professional performance as illustrated through her four critical incidents and non-story type information (see Table 4.8, pp. 88-90), and the T&LDHs' characteristics based on the dataset in my study (see Table 6.1, pp 116-117), Evans (2011) herself used it as an analytical framework for coding the 2007 professional standards for teachers in England. Another feature of the model is that it can integrate other theories, as in my study. Its third advantage is that it is a context-free framework; the model's components can be applied to the situations in which the professionals being researched are positioned.

Despite these advantages, I identify one problem with the model: some competencies might not be reflected in people's behaviour, although Evans (2011, p. 856) defines her behavioural component as 'what practitioners physically do at work', and Boyatzis (2008, p. 7) states that 'competencies are a behavioural approach to emotional, social, and cognitive intelligence'.

For example, in her interview Li spoke of a time she had been unsuccessful: on the afternoon of a very rainy day, a PhD student was invited to her school to give a presentation about inquiry-based study. Because this event had been organised the previous week, and nobody had expected such heavy rain an hour before the presentation, Li did not have enough time to cancel. Many teachers arrived at the school in the rain, and some were unhappy. Moreover, the PhD student gave a very boring presentation, and in the middle of it, one teacher stood up and asked the PhD student to stop talking. Angered by the teacher's rudeness, Li had said, 'I hope we can continue listening; if anybody doesn't want to listen, please leave now.' The teacher turned to Li and asked, 'Why did you say it like that?' Then he left the meeting room, and several others also left. The PhD student was so embarrassed he hurried out of the school without saying a word. After the incident, Li reflected on her own behaviour and demonstrated empathy with the teacher:

The teacher lived a long way from the school, and he didn't have any lessons that day, so he could've stayed at home for the whole day. Because of the presentation, he had to come to school in the heavy rain. Also, the PhD student just read some theories to us – boring, and of no use. I can understand the teacher's perspective – though he shouldn't have treated the PhD student so rudely. It's my fault for failing to ensure the quality of the presentation. The teacher must've felt that he'd lost face because I asked him to leave in front of the teachers, so I should apologise to him. (Li, from the excellent group)

The next day, before talking to the teacher, Li had an opportunity to cooperate with him on another activity. He managed to work with Li, and showed remorse through what he did, rather than what he said. In this case, although what she *said* to me demonstrated it, Li did not do anything to *show* her empathy – so I decided it was not appropriate to categorise 'empathy' within the 'competential' dimension of the 'behaviour' component in Evans's model.

In some respects, Evans's competential dimension overlaps with the intellectual component (see Figure 3.4, p. 37). For example, the 'analytical'

dimension involves the ability to use analysis skills to solve problems, which can be regarded as a kind of competence. Additionally, some characteristics involving cognitive skills do not fit into any of Evans's dimensions. For example, in Sternberg's (2005; 2007; 2008) WICS model (see pp. 54-56), creativity is regarded as a necessary trait for successful leaders, but it is different from analyticism. I found it difficult to categorise creativity; it did not seem to fit into any of the 'intellectual' component's four dimensions. In the light of such reflection on its application to my research, I intend to modify Evans's model for my future use in research and curriculum design. My intended modification is shown in Figure 7.1.

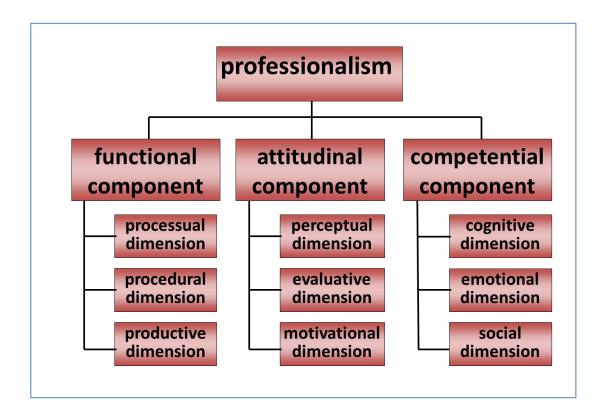


Figure 7.1 Revised model of the componential structure of professionalism

The modifications to Evans's model (presented in Figure 3.4 – see p. 37) are three-fold. The 'behavioural' dimension has been changed to 'functional', for two reasons. One is that people's professional requirements correspond with their job functions – for example, in China, good teachers are normally promoted and become school leaders. However, good teachers may not be good leaders if they possess only teaching skills and

competencies; they need to learn and master new knowledge and skills to fulfil their new job demands. The other reason is that school leaders in different positions apply different processes and procedures to their jobs, consistent with their job functions, so 'functional' is a more pertinent descriptor of what professionals physically do in their work.

The second modification involves moving the 'competential' dimension to replace the 'intellectual' component. One reason for this is that a competency might not be reflected in one's behaviour, as I argue above. Another reason is that 'competential' is a more inclusive and broader concept than 'intellectual' in the revised model, because of the third modification, explained below. I intend the 'competential' component to refer to people's knowledge, understanding, skills and competencies for effective job-related behaviour or mental processes.

The third modification is significant. The 'competential' component integrates three dimensions – 'cognitive', 'emotional' and 'social' – which respectively refer to a professional's ability to think or analyse information and situations, and to recognise, understand, and use emotional information about him/herself and others that leads to or causes effective or superior performance (Boyatzis, 2008). Although these three dimensions draw on Boyatzis's (2008; 2009) model, each can incorporate other theoretical models to examine people's professional lives, rather than be restricted to the elements in his model.

This modification is based on two main factors. First, my research findings show that the excellent T&LDHs consistently and extensively demonstrate a range of cognitive, emotional and social intelligence competencies, which should be added to the model in a clear way. Second, the 'intellectual' component in Evans's model mainly refers to the cognitive domain, because she defines it as 'practitioners' knowledge and understanding and their knowledge structures' (2011, p. 856), and a professional's emotional and social competencies can be categorised as relating to her 'competential' dimension, just as I did in my data analysis (see Ping's example in Table 4.8,

pp. 88-90). However, if I simply replaced 'intellectual' with 'competential' as a component of professionalism, and removed the 'competential' dimension, I would demolish the integrity of Evans's model. So my solution is to integrate her 'intellectual' component into the cognitive dimension, to create a revised model that I believe might be better for use in my future research and practice.

7.1.2 Providing conceptual explanations

The second use of theory in my research involves the provision of interpretations of the concepts that I use to explain the phenomena in my study. For example, Evans's statement about 'professionalism' as 'a description of people's "mode of being" in a work context' (Evans, 2011, pp. 854-855) allows me to easily capture its meaning and connect theory with practice. Sternberg (2005; 2007; 2008) clearly explains the cognitive traits of creativity, intelligence and wisdom, as well as the theory underpinning them. Boyatzis (2008; 2009) provides an explicit definition of each competency in his model. While the majority of the concepts fit the Chinese context, 'organisational awareness' in Boyatzis's (2008; 2009) model might not fully capture the equivalent meaning in the Chinese context – or a new concept, 'obedience', might be added to interpret situations in the Chinese context. I discuss this issue below.

According to Boyatzis (2009), the term 'organisational awareness' involves the ability to read power relationships in work settings. Spencer and Spencer (1993) identify three typical indicators of a person who has organisational awareness:

- understands the organisation's informal structures (identifies key actors, decision-influencers, etc.);
- recognises unspoken organisational constraints what is and is not possible at certain times or in certain positions;
- recognises and addresses the underlying problems, opportunities, or political forces affecting the organisation. (pp. 49-50)

From my own experience, I understand the situations in an organisation

described above. However, based on my data, the T&LDHs demonstrated clearly their appreciation of the power relationships between them and their formal superiors (educational authorities and headteachers), to whom they showed a kind of unequivocal obedience. As for their obedience to educational authorities, the T&LDHs accepted the principles and requirements of national curriculum reform unquestioningly, and attempted to implement them in their schools, as I explain in Chapter 4 (pp. 96-98).

With regard to obedience to headteachers – my main focus in this section – four features can be identified. First, T&LDHs respect their headteachers' authority and decisions regardless of whether they understand them. This kind of 'blind' obedience is illustrated by Ming's and Lu's comments (see p. 120), and by Zhen's remark: 'the T&LDH must make clear the headteacher's philosophy in leading the school. The headteacher may not tell it to you; you should be aware of it yourself'.

Second, T&LDHs keep silent on some important issues instead of discussing them with their headteachers; they avoid them for three reasons. The first is that T&LDHs feel nervous when facing headteachers; in Jin's example in Chapter 5 (see p. 102), on encountering a situation in which the new headteacher did not know her job responsibilities, Jin chose to say nothing; she found the new head too serious and so felt nervous and feared being unable to explain herself clearly. Lan's words in Chapter 6 (see p. 125) also demonstrate her nervousness when talking with a headteacher. The second reason is that T&LDHs keep silent about problems caused by the head's mistake – even very small ones. In Hai's example in Chapter 6 (see pp. 129-132), he completely recognised the problems of the pedagogical reform, but was unwilling to discuss them with the headteacher and let her make sense of and address the problems herself. The third reason is that T&LDHs do not want the headteacher to think they have exceeded their job remits and are encroaching on the headteacher's responsibilities. For instance, Kai and Yu were clearly aware of the other department heads' poor performance, but they did not raise the problems with their headteachers because they thought it was the headteachers' business, not theirs.

