In Search of the Middle Influence: Case Studies of Heads of Teaching-research Groups in Leading Teacher Learning through Instructional Leadership in Chinese Primary Schools

by

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Statement of Originality

I, TANG, Jianjing, hereby declare that I am the sole author of the thesis and the material presented in this thesis is my original work except those indicated in the acknowledgement. I further declare that I have followed the University's policies and regulations on Academic Honesty, Copyright and Plagiarism in writing the thesis and no material in this thesis has been submitted for a degree in this or other universities.

Abstract

Middle-level instructional leaders within schools are increasingly recognized with a growing number of studies showing their potential influence on teacher learning. This study explores the impact of middle-level instructional leaders, specifically the TRG heads, on teacher learning in schools in the context of the Chinese system. Interviews, participant observation, and documents were collected and qualitatively analyzed to categorize the major leadership roles and practices and capture the multi-level influences on middle leadership. The findings revealed four areas where middle leaders can impact teacher learning: (a) nurturing 'practice-embedded' professional learning; (b) optimizing conditions for teacher engagement; (c) leading teachers' research-informed practice; and (d) drawing on external resources to develop teachers. The five core roles (i.e., hub, forerunner, role model, peer mentor, and knowledge broker) and the four core areas with 18 specific practices comprise a model of conceptualization of the teacher development dimension of middle-level instructional leadership. It is argued that co-learning, participation and brokering are integral to middle leadership, and middle leaders engage in multiple spheres to lead teacher learning. Paternalistic attitudes towards teachers and the use of benevolence and servant leadership are viewed as appropriate middle leadership. Successful middle leadership can be seen in challenging school contexts, and layered instructional leadership advances teacher learning. The manner in which the findings can enable practitioners and scholars internationally to learn from the Chinese experience is discussed. This study contributes to the knowledge base by including different stakeholders' perspectives to clarify and justify the impact of middle leaders on teachers. It enhances the understanding of how middle leaders support teacher learning in a hierarchical educational context and provides a useful starting point when studying middle leadership for teacher learning. The study also extends the conventional notion of instructional leadership and expands the understanding of how the influencing factors individually and collectively

influence middle leadership for teacher learning.

Keywords: middle leaders, instructional leadership, teacher learning, model, factors

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List of Abbreviations

AS   Ancillary Service

CYL   The Communist Youth League

GG   Grade Group

LPG   Lesson Preparation Group

OME   Office for Moral Education

OTA   Office for Teaching Affairs

OTR   Office for Teaching-research

STU   School Trade Union

TRG   Teaching-research Group

WF   Women's Federation

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CHAPTER 1 THE STATEMENT OF THE PROBLEM

Schools across the world have been facing many changes, including shifts in student and teacher demographics, third-wave education reforms, increased school autonomy, and accountability policies aimed at enhancing school effectiveness and education quality. The restructuring of schools has created new expectations and accountability for those who offer leadership within the educational system (Day & Gu, 2018; Muijs, 2011; Murphy, 2015). The increasing demands and expectations on school leaders have ignited scholars' interest in reconsidering the role of school leaders (e.g., Fullan, 2020; Harris, Campbell, & Jones, 2022; Leithwood, Harris, & Hopkins, 2020).

Studies have explored the influence of principalship on school development and improvement (e.g., Hallinger & Walker, 2017; Marks & Printy, 2003; Walker & Qian, 2022). Although research has long acknowledged principals' significant impact on school climate and direction of change, principalship has had an indirect impact on pedagogical improvement and student achievement (Hallinger, Bickman, & Davis 1996; Day, Gu, & Sammons, 2016). As such, investigating the principalship alone is insufficient for understanding contemporary collective leadership in schools in response to new initiatives and programmes. Accordingly, there is a need for more investigations on the sources of school leadership other than principals that directly or indirectly drive change among teachers and students (Elmore, 2004; Leithwood, 2016; Lipscombe, Tindall-Ford, & Lamanna, 2023).

Over the past three decades, comprehensive, systematic educational reforms have resulted in increased school leadership responsibilities for improving organisational and learning outcomes (Day, Sammons, Hopkins, Leithwood, & Kington, 2008; Hallinger & Heck, 2002; Muijs, 2011; Walker, Lee, & Bryant, 2014). The increased responsibilities of principals have led to work intensification that has, to some extent, been resolved through sharing leadership

responsibilities with middle leaders (Dinham, 2016; Irvine & Brundrett, 2016; Ylimaki, 2013). The sharing serves to consolidate the move to give middle leaders new leadership roles while emphasizing their professional influence (Hargreaves, 2020; Edwards-Groves, Grootenboer, Hardy, & Rönnerman, 2019).

Aligning with this global trend, middle leaders in Chinese education have, over the past three decades, taken more responsibility in the teaching and learning process. Major curriculum reforms since 2000 have established new systematic goals helping to transform teaching and learning methods to promote students' holistic development in Chinese schools (Qian & Walker, 2013; Tan, 2011). The transformation has led to an emerging interest in how school leaders create positive conditions for supporting teaching and learning (Cravens, 2008; Qian & Walker, 2013; Walker & Qian, 2015; Zhang & Pang, 2016). The literature emphasises the importance of the middle-level leaders for stimulating school transformation (Bryant & Rao, 2019; Harris, A., & Jones, 2017). Middle leadership is often viewed as coaching, supporting, and modelling (Mercer & Ri, 2006; Zhang, Wong & Wang, 2022). Although China has accumulated a great deal of middle-level professional practices for enhancing teacher capacity over the past few decades, it remains largely hidden from international audiences.