The third feature is that T&LDHs adjust their behaviour to headteachers' likes and dislikes, and inconsistency in their words or deeds. Xia's confusion (p. 120) and Yan's frustration, as well as Qing's experience (p. 125), vividly illustrate this.

Finally, T&LDHs believe headteachers should be repaid with loyalty, obedience and an intimate relationship, for two reasons. One is that their own promotions to senior leadership roles were due to the headteachers' kindness and trust in them, which was deserving of their reciprocal devotion. A Chinese saying conveys this traditional morality; it translates literally as: drips of beneficent water must be repaid with overflowing fountains of gratitude. The second reason also originates from Chinese traditional culture: paternalism. Because Confucius extends the analogy of family structure to organisations, the head of an organisation is considered the father in a family, who has absolute power, and other family members should respect him and comply with his wishes (Fu et al., 2007). Influenced by such beliefs, T&LDHs regard cooperating and getting on well with their headteachers as their duty. Any conflict with their headteachers would generate guilt and regret, as Jun's story illustrates:

I had worked with my old headteacher for four years, then he was appointed headteacher of another school, and we were separated for a few years. Later, I went to his school as a T&LDH. I identified myself as his 'child', although he didn't think so. We got along with each other very well, with few conflicts between us. However, one day, in a leaders' meeting, we were discussing the schedule for the next week. Because I wanted to arrange more activities for the teaching and learning department, and hadn't run these past the headteacher in private in advance, he didn't support my idea for so many activities. We argued a lot; I said that teaching and learning was the lifeline of a school, and other activities should give way to them. The old headteacher got very angry and wouldn't support me. After that incident, I reflected on my behaviour. First, I should see teaching and learning work within the bigger picture of the school's work, and shouldn't think about my work too much. The headteacher had the job of coordinating the whole school's work and school development, while I was considering only the work in my field. Second, communicating in private is better than arguing in public. As a deputy head, you have a duty to

communicate with the headteacher. Time is tight, too busy, and all of these are excuses. You should report your ideas and plans to your head in the first place so he can help you take forward the work. Third, leaders should control their emotions; you shouldn't place yourself in the position of a child. Even though you're young, you should think as a school leader. I've been regretting falling out with my head. (Jun, from the excellent group)

From the evidence presented above I argue that, in the Chinese context, the concept 'organisational awareness' might reflect the feature of 'obedience' to formal superiors, rather than micro-political issues. Dimmock (2007) also finds that culture imparts different meanings and connotations of the same concept, and reminds us that researchers 'need to take cognisance of how apparently identical concepts, policies, ideas and behaviours may hide important differences in meaning and connotation, depending on their cultural context' (p. 58).

7.1.3 Providing evaluative criteria

The third use I made of theory was to provide me with evaluative criteria for T&LDHs' characteristics. For example, Sternberg (2005; 2007; 2008) offers assessment criteria for the concepts in his WICS model, and Spencer and Spencer (1993) present assessment criteria for the competencies in Boyatzis's (2008; 2009) competency model. These indicators were excellent sources for helping me judge T&LDHs' leadership practice.

I present some specific examples to illustrate this. Sternberg (2008, p. 361) defines 'creativity' as:

the skills and dispositions needed for generating ideas and products that are (a) relatively novel, (b) high in quality, and (c) appropriate for the task at hand.

Creative skills and attitudes include a range of features, such as problem redefinition and analysis, recognising how knowledge can both help and hinder creative thinking, and willingness to take sensible risks (Sternberg, 2007; 2008). He identifies three important creativity skills:

❖ selective encoding: distinguishing irrelevant from relevant information in

- one's field of experience;
- selective comparison: novel relating of new information to old information;
- selective combination: taking selectively encoded information and combining it in a novel but productive way (Sternberg, 2007, pp. 36-37).

In Wei's story in Chapter 6 (see pp. 118-120), he clearly realised it was hard for his school to compete with another good school in the NCEE because the students in his school were not as clever as those in that school. So, choosing to avoid competing with that school, he opted for developing humanistic education, with his school becoming number one in humanistic education in the district. This was a novel idea in the Chinese context because almost all school leaders focus on the NCEE - whereas Wei did not respond the way everyone else does, and found an alternative way to enhance his school's development. Developing humanistic education is also advocated by educational authorities, and the students in Wei's school are qualified for the course requirements to ensure good results (e.g. getting excellent results for the humanistic courses in the NCEE) - so the idea was feasible and appropriate for his school. Moreover, the programme brought a good reputation and excellent students to his school, yielding high quality outcomes. The example shows Wei's creativity and capacity to 'think outside the box'.

Each of Lan's and Feng's stories (see pp. 135-137) had some novel elements – for instance, to motivate teachers, Lan established a 'points system' and Feng increased the number of excellent teachers in the annual summative assessment – but both approaches had potential weaknesses and risks. Lan's encouragement of teachers to do extra work risked leading to ineffectiveness, because they might end up prioritising the extra work over their other duties. Feng's practice backfired on him. Thus both ideas were flawed, and in these two particular situations, neither was creative.

In spite of the fact that the theories provided me with evaluative criteria for examining the T&LDHs' characteristics in most cases, I encountered two problems. First, some indicators did not fit the Chinese contextual situations

I investigated. Second, Spencer and Spencer's (1993) assessment criteria provide detailed behaviour descriptions for each competency, but ignore the influence that people's values and perceptions have on them. My solution was to combine accurate understanding of the concepts' connotations and evaluative criteria, the Chinese educational context, the features of the T&LDHs' positions and my own experience to evaluate the T&LDHs' leadership practice in a flexible way. The example of 'organisational awareness' I present above illustrates the conditions I encountered and how I interpreted the data by combining the T&LDHs' perceptions and behaviour and Chinese traditional culture.

7.1.4 Providing evaluative tools

The fourth use I made of theory in my study was in providing evaluation tools. I applied Hallinger's (1982; 2011a) *Principal Instructional Management Rating Scale (PIMRS)*, which I translated from English into Chinese with some modifications, to evaluate the T&LDHs' leadership behaviour. Although the instrument was developed in the American context, I verified that it is trustworthy to be used among T&LDHs in the Chinese context by testing its reliability and validity, as described in Chapter 4 (see pp. 98-99). The research findings on T&LDHs' leadership behaviour were generated by using this instrument (see pp. 139-145).

However, the *PIMRS* could not be used to evaluate a T&LDH's overall job performance, for three reasons. First, it does not cover all the job functions of a T&LDH. T&LDHs' job functions are reflected in six dimensions and 16 job functions, as shown in Table 5.1 (see p. 104), while the *PIMRS* examined the T&LDHs' leadership behaviour in relation to 10 functions underpinned by Hallinger's (1982; 2011a) instructional management conceptual framework. As a result, 10 out of 16 job functions are not included in the instrument. Thus the *PIMRS* reflects only part of the T&LDHs' leadership performance. Second, the instrument is behaviour-based, and cannot provide an overall assessment of a T&LDH's work, such as her/his work attitude. Third, the items comprising some specific functions do not fit well within a Chinese context. I discuss the third reason by taking the five

items evaluating the function of 'coordinating the curriculum' as an example of the problem.

The five items used in the *PIMRS* to evaluate the function of 'coordinating the curriculum' are:

- 1. Make clear who is responsible for coordinating the curriculum across grade levels.
- 2. Draw upon the results of school-wide testing when making curricular decisions.
- 3. Monitor the classroom curriculum to see that it covers the school's curricular objectives.
- 4. Assess the overlap between the school's curricular objectives and the school's achievement tests.
- 5. Participate actively in the review of curricular materials. (Hallinger, PIMRS Manual, 1990)

Before examining whether these items fit the Chinese context, to help the reader make sense of my view I outline two important Chinese contextual backgrounds: the examination-dominant, competitive context, and the policy requirements.

Examinations dominate a school's teaching and learning in China, in that the results of the NCEE are the only standard that determines whether or not a student may enter college or university. The better the college or university, the higher scores it demands. To enter a good college or university, it is better for students to attend a good senior secondary school, which is likely to have a higher success rate for college or university entry. By extension, entering good primary and junior secondary schools raises the odds of entering a good senior secondary school, because there are more excellent teachers and opportunities in good schools than 'typical' schools. To increase their chances of getting a good education, many students are therefore encouraged to learn maths and English at a very young age to gain an advantage, and schools are constantly preparing for examinations.

The other background issue is that all Chinese schools are required by the

educational authorities to implement the national curriculum standards and schemes, and one important requirement is that all compulsory courses must be given sufficient delivery time. Because of the pressure of the NCEE and senior entrance examinations, many schools increase delivery time for exam subjects, and reduce the time for others – though this is prohibited by the educational authorities. For instance, music is a compulsory curriculum, but it is not taken in senior and college entrance examinations, except for those institutions specialising in music. As a result, some schools reduce the delivery time of music lessons, or cancel them altogether. Therefore, as a policy, assigning sufficient delivery time to the compulsory national curricula is a basic requirement on which to judge a headteacher or T&LDH in China.