Similar to Western countries, middle leaders in Chinese schools are experienced teachers. They are called backbone teachers *(guguan jiaoshi)*, special class teachers *(teji jiaoshi)*, or master teachers *(mingshi)* and the focus of their roles is on improving teacher learning and development at schools (Bryant & Rao, 2019; Wang & Hong, 2019). School-based teacher professional development for student learning is systematically organised by heads of teaching-research groups (TRG heads), who lead subject-based teaching-research groups (TRG) and lesson preparation groups, which are the smallest units at schools. The key function of these bodies is to develop teachers, help them understand their role in educational reform and provide

them with pedagogical support (Guo, 2005). Scholars have observed the close relationship between middle leaders, specifically TRG heads and teacher learning (e.g., Lv, Y., 2011; Wang, H., 2017). Leading teams of teachers is often a large part of middle leadership, such as leading teachers within a subject area (Chen, B., 2011; Hu & Gao, 2012). Consequently, a variety of opportunities are created for the TRG heads to exercise instructional leadership for enhancing teacher development.

Instructional leadership refers not merely to the role of the principal (Hallinger & Murphy, 1985), instructional leadership contributions of teacher learning involves other school leaders, such as middle leaders (Bryant, 2019; De Nobile, 2018; Dinham, 2007; Hairon, 2016; Hallinger, Adams, Harris, & Jones, 2018). However, how middle leaders build teacher capacity remains underexplored (Bryant & Walker, 2022; Bryant, Wong, & Adames, 2020; Edwards-Groves, Grootenboer, Hardy, & Ronnerman, 2019; Hairon, Goh & Chua, 2015; Ho, Bryant & Walker, 2022). In China, there are few studies investigating how middle leaders lead teacher professional learning. The existing empirical evidence concerns the positive influence of TRG heads in teachers' classroom practice (Chen, 2011; Huang, 2012; Li, 2010) providing insight on the central role of the TRG heads as builders of teacher capacity. However, research on this process, how TRG heads, individually or collectively, informally or formally, exert influence over teachers, remains very thin.

Accordingly, there is a need to broaden and deepen an understanding of how TRG heads, i.e., the middle-level professionals, enact their instructional leadership in ways that develop teacher capacity, especially how they supervise teachers, how they work individually and collaboratively, how they find support, and how conditions shape the form of TRGs leadership. The study thus aims to address the leadership interactions of TRG heads, how TRG heads exert influence over teachers, and why they enact their leadership in a particular way. The following

sections provide rationales for focusing on TRG heads and their leadership.

1.1 Scope of Chapter

This chapter has six sections. The first section addresses the question: why is there a need to conduct an examination into the role and practices of Chinese middle-level instructional leaders and specifically TRG heads as instructional leaders in fostering teacher learning and development? After identifying the current knowledge boundaries in Chinese instruction-oriented middle leadership, I explain the research purpose in the second section, that is, what I aim to uncover in the course of this study. The purpose informs the research questions, which are presented in the third section. The fourth section comprises a justification of the contribution and originality of this research, while the fifth section contains my position in the research. The final section comprises a description of the remaining chapters.

1.2 The Rationale of the Study

This section provides a rationale for examining the role of TRG heads in helping teachers develop their craft. Two interrelated factors underpin this rationale. First, the sphere of leadership influence of middle leaders has expanded with increased responsibilities for improving learning and teaching (Bryant, 2019; Leithwood, Harris, & Hopkins, 2020). The increased responsibilities of principals have led to increased workload which has partially been solved by dispersing some leadership responsibilities to middle leaders (Dinham, 2016; Irvine & Brundrett, 2016; Lowenhaupt & McNeill, 2018; Ylimaki, 2013).

There has been wider acknowledgement that teachers as reform leaders in school reform and improvement (Bryant & Rao, 2019; Hargreaves, 2000; Lieberman, Campbell, & Yashkina, 2016; Wenner & Campbell, 2017). Teachers occupying middle-level leadership positions now typically align more closely with teachers and lead teachers within and beyond their traditional

influential sphere (Day & Grice, 2019). China has also signalled its respect for teacher professionalism and has been considering similar reforms of empowering teachers to lead initiatives (Gu, 2013; Qian & Walker, 2022; Zhang, Walker & Qian, 2022) while encouraging leadership from middle leaders and teachers (Bryant & Rao, 2019).

Over the past two decades, middle leaders, specifically the TRG heads, have assumed greater responsibility for improving teaching and learning (Gao & Hu, 2016). Since 2000, a third-wave of educational reform has emerged (Cheng, 2003). Despite the good intentions of the educational reforms, the new visions of education, including decentralization and initiating school-based management have posed some conceptual and practical challenges to the efforts of teachers and school leaders to ensure good quality teaching (Cheng, 2019; Lee & Yin, 2011; Lin, 2018a; Paine & Fang, 2007).

In China, these ongoing reforms have reinforced the professional role of middle leaders for advancing teacher learning and implementing curricular and instructional change within and across schools (Bryant & Rao, 2019; Du, F., 2011). However, subject-based TRG has been unable to meet the needs of teacher learning in response to the age of innovation and diversity. Cross-subject teaching-research has emerged as an innovative strategy for enhancing teacher development (Shen & Yan, 2018). The increased workload, coordination of inter-group teacher collaboration, and routinization of the cross-subject teaching and research may pose challenges to the TRG heads. Moreover, the role of teaching and research extends beyond merely focusing on teaching content to include broader functions, namely, improving teaching and learning, advancing teacher learning, facilitating student development, and making instructional decisions (Ministry of Education, 2019). Accordingly, there is a need to redefine of the role of the TRG heads.