Furthermore, Chinese schools do not have sufficient curriculum autonomy. According to the Curriculum Reform Documents⁵ (2006; 2007):

- Senior students are required to study for three years and gain a certain number of credits each year. The candidates are eligible to graduate when they gain 144 credits, including 116 for compulsory modules, 22 for selective modules and 6 for school-based selective modules. Each module is valued at two credits.
- Junior students are required to take 50 lessons for school-based curricula every school year.

It is evident that the proportion of lesson time taken up by national curriculum content is very high, leaving only a small amount of time for school-based curricula. Moreover, each national curriculum has its standard issued by the educational authorities; only the objectives and content of school-based curricula may be determined by the school.

However, educational authorities have been advocating fostering students' all-round development, fulfilling their potential and cultivating their unique personalities. One way of addressing these proposals is to develop and run school-based curricula. Moreover, developing and running school-based

⁵ Curriculum Reform Documents: for ethical reasons – to ensure anonymity – I omit referencing information that would allow the local education authority to be identified.

curricula is considered by educational authorities and school leaders to be a way of standing out from similar schools – and therefore, on condition that the national curricula will be assigned sufficient delivery time, providing students with various colourful school-based curricula has won approval at both policy and practice levels. It has also become one of the most important evaluation indicators in school supervisions and assessments organised by the educational authorities. By extension, developing and running school-based curricula has become a critical quality indicator for judging headteachers and T&LDHs in China.

These critical indicators valued in the Chinese context – assigning sufficient time to the national compulsory curricula, and developing and running school-based curricula - do not feature within Hallinger's (PIMRS Manual, 1990) five items used to evaluate the function of 'coordinating the curriculum', listed above. In the process of testing face validity of the *PIMRS* described in Chapter 4 (see pp. 75-79), these two Chinese context-specific indicators were identified by all participants. Indeed, making curricular decisions was often not required in many Chinese schools implementing the national curriculum standard for each subject. In such cases, Item 3, 'monitor the classroom curriculum to see that it covers the school's curricular objectives', did not apply, because almost all the classroom curricula are taught to national curriculum standards, which are the guiding documents for the school's curricular objectives. Item 2, 'draw upon the results of school-wide testing when making curricular decisions', seems a little misleading when applied to the Chinese context because one of the most important objectives for almost all schools is to help students gain high examination marks, and school leaders usually set high expectations of examination results. If school leaders 'draw upon the results of school-wide testing when making curricular decisions', they would run the risk of assigning more time to examination subjects, which runs counter to national policy.

Additionally, except for a very small amount of time for school-based curricula, almost all students follow the same curricula in fixed classrooms. Thus Item 1, 'make clear who is responsible for coordinating the curriculum

across grade levels', seems fairly unimportant in the Chinese context. In general, school leaders arrange formal programmes at the beginning of the term, and almost all schools have a moral education department in charge of informal programmes, such as extra-curricular activities; year leaders and class teachers take responsibility for them. To some extent, Chinese schools have a relatively mature and fixed management structure to coordinate the curriculum. Nevertheless, item 4, 'assess the overlap between the school's curricular objectives and the school's achievement tests', and item 5, 'participate actively in the review of curricular materials', are necessary indicators for evaluating T&LDHs' work. In summary, when the *PIMRS*, developed by Hallinger (1982; 2011a), is applied to the Chinese context, I suggest the above items need modifying.

In the four sections above, I discuss the uses of theory and theoretical perspectives in my study: the theories provided me with suitable analytical tools, explanations of concepts, assessment criteria and evaluative tools. Because the theories I used were developed in the western context I encountered problems that needed addressing before I could apply them to my research. Such problems include different meanings and connotations surrounding a given concept, and incompatibility between some assessment criteria and the Chinese educational context. Despite these problems of cross-cultural applicability, the theories still offered useful guidance for my research.

7.2 Implications and applications

Combining my research findings on the nature of T&LDHs' roles, the range of their characteristics and the above discussion on the uses of theory and theoretical perspectives in my research, in this section I discuss three issues: the extent to which my research questions have been answered on the basis of the empirical investigation, the features of distributed learning-centred leadership in the Chinese secondary context, and, based on the discussion of the first two issues, I put forward four suggestions to inform research and practice in the Chinese context.

7.2.1 The extent to which the research questions have been answered on the basis of the empirical investigation

My research addressed two questions: one relating to the nature of the T&LDH's role in Chinese secondary schools, the other to the range of characteristics among T&LDHs and how these characteristics are reflected in their professional practice. I responded to the first question from three perspectives. First, three categories of leadership configuration, 'standard', 'integrated' and 'umbrella', emerged from the data analysis of the critical incident interviews; my research showed the 'standard' model was dominant in 24 investigated schools. Second, based on Hallinger's (2011a) instructional management conceptual framework, I explored T&LDHs' work responsibilities, involving six dimensions and 16 specific job functions (see Table 5.1 on p. 104) which describe what T&LDHs physically do in their work. Third, I presented how T&LDHs carry out their roles through a range of vivid stories in Chapters 5 and 6.

In terms of the second research question, I identified 12 characteristics among the excellent T&LDHs and nine among the typical performers (see Table 6.1 on pp. 116-117). I presented the evidence through three approaches. First, I used four excellent T&LDHs' examples to illustrate that effective leadership resulted from skilfully enacting the characteristics identified among those excellent leaders in a combined way, and that these characteristics were prevalent in the excellent T&LDHs' professional practice (see Section 6.2.1). Second, I compared three sets of leadership practices to demonstrate what effective and ineffective leadership performances look like, and that lack of one or more necessary skills and competencies in a particular situation results in leadership ineffectiveness (see Section 6.2.2). Third, based on quantitative data analysis, I identified four characteristics among the excellent T&LDHs and one characteristic in relation to the typical T&LDHs; of them, three characteristics were corroborated by the qualitative evidence (see Section 6.3).

Overall, each of the two research questions was satisfactorily answered through the empirical investigation. Notably, Boyatzis (2008, p. 6) points out

that one's maximum performance 'is believed to occur when the person's capability or talent is consistent with the needs of the job demands and the organisational environment'. My research has clarified T&LDHs' job demands and the capabilities required to fulfil the position. Being sensitive to the organisational environment is important for them to exercise effective leadership. I address this issue in the next section.

7.2.2 The features of distributed learning-centred leadership in the Chinese secondary context

The Chinese secondary school management structure is complicated; it involves two systems and at least three departments, as shown in Chapter 2 (see pp. 10-13). Highlighting my research focus, I discuss its features in relation only to the teaching and learning department (see Figure 2.3, p. 11). Three features can be addressed. First, learning-centred leadership is highly distributed. All 24 schools involved in my study set formal positions of subject leaders and year-subject leaders in the school hierarchy, resulting in a highly distributed learning-centred leadership configuration. The school I used to work for serves as an example - like the vast majority of Chinese secondary schools it employed the traditional leadership hierarchy. There were about 1,800 students enrolled in 2010; for that school year, 143 teachers were assigned teaching positions, and among them, six were appointed year heads, 14 subject leaders, and 47 year-subject leaders. Typically, their leadership positions did not overlap, so if a teacher was appointed subject leader, s/he would not assume the position of year head or a year-subject leader. Put simply, almost half of the teachers assumed formal leadership positions. Apart from these, other positions were set for specific functions, such as young teachers' mentors (see Ting's story, pp. 122-124) and teacher leaders (see Feng's story, pp. 125-126), as well as some informal positions, such as the teacher leader for tutoring young teachers for the teaching competition, described in Li's story (see p. 127). It can be seen, therefore, that a highly distributed leadership configuration for teaching and learning is one of the features of the Chinese secondary school

context.

Second, distributed learning-centred leadership is mainly characterised by the 'appointed' type of leader, accompanied by the other three types, 'empowered', 'authorised' and 'voluntary'. I explain this in detail as follows. In reviewing the literature on distributed leadership (e.g. Harris, 2008) and learning-centred leadership (e.g. Frost and Durrant, 2003; Frost and Harris, 2003), it occurred to me that two sets of key words might be captured: formal-informal and active-passive. The former set refers to leadership that can be exercised by people in both formal and informal positions relating to a school's hierarchical structure. The latter set involves people's attitudes to becoming leaders; nevertheless, I focus only on the attitudes people hold to become leaders and the ways in which they become leaders, rather than their attitudes towards work after becoming leaders. Using these two dimensions, a two-by-two typology is devised, consisting of four types of leadership:

	Formal	Informal
Active	Authorised	Voluntary
Passive	Appointed	Empowered

Figure 7.2 Four types of distributed learning-centred leadership

The first type, which I call 'authorised', refers to people who actively pursue formal leadership positions to gain authority – for example, in some parts of China, some teachers run for the positions of deputy heads or directors in their schools. The second type, 'voluntary', describes those who actively assume some work as informal leaders (without formal positions) when they think they are able to provide leadership according to their self-evaluation of their capabilities in particular situations. The third type, 'appointed', refers to people who are passively appointed formal leaders because their superiors

believe they possess the ability to be leaders at different levels, such as T&LDHs or subject leaders, while they themselves do not actively pursue the positions. The fourth type, 'empowered', refers to those who do not want to be leaders, but are empowered by their superiors to exercise leadership as informal leaders in particular situations. It is worth noting that the latter two types either work actively or do not necessarily work actively after becoming leaders.