Secondly, the reform of instructional leadership has become a focus of policymakers and school

leaders (Hallinger, 2015; Hallinger, Gümüş, & Bellibaş, 2020; Leithwood, 2001). Instructional leadership has stretched over the work of middle leaders (Bryant, 2019; Bush, 2015; De Nobile, 2018; Dinham, 2007; Hairon, 2016; Hallinger, Adams, Harris, & Jones, 2018). In addition to teaching responsibilities, middle leaders, who are often tasked with representing their subject teams, increasingly participate when the whole school makes decisions about instruction and the curriculum (Hammersley-Fletcher & Strain, 2011). Middle leaders view developing effective teaching and learning practices as being central to their role (Irvine & Brundrett, 2017; De Nobile, 2017; Thorpe & Bennett-Powell, 2014). As leadership actions are closely associated with teaching and learning, either directly or indirectly (Hallinger, 2003; Hallinger & Heck, 1996), middle leaders are recognized as a potential source of instructional leadership (Leithwood, 2016; Tang, Bryant, & Walker, 2022).

Although instructional leadership is widely emphasized across principal leadership literature (Hallinger & Chen, 2015; Hallinger & Bryant, 2013), knowledge about middle leaders has not yet been fully grasped (Bush, 2013; Hallinger, 2009; Leithwood, 2016). The studies that exist have noted the influence of instructional leadership by middle leaders on teachers; however, knowledge on the nature of this role and the scope and focus of influence, specifically how they encourage teacher growth and professionalism, how they prioritize their tasks, and how they foster teacher development is still unclear. The present study thus reconsiders the concept of instructional leadership more broadly to include middle-level leadership position. Instructional leadership is inextricably connected to teacher development in schools (Blasé & Blasé, 1998; Walker & Qian, 2022).

In China, the education system has made use of the teaching-research system to promote subject-teacher collaboration and development. The teaching-research office (*Jiaoyanshi*), TRG (*Jianyanzu*), lesson preparation group (*Beikezu*), teaching-research officer (*Jiaoyanyuan*)

and head of TRG (*Jianyan zuzhang*) are enabling structures in the teaching-research system for stimulating professional dialogue, promoting collaboration, and enhancing solidarity among teachers (Tsui & Wong, 2009). Teaching-research officers who are external experts in subject areas from the teaching-research offices support subject-based TRGs and lesson preparation groups. Teaching-research offices are established and attached to the education departments at district/county and provincial/municipal levels to promote teacher learning (Wang & Hu, 2020). Middle leaders leading the TRGs and lesson preparation groups make use of the teaching-research structures they work in to support and conduct teacher learning activities (Hu, 2013; Xi, 2015).

Since 1952, TRG heads (middle leaders) in China have accumulated considerable professional practice leading teacher professional learning and development as individuals or as teams, which inform the wisdom of educational leadership and construct local theories. The focus of the present study is thus to develop an indigenous understanding of Chinese TRG heads in building teacher capacity, which remains largely absent in the international literature.

Only a small number of studies have examined how heads of TRG's build teachers' instructional capacity (i.e., Chen, 2011; Huang, 2012; Li, 2010; Li, 2017). These studies refer mostly to the role definition, duties, responsibilities, and performance of TRG heads for promoting teacher development. Only three empirical studies have investigated leadership strategies and practices of TRG heads to build capacity among teachers. Chen (2011) investigated the heads of TRGs in rural schools and depicted the essential practices in building teacher capacity. The two others described the leadership strategies of TRG heads for developing novice teachers (Huang, 2012; Li, 2010). These understandings help uncover the influence of TRG heads over other teachers. However, simply describing leadership strategies (e.g., modelling good practice) does not explain how different aspects of leadership impact

teachers. This impact demonstrates interactions among principals, TRG heads, teachers, and contexts. Studies have largely failed to examine these interactions and the influence of context, such as school conditions, toward building teacher capacity. Studies regarding TRG heads lack empirical data. As a result, there is a gap in theorising the leadership practices of TRG heads. There is thus a conceptual gap in understanding how TRG heads exercise instructional leadership for building teacher capacity in mainland China. Strengthening the existing knowledge base with more empirical examination in China is timely and necessary. These contextual and conceptual underpinnings will be discussed in the following sections.

1.2.1 Contextual Underpinnings

Over the past three decades, educational reforms, particularly quality assurance review, education accountability, and school-based management (Cheng, 2022), have been enhancing school leadership, giving them expanded responsibilities (Day, Sammons, Hopkins, Leithwood & Kingston, 2008; Hallinger & Heck, 2002; Muijs, 2011; Walker, Lee & Bryant, 2014). These trends are evident in many countries. In the United States, for example, the Adequate Yearly Progress (AYP) assesses schools. School leaders decide how to design their improvement programmes, aligning school values and development planning with achieving the state's academic standards (Ma, Shen, & Krenn, 2014). Similarly, recent reforms in England give schools more autonomy with increased responsibilities while reducing the involvement of local authorities (Greany, 2015). The British government has encouraged school leaders to develop a school-led curriculum in response to the accountability system (Lupton & Thomson, 2015). In Canada, provincial large-scale testing programmes and accountability policies have restructured school management leading to the expanded role of school leaders (Copp, 2019). Principals are given the autonomy to develop their schools based on their own specific characteristics and needs while the Ministry of Education provides the overall direction.

Similar accountability-oriented reforms have also been implemented in the Asia-Pacific region, such as in China, Singapore and Malaysia (Cheng, Ko & Lee, 2016; Fullan, 1998; Lee, Walker & Chui, 2012; Lieberman, 1998). Responding to the change to school restructuring reforms, principals have encouraged active participation and teachers' professional autonomy (Cheng, Ko, & Lee, 2016; Harris, 2004; Gonzales & Lambert, 2014; Lieberman & Miller, 2004; Spillane, 2006; Wang, Waldman, & Zhang, 2014). The expansion of principals' responsibilities has led to increased workload, which has, to some extent, been addressed by delegating leadership responsibilities to teachers in middle leadership positions, such as department heads and subject leaders (Dinham, 2016; Irvine & Brundrett, 2016; Lowenhaupt & McNeill, 2018; Ylimaki, 2013). The result has been a more inclusive model which brings middle leaders into the instructional- and organizational-levels driving change in schools (Carter, 2016). For example, Singaporean principals share instructional leadership with middle leaders; this includes conducting classroom observations and giving feedback to teachers (Ng, 2019). There is therefore a need to reconceptualise the nature and practice of middle leaders in facing the increasing impact and complexities of contextual change within educational reform.

Middle leaders are increasingly recognized as important drivers of school development (Bryant, 2019; Bryant et al., 2020; Day, Sammons, Hopkins, Leithwood, & Kingston, 2008; Leithwood, Harris, & Hopkins, 2020). They increasingly serve as motivators, developers, and mentors of teachers to enhance student learning outcomes (Dinham, 2007). The role of middle leaders extends from leading the subject teams to layered involvements in wider school activities (Day & Grice, 2019; Day, Gu, & Sammons, 2016).

However, a third wave of educational reforms since 2000 has changed the method of teaching and learning which has challenged teachers and school leaders (Cheng, 2011). A scholarly interest regarding teacher professionalism as a strategy for promoting instructional change has

emerged and has been growing (Hargreaves & Rolls, 2020; Gümüş, Çağatay Kılınç, & Bellibaş, 2022). It is, therefore, important to explore how school leaders develop and lead teachers to maintain quality education. Few researchers, however, have investigated how school leaders motivate and shape teacher learning and development (Hallinger & Walker, 2017), especially regarding how middle leadership builds teacher capacity (Bryant, Wong, & Adames, 2020; Edwards-Groves et al., 2019; Harris & Jones, 2017; Ho, Bryant & Walker, 2022).

Considering similar accountability-oriented reform in East Asia over the past three decades (Bryant, Walker & Qian, 2018; Cheng, 2009; Walker, 2004; Walker, Lee, & Bryant, 2014), China has been experiencing education decentralization which has reconceptualised school leadership resulting in increased responsibilities (Lin, 2018b). The movement opened with 'The Reform of China's Educational Structure: Decisions of the Communist Party of China Central Committee' of 1985 which focused on decentralising power and finding multiple ways of financing.

This reform in China allowed local (provincial- and county-level) authorities rather than the central government to manage primary and secondary schools. Subsequently, 'The Outline for China's Educational Reform and Development' of 1993, 'Decisions on Deepening Education Reform and Promoting Quality Education in an All-round Way' of 1999 and 'Decisions on Basic Education Development and Reforms' of 2001 advanced the decentralisation movement reducing external control.

These reforms accorded school leaders additional responsibilities and required schools to change their traditional organisational cultures and structures while transforming teaching methods and teacher-student relationships (Lo, Li, & Lai, 2010). Principals consequently strengthened the leadership role of middle leaders, specifically TRG heads, by delegating the instructional supervision and teacher personnel management tasks to them (Wang, X., 2012).

Their importance to school leadership expanded due to the principals' increasing responsibilities and limited time (Zhao & Zhang, 2016). The trend of institutional transformation continued with the 'Outline of the National Medium – and Long-term Plan for Education Reform and Development (2010-2020)' of 2010, 'Opinions on Deepening the Reform of Educational Structure' of 2017 and 'Opinions on Deepening the Reform of Educational Structure and Comprehensively Promoting Quality of the Compulsory Education' of 2019. These directives further decentralised the traditional relationship between the government, schools, and society. The ongoing reforms transformed the role of local government leaving room for school leaders to shape teaching and learning. This shift was aligned with the increasing emphasis on the function of TRGs as important change agents for teacher learning, with a focus on facilitating student learning (Shi, 2019; Zhang, M., 2019). The nature of the TRGs is still changing with much broader expectations. The educational reforms try to capitalize on TRG heads' wisdom and leadership. The TRG heads extend the role of managing instructional tasks to crossing boundaries to support teacher learning (Chen & Liu, 2019).

The central government issued 'Opinions on Comprehensively Deepening the Reform of Teacher Troop Construction in the New Era' of 2018 and promoted the modernisation of teacher management, indicating a new type of leadership for supervising teachers. The above changes in their traditional role, however, has created uncertainty among TRG heads who were enacting the role of developing teachers and posed new challenges; namely, they now perform tasks that require expertise beyond their existing knowledge base.