From my own experience and the evidence in this study, all four types can be found in the Chinese secondary school context. However, the most universal is the 'appointed' type. For example, in the school I worked for, all subject and year-subject leaders were appointed by the school, and nobody actively pursued formal positions. The majority of T&LDHs in my study also talked about their practice of designating leaders at different levels following discussion with their headteachers. It is fair to say that Chinese secondary schools widely apply 'appointed' distributed leadership for teaching and learning. As for the 'empowered' type, it is mainly used in temporary activities in which some teachers are empowered to do leadership work. For instance, Li's example (see p. 127) demonstrates how a special-grade teacher was empowered to exercise leadership in a temporary activity. However, if the teacher had not been empowered, he may not have done the work actively.

The other two types – 'authorised' and 'voluntary' – are relatively rare in the Chinese context due to institutional and cultural factors. First at all, staff in China are given very few opportunities to run for leadership positions; teachers are led and managed by several leaders at different levels, through different channels, and have few opportunities to exercise leadership, because the leaders with formal positions and the 'empowered' informal leaders assume the relevant work. Furthermore, following Chinese tradition, especially the Taoist tradition, intelligent people are those who are able to act intelligently, conceal their strengths and behave humbly (Yang and Sternberg, 1997). The majority of Chinese people may not actively pursue leadership opportunities, unless prompted or encouraged to do so by

superiors. Lastly, 'voluntary' leaders may find it hard to exercise leadership unless they possess unique or outstanding skills, because Chinese people respect authority (Hui et al., 2007). In summary, Chinese secondary schools are characterised by leadership that is formally and informally designated.

The third feature of distributed learning-centred leadership is that whether or not people are able to exercise leadership is closely associated with organisational culture. Typically, designated leaders gain authority to exercise leadership, and most can exert their leadership smoothly, such as the subject and year-subject leaders in Si's, Hong's, Ying's (see pp. 109-112) and Jun's (see pp. 132-133) schools, and teacher leaders in Feng's and Li's schools (see pp. 125-127). However, in particular situations, even though a leader has been appointed or empowered by superiors, if the appointment or empowerment is beyond teachers' expectations or conflicts with a school's traditional practice, it may be resisted. Jin's example (see p. 102) illustrates this situation. Another example is Hai (see pp. 129-132); although he lacked some of the necessary competencies to fulfil his job demands, the 'unhealthy' culture that prevailed at his school might have been an important contributor to the failure to implement pedagogical reform.

7.2.3 Recommendations for practice and further research

Combining the features of distributed learning-centred leadership in the Chinese secondary context and my research findings, four applications and implications emerge as particularly relevant. First, since learning-centred leadership in the Chinese secondary school context is highly distributed through appointment, leaders' job functions at different levels should be specifically prescribed so that leaders can make clear their responsibilities and fulfil their job demands. In going through the 18 T&LDHs' job descriptions, I found them generic; they did not cover the job functions that T&LDHs actually carried out. According to my research findings, T&LDHs' job functions include six dimensions, as shown in Figure 7.3. I use a hand graph to represent the six dimensions because in Chinese, we often say 'zhua jiaoxue' (scratching teaching and learning work), which means thinking hard and managing to do the teaching and learning work well. I believe all

six dimensions are important for an effective T&LDH. Like the parts of a hand, none of them is dispensable.



Figure 7.3 T&LDHs' work dimensions

As T&LDHs are the special leaders in charge of teaching and learning within their schools, their job functions may represent the content of learning-centred leadership. Apart from T&LDHs, there are four other levels of leaders with responsibility for teaching and learning, including the headteacher, deans and teaching directors, subject leaders and year-subject leaders. In his interview, Feng described leaders' roles:

I lead the direction of pedagogical initiatives and promote teachers' universal teaching skills. I need strong subject leaders and year-subject leaders. Subject leaders determine the quality of a particular subject, and year-subject leaders determine a school's academic outcomes. (Feng, from the excellent group)

It is evident that leaders' roles and functions at different levels are varied and complementary. How are they distinct from each other? How and to what extent are their job functions complementary? How can they provide leadership to achieve synergy? All these questions need to be further researched.

Based on Hallinger's (1982; 2011a) instructional management conceptual framework, I formulated six dimensions of learning-centred leadership in the Chinese secondary school context. It can be used as a template to describe instructional leaders' job functions at different levels. Descriptions of leaders' functions for different positions in the same template may help them clearly realise their unique functions and roles, as well as how the functions are complementary and interdependent, so that leaders can approach their jobs systematically. Additionally, leaders should attend pre- and in-service training programmes involving knowledge and skills relating to their job functions. For example, curriculum is an important dimension in learningcentred leadership – but some T&LDHs I interviewed did not understand the concept of 'curriculum', and many conflicting views emerged from their accounts. One of the T&LDHs even believed a school-based curriculum must be an integrated course, including inquiry-based elements over a long period; her interpretations of 'curriculum' made her feel challenged and stressed in developing and implementing the school-based curricula. Thus insufficient knowledge and skills for a particular position may restrict leaders' thinking and performance, and even have a negative influence on schools' development.

Second, the skills and competencies relating to leaders of different levels should be identified and integrated into training programmes. In my study, I identify the characteristics excellent T&LDHs possess (see Chapter 6, pp. 116-117), and these characteristics can serve as a competency model to be used in T&LDHs' assessment and training programmes. Each T&LDH has a different skill and competency repertoire, and different T&LDHs behave differently in similar situations, resulting in positive or negative outcomes (see Chapter 6, pp. 127-139). Effective leadership results from skilfully demonstrating a range of skills and competencies in a combined way. T&LDHs can be examined by themselves, by peer assessment or by third-party assessment in light of my model, so that they may become aware of their strengths and weaknesses, based on which suitable development plans can be designed. Excellent T&LDHs also demonstrate a range of cognitive, emotional and social dispositions and competencies, and these elements

should be integrated into training programmes. In a successful development programme for aspirant headteachers in Scotland, a 360-degree feedback questionnaire about emotional competency was used to improve candidates' personal development by exploring their behaviour and feelings through the *Emotional Competency Inventory* (Forde et al., 2013). However, in the Chinese context, there is little evidence of such content in training programmes. I therefore suggest leadership training programmes in China:

- identify the competencies that a qualified or an excellent leader in a specific position should possess;
- be based on knowledge of how to help school leaders master these skills and competencies;
- evaluate whether school leaders master the skills and competencies through training programmes, work experience and self-learning;
- develop a system for training school leaders at different levels.

All these need further research and practice.

Third, integrating real cases into school leaders' training programmes has the potential to deepen their understanding. From my own experience of attending school leaders' training programmes, I identify two potential problems: theory learning without integrating practical elements, or experimental learning without linking any theories, and a lack of relevant skills and competency training. In terms of the first problem, some programmes deliver knowledge about a field in the form of a lecture. For example, three days of one training programme was spent explaining some concepts of psychology and the developmental history of psychology, without considering the purpose of delivering such content and its usefulness for school leaders' practice. Others arrange visits to famous schools to learn from their experiences, but these end up being nothing more than superficial campus tours.

As for the second problem, school leaders need cognitive, emotional and social skills in the workplace. For example, in my study I find excellent T&LDHs possess more steady cognitive, emotional and social competence,

such as analytical and inspirational skills, than typical T&LDHs. How can school leaders be equipped with these skills through training programmes, thereby improving their practical intelligence? I suggest training programmes integrate real cases to help trainees put theory into practice so they can gain relevant skills. From my own experience, I had relatively rich practical experience as a teacher and leader before I started my doctoral study. However, neither theory learning nor practical experience independently helped deepen my understanding of the T&LDHs' functions and competence – not until I analysed the T&LDHs' narratives could I understand both theories and T&LDHs' functions and competence. Real cases, therefore, have the potential to provide a vehicle for improving understanding of theories and practice, and gaining relevant skills and competencies.

Finally, learning-centred leadership configuration within and between schools should be paid more heed. Yan, a T&LDH in a disadvantaged school, told me an unsuccessful story in her interview: in the first year of implementing the senior curriculum reform, many teachers did not clearly understand the educational authority requirements. For example, some thought they could devise a curriculum plan based on students' levels. A physics teacher, convinced that the chapters in the new textbook were badly ordered and did not promote students' mastery of knowledge, changed the order of the chapters. However, the mid-term examination organised by the district used a test paper based on the chapter ordering in the textbook. This made Yan feel very guilty for having neglected to control the subject teaching arrangement. She believed the main reason for this mistake was that only one teacher taught physics at this grade (normally, disadvantaged schools are so small that only one teacher teaches a subject within a grade). If there had been two teachers forming a year-subject group, this situation might never have occurred because they would have had to discuss before effecting changes that impacted upon lesson delivery. To create a collaborative environment for teachers, Yan established a network in which teachers from six disadvantaged schools got together every two weeks and discussed their teaching. In my view, year-subject groups are the most basic and useful management level within the school, because teachers can

discuss their day-to-day teaching at all times – and in cases where only one teacher teaches a subject within a grade, Yan's network initiative may be helpful. I therefore suggest that school leaders – especially headteachers – consider how learning-centred leadership may be configured to provide enabling environments in which teachers may collaborate on solving problems and sharing new ideas.