The recent curriculum reform in China, which has been implemented since 2001, entails a series of measures to provide students with good quality education (*suzhi jiaoyu*). The ongoing reform focuses on school-level changes and curriculum development. Curriculum development

necessitates innovation in teaching and transformation of pedagogical practices (Paine & Fang, 2006; Qian & Walker, 2013). Middle leaders, specifically TRG heads, identify new educational needs and foster teachers' engagement in innovative teaching practice and achieve higher educational outcomes (Ma, P., 2014). To facilitate transformation of teaching practice, schools have decentralized, promoted the status of TRGs and emphasised the experts-as-leaders role of the TRG heads (Zhang, M., 2019). The government has also promoted the modelling and leading function of outstanding teachers, such as TRG heads, with various honorary titles such as "master teacher" and "backbone teacher" in the teaching-research systems, and highlighted their leading role in the nationwide 13th five-year education development plans.

As middle-level leaders, TRG heads take certain administrative positions, such as being responsible for coordinating and managing various affairs of the school. Their dual status makes them core members of teacher teams, and integrates their administrative power and professional authority when providing guidance for the teacher team (Qiao & Lai, 2016). However, subject-based teaching-research cannot fully meet the needs of teacher learning and development in response to the shifting context; therefore, education departments and schools have introduced cross-subject teaching-research as another complementary form to better promote teacher learning (Shen & Yan, 2018). TRG heads may face more complex situations due to the rising expectations of their role. Thus, there is a need to define the expanded role of TRG heads to enhance or benefit their role enactment. The present study assumes TRG heads influence school-based teacher learning. They help establish the connections between different levels of teacher learning while engaging teachers' deep involvement which shapes their learning outcomes (Zhang, Wong, & Wang, 2021).

1.2.2 Conceptual Underpinnings

A summary of principalship practice in effective schools demonstrates the great need for school

leaders to develop instructional leadership (Hallinger, 2005; Hallinger, Gümüş, & Bellibaş, 2020; Hallinger & Murphy, 1985; Leithwood, 2001). The instructional leadership role performed by school principals requires the involvement of other leaders, including middle leaders (Bryant, 2019; De Nobile, 2018; Dinham, 2007; Hairon, 2016; Hallinger, Adams, Harris, & Jones, 2018). Principals need to work with middle leaders to improve teacher professional development in which specific subject knowledge is required (Bush, 2015).

Since 2000, scholars have investigated other leadership sources of influence beyond the individual principal. The conception of shared instructional leadership emerged (Harris, 2003; Jackson, 2000; Lambert, 2002; Marks & Printy, 2003), indicating the professional role of teachers in instructional decision making. Different levels of school leadership activities contribute to school improvement (Bennett, Woods, Wise, & Newton, 2007). Principals set school visions and goals, while middle leaders define departmental purpose and direction. Principals and middle leaders improve teaching and learning, promote a positive climate, develop and improve the curriculum, and promote teacher development at different levels (De Nobile, 2018; Gurr, 2019; Javadi, Bush, & Ng, 2017).

Despite the extensive evidence about principals' instructional leadership (Hallinger & Chen, 2015; Hallinger & Bryant, 2013), the knowledge base regarding middle leaders is not well-developed (Bush, 2013; Hallinger, 2009; Leithwood, 2016). Furthermore, while the instructional leadership model has been empirically examined in the West, little is known about how to apply this model in China, especially at the middle level. It is generally acknowledged that instructional leadership is not just a function of principals (Hallinger, Adams, Harris, & Jones, 2017). The introduction of the notion of instructional leadership at multiple levels has led to research that examines middle leaders' instructional leadership, but knowledge of how middle leaders actually exercise instructional leadership, how they work collaboratively, and

the relationship between middle leaders' instructional leadership and principal instructional leadership remains under-researched. Additionally, the specific interactions between school leadership and teacher learning are under-explored (Hallinger & Walker, 2017).

Research on teacher learning has focused on either individual teachers or the teacher team as the unit of analysis (Borko, 2004). However, the insights arising from this research are incomplete in scope. A growing number of studies suggests the potential influence of middle leaders on teacher professional learning (Bryant, Wong, & Adames, 2020; Ho, Bryant & Walker, 2022). Middle leaders lead teacher learning, whether as individuals or as teams (Dinham, 2007; Hairon et, al., 2015; Harris, 2003; Leithwood, 2016). This process of influence and implementation is complex because it involves multiple interactions and interrelationships between and among teachers, principals and other stakeholders.

In China, middle leaders, specifically TRG heads, work collectively with teachers, vice principals, and teaching-research officers (external mentors) to lead teacher learning. However, this process has rarely been explored and most of studies regarding TRG heads have been non-empirical, i.e., prescriptions and commentary. There is empirical evidence that has focused mainly on the difficulties facing TRG heads, the required leadership competency and how to strengthen it. Studies have shown that teacher development is highly prized by effective leaders (Bryant, Wong, & Adames, 2020).

Middle leaders have multifaceted roles (Busher & Harris, 1999; De Nobile, 2018), suggesting that they normally need to prioritise their work related to capacity building among teachers (Zhang, Wong, & Wang, 2021). The TRG heads' primary responsibility is to lead teacher learning. The TRG heads need to understand the different levels of teacher learning and engage teachers' deep involvement (Cao & Pang, 2019; Tang & Bryant, 2022). Given the essential role they play, they are expected to influence teacher learning. Thus, the present study explores how

TRG heads (mid-level leadership position) influence teacher learning.

The growing research on middle-level instructional leadership has largely been conducted in the US (e.g., Turner, 1983; Worner & Brown, 1993; Klar, 2012), Canada (e.g., Leithwood, 2016) and South Africa (e.g., Nkadimeng & Thaba-Nkadimene, 2020; Ogina, 2017; Seobi & Wood, 2016). The present study provides an empirically developed indigenous understanding of instructional leadership of Chinese middle leaders, specifically TRG heads, which is largely under-researched in the literature. The enactment of leadership practices is shaped by culture and societal contexts (Leithwood, 2010). Seemingly similar leadership concepts and behaviour can be construed and implemented differently depending on the sociocultural and organizational context (Qian, Walker, & Li, 2017).