7.3 Summary

The theoretical/conceptual frameworks that I applied to my study underpinned my research in an integrated way. They provided analytical tools, conceptual explanations, evaluative criteria and evaluative tools for examining the nature of the T&LDHs' role and the range of their characteristics. However, the application of theoretical frameworks needs to be accompanied by consideration of contextual elements to ensure a correct and thorough interpretation of a particular phenomenon.

In addition, I identify three features of distributed learning-centred leadership in the Chinese secondary context: high leadership density, characterised by 'appointed' leaders, and the exercise of leadership associated with organisational culture and traditional practice. I present four suggestions, incorporating these features, relating to school management and training programmes for school leaders. These should inform relevant research and practice, and prescribe job functions for leaders at different levels, incorporating consideration of the learning-centred leadership configuration within and between schools, and integrating the development of cognitive, emotional and social competencies and case studies.

Chapter 8 Conclusion

In this concluding chapter I consider two issues. The first is the contribution I have made to the knowledge base; the second, the limitations of my study.

8.1 Contribution to the knowledge base

In this research project I have explored the nature of the T&LDHs' role and their characteristics in the context of Chinese secondary schools. My research has made an original contribution to the knowledge base in seven respects.

First, I have identified three models of leadership configuration in Chinese secondary schools: 'standard', 'integrated' and 'umbrella' (see pp. 101-102). This represents a new angle from which to examine school leadership. China is a populous and vast country with different-sized schools, and different leadership configurations might be suited to different-sized schools with different development stages in different areas. It is useful to explore such evidence to improve school development. However, more research is needed to inform these issues, such as the advantages and disadvantages of different leadership configurations, and why and how different configurations suit different school contexts. Although my study involved some examination of the three models of leadership configuration, information on them was scarce.

Second, I have identified the features of distributed learning-centred leadership in Chinese secondary schools: a high-density leadership configuration, characterised by 'appointed' leaders, with leadership that complements organisational culture and traditional practice. I argue that the prevalence of high-density leadership configurations for teaching and learning is one of the reasons students in China gain excellent results in reading, maths and science in the Organisation for Economic Cooperation and Development's (OECD's) Programme for International Student Assessment (PISA). Shanghai, the only city in mainland China to participate in the PISA, gained the top position in reading, maths and science out of the

70 countries assessed in 2009 (Tucker, 2012). The results represent the academic performance of students in big Chinese cities. Although many factors contributed to the results, high-density leadership configurations is one of them. As the functions of leaders at different levels are complementary, collaborative and interdependent, leaders, along with teachers, create a kind of synergy to improve teachers' development, enhancing students' learning.

Let me expand upon my argument. In many Chinese secondary schools, many people, such as T&LDHs, teaching and learning directors, deans, and subject and year-subject leaders, take up formal positions to exercise learning-centred leadership, and are required to assume different responsibilities. Other people, including experienced teachers and key teachers 6 at different levels (city-, district-, and school-levels), take on informal leadership roles. Together they contribute to improving teaching quality; for example, a T&LDH with a history background may not provide suggestions pertinent to a senior-school maths teacher, while the maths subject leader can take responsibility for supervising maths teachers. A maths subject leader may not have time and energy to supervise every lesson of every maths teacher, while year-subject leaders are in charge of day-to-day teaching and learning for each form or grade. Moreover, experienced teachers often serve as mentors to young teachers, while key teachers lead teaching and learning initiatives. Thus both formal and informal leaders at different levels, along with experienced and key teachers, are well configured to contribute to students' and teachers' learning in many Chinese secondary schools.

Additionally, leaders at different levels have different roles and must work collaboratively to achieve their shared goals. Many schools, for instance, are promoting classroom teaching innovations. In the innovation process,

⁶ Key teachers refer to those teachers deemed to be of excellent quality, who have good reputations and a wealth of teaching experience. Their qualifications must be evaluated and awarded every three years.

leaders at school level may provide other leaders and teachers with theoretical guidance, and suggestions for implementing policy and practice, as well as intellectual and emotional support to promote change; subject leaders may draw up implementation plans with teachers, incorporating consideration of the subject context and features; year-subject leaders implement the plans, and provide feedback on the implementation to their superiors at different levels. Jun's example about mentoring teachers on how to reflect on their teaching (see pp. 132-133) partly reflects the different roles of T&LDHs and subject leaders. Hence, high-density leadership configurations in Chinese secondary schools may be good for improving student outcomes, enhancing teachers' professional development and promoting teaching initiatives.

Third, I have identified four types of distributed learning-centred leadership by considering teachers' attitudes to becoming leaders and formal and informal leadership roles (see pp. 163-164). My rationale behind these two dimensions is based on two considerations. One is the important concept of 'agency', involving leadership for learning and distributed leadership. Frost (2006) systematically examines the concept of 'agency' in leadership for learning, and defines it as 'the capacity to make a difference' (p. 20). He argues that 'shared leadership assumes that all members of a learning community have the capacity to influence' (p. 20), and 'social (or organisational) structures can be modified by the agency of individuals' by drawing on Giddens' (1984) theory of action (p. 23). Agency also relates to the agent's self-regulation and self-belief in efficacy, so distributed learning-centred leadership involves a teacher's attitude that influences whether or not s/he actively pursues a leadership role.

I have also considered the situation in China. As I observe in Chapter 3 (pp. 45-48), China is a large power-distance and collectivist society, in which people respect authority and value humility; they therefore set great store by formal positions and external recognition of identity and standing.

From these two dimensions, I have identified four categories of leadership:

'authorised', 'voluntary', 'appointed' and 'empowered'. I consider this typology helpful for interpreting distributed leadership in the Chinese context; it reminds school leaders of the need to designate suitable leaders for particular situations and create an environment that promotes and facilitates 'voluntary' leadership.

Fourth, based on Hallinger's (1982; 2011a) instructional management conceptual framework, I identified T&LDHs' job functions, including six dimensions and 16 job functions. In comparison with Hallinger's conceptual framework, research, as a new component, is included in learning-centred leadership. The six dimensions can be used to prescribe school leaders' job functions at different levels for learning-centred leadership in China.

Fifth, to return to my research focus: what is it that distinguishes excellent T&LDHs? By using Evans's (2008; 2011) conceptual model of the componential structure of professionalism as an analytical tool, integrating other theories, I have uncovered 12 characteristics of excellent T&LDHs and nine of typical T&LDHs in the Chinese secondary context. I believe I have revealed some characteristics of 'extended' and 'restricted' school leaders. Moreover, I have identified what effective and ineffective leadership looks like, and how T&LDHs' characteristics are reflected in their professional lives. Few studies provide evidence of what ineffective leadership looks like, so my study has contributed towards filling a gap in the knowledge base. My research findings could inform T&LDHs' selection, assessment and professional development.

Sixth, based on the problems I encountered in my research, I have adapted Evans's (2008; 2011) conceptual model of the componential structure of professionalism. In comparison with Evans's model, the revised model is more broad and inclusive as an analytical tool; moreover, informed by my research findings, it integrates three dimensions – cognitive, emotional and social – into the 'competential' component. Chinese people, as I explained when outlining our characteristics in Chapter 3 (pp. 45-48), place special importance on the ability to solve practical problems, and on self-control,

self-cultivation, self-development and self-improvement, and strong social skills to maintain harmony and good relations. These characteristics are closely associated with cognitive, emotional and social intelligence competencies, thus my adaption is particularly applicable to the Chinese context.

Finally, my study adopted Boyatzis's (2008; 2009) competency model and the BEI method used in competency studies developed in the business sector. Boyatzis's competency model extended my understanding of people's intelligence competencies, and the BEI method provided a suitable and useful technique for examining T&LDHs' job functions and characteristics. My integration of theories and research methods used in the business sector to explore school leaders' capabilities represents yet another contribution that my research has made. I have illustrated the potential of the BEI method and Boyatzis's competency model to examine school leadership configuration and the competencies that different school leaders need.

8.2 Limitations of the research

My research has two key limitations. First, a small sample in a single district limits the applicability of my findings to other contexts, even within China. The district in question is one of the most developed education districts, even in comparison with other districts in the same city. It cannot, therefore, represent all parts of the country. China is a populous and vast country, and economic and cultural development is very varied and diverse. More research is needed to explore T&LDHs' characteristics in different areas.

Second, as all the T&LDHs studied were in the same district, they are likely to share commonalities in relation to practice. While Hallinger's (1982; 2011a) *PIMRS* has some limitations in relation to evaluating T&LDHs' performance, a small sample itself presents problems in identifying differences in leadership behaviour between excellent and typical T&LDHs. Again, further research is needed to generate more evidence.

8.3 Summary

In summary, through my research I reflected on my previous work and experience as a school leader and studied relevant theories and theoretical perspectives in a critical way. My findings have opened a window on to distributed learning-centred leadership and school leaders' professionalism in Chinese secondary schools. I believe I have achieved the purposes of my doctoral study.

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List of Abbreviations

T&LDH: Teaching and Learning Deputy Headteacher

SMT: Senior Management Team

MEDH: Moral Education Deputy Headteacher

NCEE: National College Entrance Examination (gaokao)

PIMRS: the Principal Instructional Management Rating Scale

JSS: Junior Secondary School

NCSS: Normal Combined Secondary School

DMCSS: District-level Model Combined Secondary School

CMCSS: City-level Model Combined Secondary School

CII: Critical Incident Interviews

BEI: Behaviour Event Interview

LISAM: Low Inference Self-Assessment Measure

PISA: the Programme for International Student Assessment

OECD: the Organisation for Economic Co-operation and Development

Appendices

Appendix 1: The schedule of the critical incident interviews

- 1.1: The schedule of the critical incident interview used in the pilot interviews
- Background and biographical outline
 - (1) Service year
 - (2) Subject background
 - (3) The positions assumed before the current position
- Job responsibilities
 - (4) Leadership configuration for the whole school, and staffing in the teaching and learning department
 - (5) Major tasks and responsibilities
 - (6) Tasks and responsibilities which you actually do
- Critical incidents

'Now, I'd like to get a complete example of the kinds of things you do in your job. Can you think of a specific time or situation which went particularly well for you, or you felt particularly effective...a high point?'

Possible questions to get a complete story:

- (7) 'What was the situation? What events led up to it?
- (8) 'Who was involved?'
- (9) 'What did you think, feel, or want to do in the situation?'
- (10) 'What did you actually do or say?'

- (11) 'What was the outcome? What happened?'
- Characteristics needed to do the job
 - (12) 'What characteristics, knowledge, skills, or abilities do you think are needed to do your job? If you were hiring or training someone to do your job, what would you look for?'
- Environmental factors influencing job performance
 - (13) 'What factors do you think enhance your job effectiveness? How did these factors enhance your job effectiveness?'
 - (14) 'What factors do you think have a negative influence on your job effectiveness? How did these factors influence your job effectiveness?'
 - (15) 'What is the biggest obstacle that influences your job effectiveness? Do you think it can be removed? If yes, how can it be removed?'
- 1.2: The schedule of the critical incident interview used in formal interviews

Apart from the 15 interview questions shown above, another three questions were added to the interview schedule:

- A brief assessment of their own job performance
 - (16) 'Would you please list three aspects that you think you have done very well in your work? What are the achievements?'
 - (17) 'Would you please list one or two aspects that you think you need to improve in your work?'
 - (18) 'What do you think is the most difficult job in your work? Why?'

Appendix 2: The patterns generated from the qualitative data relating to the first research question

Note: The codes marked * are instructional leaders' 10 job functions developed by Hallinger (2011a).

2.1: The patterns generated from the T&LDHs' job responsibilities relating to the first research question

Number	Name of the code	Sources	References
1	* framing the goals for teaching and learning	17	18
2	* promoting professional development	16	27
3	* supervising and evaluating instruction	16	26
4	leading and managing instructional supportive affairs	15	33
5	implementing and reflecting the plans	15	21
6	leading and managing research activities and programmes	14	21
7	evaluating staff's performances	14	21
8	formulating, amending, improving and implementing policies and regulations relating to instructional affairs	12	12
9	* coordinating the curriculum	12	18
10	leading and promoting teaching and learning initiatives	11	15
11	observing educational laws and regulations	11	14
12	coordinating and communicating within and across departments	9	10
13	recruiting students	9	10
14	developing school-based curricula	8	8
15	staffing teachers and leaders within the department	7	11
16	* monitoring student progress	5	6

17	evaluating the departments' (e.g. subject groups) and groups' (e.g. year-subject groups) performances	4	4
18	leading and managing moral education	3	3
19	recruiting teachers	2	2
20	scrutinising and approving expenditures within the department	1	1
21	assisting in organising teacher delegator conferences	1	1
22	* communicating the goals for teaching and learning	1	1
23	coordinating external relationships	1	1
24	enhancing school's reputation in society	1	1
25	* providing incentives for learning	0	0
26	* providing incentives for teachers	0	0
27	* protecting instructional time	0	0
28	* maintaining high visibility	0	0

2.2: The patterns generated from all the qualitative data relating to the first research question

Number	Name of the code	Sources	References
1	* promoting professional development	40	143
2	* framing the goals for teaching and learning	39	45
3	leading and managing research activities and programmes	38	146
4	leading and managing instructional supportive affairs	35	56
5	* coordinating the curriculum	33	58
6	* supervising and evaluating instruction	33	51
7	leading and promoting teaching and learning initiatives	31	40

	ı	1
developing school-based curricula	30	37
implementing and reflecting the plans	28	36
evaluating departments', groups' and staff's performances	25	37
formulating, amending, improving and implementing policies and regulations relating to instructional affairs	21	25
coordinating and communicating within and across departments	16	27
staffing teachers and leaders within the department	16	22
* providing incentives for teachers	15	17
recruiting students	14	21
* monitoring student progress	14	19
observing educational laws and regulations	13	16
* communicating the goals for teaching and learning	9	15
leading and managing moral education	6	7
* maintaining high visibility	5	5
recruiting teachers	4	4
creating a positive teaching and learning climate	3	4
scrutinising and approving expenditures within the department	3	3
solving conflicts and problems between staff	2	2
* protecting instructional time	2	2
* providing incentives for learning	2	2
assisting in organising teacher delegator conferences	1	1
coordinating external relationships	1	1
enhancing school's reputation in society	1	1
	evaluating departments', groups' and staff's performances formulating, amending, improving and implementing policies and regulations relating to instructional affairs coordinating and communicating within and across departments staffing teachers and leaders within the department * providing incentives for teachers recruiting students * monitoring student progress observing educational laws and regulations * communicating the goals for teaching and learning leading and managing moral education * maintaining high visibility recruiting teachers creating a positive teaching and learning climate scrutinising and approving expenditures within the department solving conflicts and problems between staff * protecting instructional time * providing incentives for learning assisting in organising teacher delegator conferences coordinating external relationships	evaluating departments', groups' and staff's performances formulating, amending, improving and implementing policies and regulations relating to instructional affairs coordinating and communicating within and across departments staffing teachers and leaders within the department * providing incentives for teachers the monitoring student progress communicating the goals for teaching and learning leading and managing moral education * maintaining high visibility recruiting teachers 4 creating a positive teaching and learning climate scrutinising and approving expenditures within the department solving conflicts and problems between staff providing incentives for learning assisting in organising teacher delegator conferences coordinating external relationships 1 25 25 25 26 27 28 29 21 20 21 21 21 21 21 21 21 21

Appendix 3: The codes generated from the critical incident interviews with six T&LDHs relating to the second research question

Component	No.	Codes	Yan	Jun	Wei	Ping	Zhen	Lan
	1	being adept at organising activities and events	♦ ∫	*		*	•	
	2	setting high job expectations for oneself	~ \(\mathcal{1} \)	♦ ∫		♣ }	•	*
	3	making oneself an example to others		*		•	•	
	4	making good use of structure	•	♦	*	*	•	
	5	paying attention to details	•	•	•	∳ ∫	∳ ∫	
	6	actively promoting pedagogical initiatives	•		♦ ∫		•	
	7	ensuring the teachers' rationale fits with the head's			* \(\)			
Behavioural	8	having the ability to control and lead pedagogical initiatives						
	0	spontaneously among the teachers			^			
	9	setting teacher examples	•	*	*			
	10	establishing teaching quality standards			*			
	11	insisting on classroom observations		*				
	12	paying attention to procedures and common sense		*		Y		
	13	following educational policies and regulations	•		♦	•		
	14	being frequently productive		*	*	Y	•	Y
Intollogue	15	being reflective	*	•	•	•	•	•
Intellectual	16	lacking expertise and skills to lead and manage research				∳ ∫		•

	17	adopting a rational approach to practice		*	*	*	•	*
	18	being analytical	*	•	*	*	*	*
	19	being creative	*	.	♣ ∫	٧	*	٧
	20	being investigative	A	^		^	^	*
	21	lacking confidence				۴ſ		٧
	22	knowing one's own shortcomings and/or strengths	*	*		4 l	٨ſ	•
	23	respecting and following superiors' and experts' views	*		*	٠ſ	٨ſ	*
	24	being adaptive	•	•	•		.	*
	25	having good control of one's own emotion		*				
	26	lacking good control of one's own emotion		*				4 \(\)
	27	having empathy towards others	•	♣ \	•	•	.	♦ ∫
	28	being a good communicator			*	.		
	29	having an awareness of power relations	•	*	*	4 1	٨ſ	♣ \
	30	doing things in a collegial way	•	•		^	•	•
	31	having the awareness and skills to coach others		•	•	•	•	•
	32	inspiring others	♦ J	*	•		.	*
	33	persuading others with some strategies	•	•	♦ ∫			*
	34	having good relationships with others	*		*	٠ſ	↓	
	35	negotiating with subordinates, not commanding them				•		
Authorities d	36	holding an examination-centred rationale	٧	*		∳ \		
Attitudinal	37	valuing research	•	*	♦ ∫	*	٨ſ	4 \(\)