Therefore, middle leaders in non-Western countries such as China may have different understandings and strategies for implementing instructional leadership from their counterparts in the West. Moreover, with a few exceptions (e.g., Javadi, Bush, & Ng, 2017; Xie, C., 2017), there are few empirical studies on middle-level instructional leadership in non-Western cultural and societal contexts. In China, few studies on middle leaders (the TRG heads) have been grounded in instructional leadership. China is perhaps best known for its system of promoting teacher collaboration and development. One of these is TRGs in schools and the outstanding teacher office beyond schools (Qian, Walker, & Li, 2017). There are TRGs in every school to support teacher learning. Empirical studies have shown that teachers learn best when provided with on-site guidance and mentoring (Hargreaves, 2000). TRG heads are middle-level instructional leaders who can play a central role by offering this support (Chen, & Zhang, 2022).

Over the past few decades, China has accumulated considerable experience with TRG heads supporting teachers, whether as individuals or in teams, which makes it possible to extract the wisdom of educational leadership from them and construct local theories. However, although

several strategies of TRG heads as instructional leaders have been proposed (e.g., mentoring support, establishing learning routines, modelling good teaching practices), they are not well understood in the operational realities of schools. This leaves an empirical gap regarding how teachers are developed at the middle-level leadership positions in China. In the shifting context, strengthening the existing knowledge base with more empirical evidence is timely and increasingly necessary. I make a case for the need to reorient middle-level roles towards instructional leadership. The present study broadens conceptions of what constitutes instructional leadership for professional learning.

1.3 Purpose of the Study

The overall purpose of the study is to understand the role of TRG heads and their strategies and practices and factors that shape their leadership for teacher learning. In essence, I seek to uncover how TRG heads enact instructional leadership and what drives them to enact in different ways. The overall goal can be divided into four sub-purposes:

1. To analyse different perspectives on the role of TRG heads in leading teacher learning;
2. To explain how TRG heads lead teacher learning through instructional leadership individually and collaboratively;
3. To untangle the complex interactions among various factors regarding middle leadership for teacher learning; and
4. To advance the knowledge base by summarising a set of middle leadership strategies in leading teacher learning.

1.4 Research Questions

In light of the research purpose, the overarching research question is: How is the instructional leadership role of TRG heads in promoting teacher learning understood, exercised, and shaped? Four interrelated questions assist in answering the primary research question:

1. How is the TRG head's role as a leader of teacher learning constructed?

2. How does the TRG head lead teacher learning?

3. What conditions influence the TRG head's leadership and how do these conditions interplay together?

4. How can the findings enable international scholars and practitioners learn from the Chinese experiences?

1.5 Researcher Positioning

Because I adopt an interpretivist approach, it is important to account for my position as a researcher by being transparent about my own background and motives for conducting the research (Creswell, 2003; Merriam, 1998).

In contrast to my participants and possible readers, I have never been the head of a TRG. I pursued my undergraduate degree in early childhood education followed by my master's studies in higher education. During my doctoral research, I focused my attention on school leadership and management. My interest in school leadership and management was piqued during the two years I spent working as a research assistant in Hong Kong. The research site of the present study was Guangzhou. I was born and received my 24 years of education, from kindergarten to graduate school, in Guangzhou so I have some knowledge of the education system in the city. My father, who was a Chinese teacher at a local primary school before he recently retired, always shared his work experience with me and what he mentioned most was his supervisor, namely, the head of his TRG, noting his supervisor's care and help. Combined with my work experience as a research assistant and my father's influence, I wanted to better understand the potential influence of TRG heads on their peers and how they exert this influence.

My background of never having worked as a TRG head positions me well as an outsider in relation to my participants. There are four benefits of being an outsider. First, I am able to gain a broader perspective about the relationships and influences of the TRG head than insiders (see Fay, 1996). Second, the participants assumed that my knowledge of their work was limited and they therefore elaborated in detail to help me to understand. Third, as an outsider, the participants felt comfortable about discussing their situations with me when they realised that, unlike the supervisors, I had no direct participation in their work and did not evaluate it. Finally, I did not need be a member of the target group to be able to describe and interpret the participants' experience well (see Dwyer & Buckle, 2009). Although I have not been the head of a TRG, I have two months experience of working in a primary school in Guangzhou as a volunteer teacher. I therefore had a rough idea about the school setting and how it works. This enhanced the depth and breadth of my understanding of the work of teachers and TRG heads (see Kanuha, 2000).

1.6 Structure of the Study

The thesis comprises nine chapters. The content of each is summarised below.

The current chapter explains the contextual and conceptual backgrounds of the study by providing a rationale for researching the role of the TRG heads while identifying the major and specific aims of the study, the research questions, and their significance.

Chapter 2 is an analysis of the context within which school middle leadership is studied. This includes the sociocultural context, namely Confucian sociocultural values of Chinese society and the institutional-political structures within which education is delivered, and the shifting context of school leadership, and a consideration of school leadership and teacher learning in China.

Chapter 3 provides a review of the literature on instruction-oriented middle leadership including a definition and its impact and the potential conditions shaping this kind of leadership. Middle-level instructional leaders within schools are increasingly recognized with a growing number of studies showing their potential influence on teacher learning. Research has revealed that instruction-oriented middle leadership is an important source of instructional leadership. The subsequent review examines the theory of instructional leadership and summarises its core dimensions to display the conceptual framework.