38	emphasising work effectiveness				*	\$ \$	
39	attributing success to both internal and external elements	•	♦ ∫	♦ ∫	♣ ∫	*	
40	attributing failure to internal elements	•	•	•	* \(\)	•	
41	attributing failure to external elements						* \(\mathcal{1} \)
40	holding a positive attitude when facing a difficult time and						
42	disadvantageous situations	♣ .	♦ ∫	•		•	
43	regarding himself/herself as a leader and a server	↓ 1	* \(1	♦ ∫			
44	providing a direction to do things	*	^	♦ ∫			
45	developing educational resources outside the school	*	♦ ∫	* 1			
46	seeing educating parents as also the duty of the school			* 1			
47	paying attention to both the teaching course and outcomes	•	♦ ∫	♦ ∫			
48	avoiding paying attention to very specific things			•			
49	emphasising teachers' basic teaching skills	•	•				
50	valuing harmony and affection between people	♦ .		♦ ∫	♣ ∫	•	
51	being loyal to the school and the headteacher	•	•		♦ ∫	•	* 1
52	having high morale	۴J	•	Y	♣ ∫	•	
53	valuing gaining respect from colleagues	•				*	

Appendix 4: Questionnaire data analysis

4.1: ANOVA across the eight sample schools

Subs	cales	Sum of Squares	df	Mean Square	F	Sig.
Subscale 1:	Between groups	14.757	7	2.108	7.667	.000
Frames the school's goals	Within groups	114.377	416	.275		
Jeanne geans	Total	129.133	423			
Subscale 2:	Between groups	20.590	7	2.941	6.925	.000
Communicates the school's goals	Within groups	176.689	416	.425		
Solitooi o godio	Total	197.278	423			
Subscale 3:	Between groups	19.054	7	2.722	9.172	.000
Supervises and evaluates	Within groups	123.466	416	.297		
instruction	Total	142.520	423			
Subscale 4:	Between groups	20.736	7	2.962	8.360	.000
Coordinates the curriculum	Within groups	147.413	416	.354		
Carricularii	Total	168.149	423			
Subscale 5:	Between groups	26.725	7	3.818	9.891	.000
Monitors student progress	Within groups	160.569	416	.386		
progress	Total	187.293	423			
Subscale 6:	Between groups	13.385	7	1.912	6.447	.000
Protects instructional time	Within groups	123.380	416	.297		
instructional time	Total	136.764	423			
Subscale 7:	Between groups	27.593	7	3.942	9.370	.000
Maintains high visibility	Within groups	175.001	416	.421		
VISIDIIILY	Total	202.595	423			
Subscale 8:	Between groups	44.332	7	6.333	12.966	.000
Provides incentives for	Within groups	203.191	416	.488		
teachers	Total	247.523	423			

Subscale 9:	Between groups	20.513	7	2.930	9.710	.000
Promotes professional	Within groups	125.544	416	.302		
development	Total	146.057	423			
Subscale 10:	Between groups	21.984	7	3.141	9.117	.000
Provides incentives for	Within groups	143.300	416	.344		
learning	Total	165.284	423			

4.2: The Inter-rater reliability of teachers' responses

Subscale	Inter-rater Reliability
Subscale 1 Frames the school's goals	0.87
Subscale 2 Communicates the school's goals	0.86
Subscale 3 Supervises and evaluates instruction	0.89
Subscale 4 Coordinates the curriculum	0.88
Subscale 5 Monitors student progress	0.90
Subscale 6 Protects instructional time	0.84
Subscale 7 Maintains high visibility	0.89
Subscale 8 Provides incentives for teachers	0.92
Subscale 9 Promotes professional development	0.90
Subscale 10 Provides incentives for learning	0.89

4.3: Inter-item correlation matrix

Subscale	Subscale 1	Subscale 2	Subscale 3	Subscale 4	Subscale 5	Subscale 6	Subscale 7	Subscale 8	Subscale 9	Subscale 10
Subscale 1	(.896)	.729	.731	.748	.665	.614	.564	.628	.691	.659
Subscale 2		(.869)	.724	.746	.765	.605	.661	.688	.644	.696
Subscale 3			(.891)	.805	.766	.655	.611	.701	.766	.716
Subscale 4				(.898)	.778	.680	.655	.647	.749	.712
Subscale 5					(.877)	.684	.731	.775	.703	.762
Subscale 6						(.832)	.668	.678	.733	.705
Subscale 7							(.808.)	.774	.659	.778
Subscale 8								(.906)	.723	.801
Subscale 9									(.927)	.753
Subscale 10										(.885)

4.4: Independent samples test

		Levene's Equality of		t-test for Equality of Means						
						Sig. (2-	Mean	Std. Error	95% Confidence Differe	Interval of the
-		F	Sig.	t	df	tailed)	Difference	Difference	Lower	Upper
Item 1	Equal variances assumed	.281	.596	.167	422	.867	.010	.061	109	.130
	Equal variances not assumed			.168	419.599	.867	.010	.061	109	.129
Item 2	Equal variances assumed	6.865	.009	-1.074	422	.284	072	.067	203	.060
	Equal variances not assumed			-1.080	406.044	.281	072	.066	202	.059
Item 3	Equal variances assumed	6.007	.015	450	422	.653	030	.067	161	.101
	Equal variances not assumed			451	416.948	.652	030	.066	160	.100
Item 4	Equal variances assumed	.630	.428	1.018	422	.309	.065	.064	060	.190
	Equal variances not assumed			1.022	416.327	.307	.065	.063	060	.190
Item 5	Equal variances assumed	.184	.668	1.568	422	.118	.097	.062	024	.218
	Equal variances not assumed			1.570	421.920	.117	.097	.062	024	.218
Item 6	Equal variances assumed	2.929	.088	.279	422	.780	.027	.097	163	.217
	Equal variances not assumed			.280	418.457	.780	.027	.096	162	.216
Item 7	Equal variances assumed	4.739	.030	.611	422	.541	.048	.078	105	.200
	Equal variances not assumed			.613	419.513	.540	.048	.077	105	.200
Item 8	Equal variances assumed	3.112	.078	1.485	422	.138	.126	.085	041	.292
	Equal variances not assumed			1.488	420.594	.137	.126	.084	040	.292

Item 9	Equal variances assumed	2.499	.115	.027	422	.978	.002	.069	135	.138
	Equal variances not assumed			.027	416.155	.978	.002	.069	134	.138
Item	Equal variances assumed	6.342	.012	283	422	.777	022	.079	177	.133
10	Equal variances not assumed			284	417.012	.776	022	.079	177	.132
Item 11	Equal variances assumed	11.463	.001	987	422	.324	072	.073	215	.071
	Equal variances not assumed			993	401.062	.321	072	.072	214	.070
Item	Equal variances assumed	2.763	.097	012	422	.990	001	.064	128	.126
12	Equal variances not assumed			012	418.297	.990	001	.064	127	.126
Item	Equal variances assumed	13.138	.000	-1.340	422	.181	085	.064	210	.040
13	Equal variances not assumed			-1.348	403.779	.178	085	.063	210	.039
Item	Equal variances assumed	7.103	.008	-1.396	422	.163	097	.070	234	.040
14	Equal variances not assumed			-1.401	417.817	.162	097	.069	233	.039
Item 15	Equal variances assumed	28.215	.000	-3.573	422	.000	235	.066	365	106
15	Equal variances not assumed			-3.601	390.963	.000	235	.065	364	107
Item	Equal variances assumed	1.724	.190	.084	422	.933	.006	.068	129	.140
16	Equal variances not assumed			.085	413.656	.933	.006	.068	128	.140
Item	Equal variances assumed	8.319	.004	644	422	.520	045	.070	184	.093
17	Equal variances not assumed			648	406.872	.517	045	.070	183	.092
Item	Equal variances assumed	3.975	.047			730	422	.065	176	.081
18	Equal variances not assumed			732	418.498	.465	048	.065	175	.080
Item	Equal variances assumed	4.408	.036	-1.348	422	.178	099	.074	245	.046

19	- Equal variances not assumed	I		-1.355	413.096	.176	099	.073	244	.045
Item	Equal variances assumed	4.702	.031	.305	422	.761	.026	.084	140	.192
20	Equal variances not assumed			.306	418.702	.760	.026	.084	140	.191
Item	Equal variances assumed	1.471	.226	-2.399	422	.017	204	.085	371	037
21	Equal variances not assumed			-2.410	414.274	.016	204	.085	370	038
Item	Equal variances assumed	7.615	.006	464	422	.643	036	.079	191	.118
22	Equal variances not assumed			466	409.822	.642	036	.078	190	.117
Item	Equal variances assumed	1.942	.164	.206	422	.837	.014	.068	119	.147
23	Equal variances not assumed			.207	419.304	.836	.014	.068	119	.147
Item	Equal variances assumed	.667	.414	299	422	.765	022	.075	170	.125
24	Equal variances not assumed			299	421.924	.765	022	.075	170	.125
Item	Equal variances assumed	.256	.613	.873	422	.383	.076	.087	095	.247
25	Equal variances not assumed			.872	419.009	.384	.076	.087	095	.247
Item	Equal variances assumed	2.590	.108	1.810	422	.071	.113	.062	010	.235
26	Equal variances not assumed			1.808	419.530	.071	.113	.062	010	.235
Item	Equal variances assumed	3.953	.047	789	422	.431	052	.066	181	.077
27	Equal variances not assumed			792	412.675	.429	052	.066	181	.077
Item	Equal variances assumed	10.692	.001	100	422	.921	007	.069	142	.129
28	Equal variances not assumed			100	404.793	.920	007	.069	142	.128
Item	Equal variances assumed	11.996	.001	-1.982	422	.048	129	.065	256	001
29	Equal variances not assumed			-1.996	396.910	.047	129	.064	255	002

					1					
Item 30	Equal variances assumed	.989	.321	.034	422	.973	.003	.091	176	.182
30	Equal variances not assumed			.034	421.888	.973	.003	.091	176	.182
Item	Equal variances assumed	1.995	.159	742	422	.458	059	.079	214	.097
31	Equal variances not assumed			744	420.984	.457	059	.079	214	.096
Item	Equal variances assumed	2.013	.157	-1.686	422	.093	145	.086	315	.024
32	Equal variances not assumed			-1.691	419.330	.092	145	.086	315	.024
Item	Equal variances assumed	1.001	.318	784	422	.434	072	.091	251	.108
33	Equal variances not assumed			783	419.798	.434	072	.091	251	.108
Item	Equal variances assumed	2.960	.086	057	422	.954	004	.064	130	.122
34	Equal variances not assumed			058	411.056	.954	004	.064	129	.122
Item	Equal variances assumed	26.436	.000	4.830	422	.000	.552	.114	.328	.777
35	Equal variances not assumed			4.798	382.780	.000	.552	.115	.326	.779
Item	Equal variances assumed	2.199	.139	.874	422	.383	.064	.073	080	.207
36	Equal variances not assumed			.876	418.697	.381	.064	.073	079	.207
Item	Equal variances assumed	.508	.476	-1.447	422	.149	125	.086	294	.045
37	Equal variances not assumed			-1.449	421.997	.148	125	.086	294	.045
Item	Equal variances assumed	.000	.999	1.153	422	.250	.108	.094	076	.292
38	Equal variances not assumed			1.151	416.576	.250	.108	.094	077	.293
Item	Equal variances assumed	1.886	.170	514	422	.607	041	.079	197	.115
39	Equal variances not assumed			516	418.916	.606	041	.079	197	.115
Item	Equal variances assumed	.151	.697	.143	422	.886	.014	.101	183	.212

40	 Equal variances not assumed 			.143	411.422	.886	.014	.101	184	.213
Item	Equal variances assumed	11.053	.001	-2.963	422	.003	189	.064	315	064
41	Equal variances not assumed			-2.976	413.225	.003	189	.064	314	064
Item	Equal variances assumed	11.596	.001	-1.923	422	.055	123	.064	248	.003
42	Equal variances not assumed			-1.933	409.285	.054	123	.064	248	.002
Item	Equal variances assumed	2.819	.094	193	422	.847	012	.062	134	.110
43	Equal variances not assumed			194	414.804	.846	012	.062	134	.110
Item	Equal variances assumed	10.496	.001	-1.639	422	.102	106	.065	233	.021
44	Equal variances not assumed			-1.649	401.786	.100	106	.064	232	.020
Item	Equal variances assumed	6.872	.009	-1.162	422	.246	080	.069	216	.056
45	Equal variances not assumed			-1.168	407.711	.244	080	.069	215	.055
Item	Equal variances assumed	2.729	.099	326	422	.744	021	.065	149	.107
46	Equal variances not assumed			328	414.261	.743	021	.065	148	.106
Item	Equal variances assumed	1.178	.278	084	422	.933	005	.064	132	.121
47	Equal variances not assumed			084	419.798	.933	005	.064	132	.121
Item	Equal variances assumed	2.392	.123	.622	422	.534	.049	.079	106	.204
48	Equal variances not assumed			.623	420.720	.533	.049	.079	106	.204
Item	Equal variances assumed	.034	.855	.552	422	.581	.047	.085	120	.214
49	Equal variances not assumed			.553	421.779	.581	.047	.085	120	.213
Item	Equal variances assumed	3.184	.075	-1.176	422	.240	085	.072	227	.057
50	Equal variances not assumed			-1.178	421.141	.239	085	.072	226	.057

4.5: Multiple comparisons - Scheffe

			Mean			95% Confidence Interval		
Subscale	(I) Rating group	(J) Rating group	Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound	
Subscale 1: Frames the	Teachers' rating	Headteachers' rating	252	.1949	.435	731	.227	
school's goals		T&LDHs' rating	077	.1949	.925	556	.402	
	Headteachers' rating	Teachers' rating	.252	.1949	.435	227	.731	
		T&LDHs' rating	.175	.2731	.814	496	.846	
	T&LDHs' rating	Teachers' rating	.077	.1949	.925	402	.556	
		Headteachers' rating	175	.2731	.814	846	.496	
Subscale 2:	Teachers' rating	Headteachers' rating	177	.2410	.764	769	.415	
Communicates the school's goals		T&LDHs' rating	.273	.2410	.527	319	.865	
Control of godino	Headteachers' rating	Teachers' rating	.177	.2410	.764	415	.769	
		T&LDHs' rating	.450	.3376	.412	379	1.279	
	T&LDHs' rating	Teachers' rating	273	.2410	.527	865	.319	
		Headteachers' rating	450	.3376	.412	-1.279	.379	
Subscale 3: Supervises	Teachers' rating	Headteachers' rating	322	.2043	.291	824	.180	
and evaluates instruction		T&LDHs' rating	147	.2043	.773	649	.355	
	Headteachers' rating	Teachers' rating	.322	.2043	.291	180	.824	
		T&LDHs' rating	.175	.2863	.830	528	.878	
	T&LDHs' rating	Teachers' rating	.147	.2043	.773	355	.649	
		Headteachers' rating	175	.2863	.830	878	.528	

Subscale 4: Coordinates	Teachers' rating	Headteachers' rating	158	.2223	.776	705	.388
the curriculum		T&LDHs' rating	.092	.2223	.919	455	.638
	Headteachers' rating	Teachers' rating	.158	.2223	.776	388	.705
		T&LDHs' rating	.250	.3115	.725	515	1.015
	T&LDHs' rating	Teachers' rating	092	.2223	.919	638	.455
		Headteachers' rating	250	.3115	.725	-1.015	.515
Subscale 5: Monitors	Teachers' rating	Headteachers' rating	227	.2353	.629	805	.351
student progress		T&LDHs' rating	.423	.2353	.200	155	1.001
	Headteachers' rating	Teachers' rating	.227	.2353	.629	351	.805
		T&LDHs' rating	.650	.3297	.144	160	1.460
	T&LDHs' rating	Teachers' rating	423	.2353	.200	-1.001	.155
		Headteachers' rating	650	.3297	.144	-1.460	.160
Subscale 6: Protects	Teachers' rating	Headteachers' rating	367	.2006	.190	859	.126
instructional time		T&LDHs' rating	042	.2006	.979	534	.451
	Headteachers' rating	Teachers' rating	.367	.2006	.190	126	.859
		T&LDHs' rating	.325	.2811	.513	365	1.015
	T&LDHs' rating	Teachers' rating	.042	.2006	.979	451	.534
		Headteachers' rating	325	.2811	.513	-1.015	.365
Subscale 7: Maintains	Teachers' rating	Headteachers' rating	476	.2453	.154	-1.079	.127
high visibility		T&LDHs' rating	.349	.2453	.364	254	.952
	Headteachers' rating	Teachers' rating	.476	.2453	.154	127	1.079
		T&LDHs' rating	.825	.3437	.057	019	1.669

	T&LDHs' rating	Teachers' rating	349	.2453	.364	952	.254
		Headteachers' rating	825	.3437	.057	-1.669	.019
Subscale 8: Provides	Teachers' rating	Headteachers' rating	502	.2696	.178	-1.165	.160
incentives for teachers		T&LDHs' rating	077	.2696	.960	740	.585
	Headteachers' rating	Teachers' rating	.502	.2696	.178	160	1.165
		T&LDHs' rating	.425	.3778	.532	503	1.353
	T&LDHs' rating	Teachers' rating	.077	.2696	.960	585	.740
		Headteachers' rating	425	.3778	.532	-1.353	.503
Subscale 9: Promotes	Teachers' rating	Headteachers' rating	304	.2076	.343	814	.206
professional development		T&LDHs' rating	.046	.2076	.976	464	.556
	Headteachers' rating	Teachers' rating	.304	.2076	.343	206	.814
		T&LDHs' rating	.350	.2909	.486	365	1.065
	T&LDHs' rating	Teachers' rating	046	.2076	.976	556	.464
		Headteachers' rating	350	.2909	.486	-1.065	.365
Subscale 10: Provides	Teachers' rating	Headteachers' rating	.031	.2221	.990	514	.577
incentives for learning		T&LDHs' rating	.506	.2221	.076	039	1.052
	Headteachers' rating	Teachers' rating	031	.2221	.990	577	.514
		T&LDHs' rating	.475	.3112	.313	289	1.239
	T&LDHs' rating	Teachers' rating	506	.2221	.076	-1.052	.039
		Headteachers' rating	475	.3112	.313	-1.239	.289