Chapter 4 justifies the multi-site case study. It provides an in-depth explanation of qualitative research and the main research strategy chosen within the constructivism paradigm while providing a rationale for the data analysis.

Chapters 5 to 7 present the findings of how TRG heads plays out in different contexts and what factors drive them to enact in different ways. By addressing the research questions, the chapters capture the common patterns and provide insights into the variation in instructional leadership of the TRG heads.

Chapter 8 is a synthesis of the main findings presenting conclusions drawn from the findings. In this chapter, I explain the main findings offering an account of what the research tells us about inherent features of instruction-oriented middle leadership for teacher learning in the Chinese educational context.

Chapter 9 includes theoretical and implications, along with research limitations and strengths, and opportunities for future research.

1.7 Chapter Summary

The impetus for conducting this study relates to school reform and improvement being linked

to leadership activities at various levels. Teachers occupying middle-level leadership positions now typically align more closely with teachers and lead teachers within and beyond their traditional sphere of influence. Middle leaders play an increasing important role in developing effective teaching and learning practices through teacher development. Studies have recognized the importance of investigating the role of middle-level instructional leaders while noting the influence of instructional leadership by middle leaders on teachers.

However, empirical evidence on the nature of TRG heads and their domains of influence, including how they encourage teacher growth and professionalism, how they prioritize their tasks, and how they find support to foster teacher development remains insufficient. The study aims to address the empirical void in untangling the influence of TRG heads (middle leaders) on teacher learning, how these TRG heads exert influence over teachers and why they enact instructional leadership in a particular way. The study uniquely defines the concept of instructional leadership more broadly to include the middle-level leadership position. Following the statement of the problem, in Chapter 2, I analyse the context of school middle leadership in China. This includes making sense of sociocultural and reform contexts in which the TRG heads work to understand the choices they make and their practices for promoting teacher learning.

CHAPTER 2 SCHOOL MIDDLE LEADERSHIP IN CONTEXT

2.1 Scope of Chapter

Although there is growing research on school middle leadership, much of it has been contextualised in Anglo-American settings. The perceptions and practice of middle leadership in hierarchical Asian societies have been largely under-explored. I review the sociocultural and institutional contexts of schools to reveal how they mediate Western notions of school middle leadership. The first sections demonstrate how scholarly studies have constructed leadership and management; they have put an increasing emphasis on leadership to facilitate the development of professional practice while discussing the sources of middle leadership power to demonstrate why middle leaders can influence teachers. The second section explains the sociocultural values of Chinese society, institutional contexts of schools and their roles in understanding middle leadership practice. The third section sketches the formal structure surrounding school leadership which helps delineate how middle leaders fit into the structure while presenting the reform context of leadership in China. The final section links the patterns of middle leadership practice to teacher learning.

2.2 Leadership and Management: Locating the Concepts of Middle Leadership

The rise of systematic reforms in education requires more leadership at the school level (Lin, 2018b; McCulla & Degenhardt, 2015; Southworth, 2008). Leadership plays an increasing role in bringing about school improvement over the last 20 years (Bennett et al., 2007; De Nobile, 2018; Fleming, 2014). Leadership and management are different concepts but overlapping domains. Leadership and management both involve influencing

goals and working with people (Kotter, 1990). However, leadership is different from management. Management is defined as the process of working with individuals and groups through which resources are allocated to achieve organizational goals (Hersey, Blanchard, & Johnson, 2012). Managing also refers to maintaining efficient and effective existing organizational arrangements to seek order and stability (Struyve, Meredith, & Gielen 2014; Sapre, 2002). The executive function of management means implementing agreed upon policies to provide order and consistency to organizations (Bolam, 1999).

Leadership is characterised by change and innovation (Gurr, 2015). Leaders exert influence over a person or a group through setting directions, communicating visions, and motivating staff or members (Dinham, 2016; Dimmock & Walker, 2000; Tead, 1935; Yukl, 2002). The interactive aspect is emphasised during the process (Bass & Bass, 2009). The domain of influence demonstrates the interrelationship between leaders and followers, in which it is recognised that the leaders can influence the group members by modelling rather than by dominating and controlling while seeking adaptive and constructive change. (Bass & Stogdill, 1990).

This study examines middle leadership for teacher learning. Schools promote outstanding teachers to be middle leaders that take a leading role within an area/department, relating senior leaders to teachers in schools (Gurr & Drysdale, 2013; Heng & Marsh, 2009). Over time, a middle leader came to be not only a leader within an area/department but also a leader in school-wide activities (Grootenboer, Edwards-Groves, & Rönnerman, 2015). Subject-related expertise of middle leaders and the complexity of the curriculum potentially position middle leaders as providers of instructionally oriented leadership to their departments and schools (Leithwood, 2016). Experienced teachers are often promoted

to middle leadership positions because of their effective teaching practices (Bryant & Rao, 2019). Middle leaders are portrayed in the research as potential 'drivers' leading teacher development and change because of their proximity, both hierarchically and physically, to teachers (Edwards-Groves, et al., 2019).

Organizationally, senior leaders define the school's mission and establish routines, while middle leaders, who occupy a leadership position at the center of the school's organizational chart, are responsible for implementing policies and making decisions (Bush, 2016; Dean, 2003; Fleming & Amesbury, 2013; Shaked & Schechter, 2016). In Jarvis' (2008) survey in the United Kingdom and Fitzgerald's (2009) study in New Zealand, department heads refer to themselves as a pipeline from upper management to teachers (see also Farchi & Tubin, 2019; Grootenboer, Edwards-Groves, & Roennerman 2014; Shaked & Schechter, 2019). Specifically, middle leaders are referred to as department heads, subject leaders, grade level leaders (also called subject coordinators, middle curriculum area leaders, and grade level coordinators), and student well-being coordinators. Middle leader positions vary by school size, school system, and national and local context (Gurr & Drysdale, 2013; Harris et al., 2019).

In summary, middle leaders have responsibility for developing and improving specific aspects of their schools, such as curriculum and instruction, teacher development, and student well-being, often through subgroups or communities. The role of middle leaders is twofold, that is, they are both classroom teachers with instructional responsibilities and leaders with obligations to the school and its departments (Dinham, 2007; Harris, Jones, Ismail, & Nguyen, 2019; Javadi, Bush, & Ng, 2017). Middle leaders organize instructional activities to facilitate teaching and learning (Weiner, 2014) and administrative tasks to

implement curricula (Friedman, 2011; Tubin, 2015). The concept of middle leadership is a subset of teacher leadership (Lipscombe, Tindall-Ford, & Lamanna, 2020; Muijs & Harris, 2003). With the incremental and ongoing school and system reforms, middle leaders extend their role of good organization and resource management to motivating teachers and leading innovation (Day & Grice, 2019). This shift demonstrates suggested increased attention to leadership for implementing school reform and promoting the teacher development.

2.3 How School Middle Leadership Works: Sources of Middle Leadership Power

In their leadership role, middle leaders seek to influence others, which is the essence of leadership in the educational context (Leithwood, 1999). This section discusses how middle leaders influence teachers and others, namely, what the sources of middle leadership power are. Power is potential influence (Hersey, Blanchard, & Johnson, 2013) which is closely related to leadership as it is a way for leaders to influence the behavior of their followers (Stogdill, 1974). Power is conceptualized as authority when it is related to one's position, and while power is associated with personal characteristics, it is often defined as charisma (Biddle, 1979). When power causes the desired behavioural change of an individual or group, it is conceptualized as influence (Hersey, Blanchard, & Johnson, 2013).

The sources of middle leadership power are of interest because they are crucial for fulfilling the leadership role. Sources of power can be grouped into two broad categories: position power and professional power. Position power refers to formal status and access to resources. For example, middle leaders use a range of social, symbolic and material

resources as sources of power to shape teachers' actions. Bureaucratic authority is an essential source of power of middle leaders (Busher, Hammersley-Fletcher, & Turner, 2007). This source of power is devolved from senior leaders to middle leaders who are allowed to enact their role in a school. Professional power includes middle leaders' subject and pedagogical expertise and access to networks. For example, Bennett et al. (2007) claimed expertise is a basis of influence, which is fundamental to the perception that middle leaders lead by example. Middle leaders may have positional power, but probably need expert and referent (relational) power in order to be effective. Middle leaders have more access to power or authority than other members of their departments or responsibility areas which allows the more powerful to have greater influence than other members over the way in which the departmental culture and the ongoing development of repertoires of practice are shaped (Busher, Hammersley-Fletcher, & Turner, 2007).

2.4 Theorising about Middle Leadership in the Chinese Educational Context: The Role of Sociocultural and Organizational Forces

Studies have revealed that the sociocultural values of Chinese society and the organizational, bureaucratic, and political context of schools, influence the behavioral patterns that shape leadership practices in Chinese schools (Walker & Qian, 2018). This sub-section discusses these important contexts underpinning middle leadership and middle leader-teacher interactions and the interplay of school middle leadership with enduring cultural and organizational influences, while providing some insights into the macro contexts of middle leadership and teacher learning at schools.

It is widely acknowledged that leadership practices vary across cultures and are deeply rooted in the cultural context (Dimmock & Walker, 2002; Hallinger, 2011). In China, Confucian culture tends to be a significant influence (Triandis, 2018). Confucianism has been rooted in China for more than 2,000 years. Although influenced to some extent by the New Culture movement, it is still the most important ethos in China (Du, 2015; Lew, 1979), shaping approaches to leadership, hierarchies of power, and norms of interaction (Chai & Rhee, 2010).

Certain points stand out as influential. The first point is benevolence. Showing benevolence is important in Chinese leadership; it is derived from the construct of paternalistic leadership (Cheng, Chou, Wu, Huang, & Farh, 2004). A benevolent leader creates and maintains a humanitarian organisation and concern for individuals' feelings and needs, offers positive and detailed feedback, and motivates them to improve (Deci & Ryan, 1987). Benevolent leadership has been found to prevail in present-day Chinese organisations (Ghosh, 2015; Shaw & Liao, 2021; Wang & Cheng, 2010). Middle leaders tend to create a psychologically safe environment for their teachers (Tang, Bryant, & Walker, 2022). A central theme of Chinese leadership is the parental role of leaders (Chen & Lee 2008). They care about their teachers' professional and familial well-being (Zhang, Wong, & Wang, 2021). School leaders are a role model of selflessness (Ma, & Tsui, 2015). They first to serve, then to lead (Wu, Qiu, Dooley, & Ma, 2020). Middle leaders treat teachers with kindness, and in return, teachers pay respect to their middle leaders (Tang, 2022). They first to serve, then to lead (Wu, Qiu, Dooley, & Ma, 2020).

Culture-building is another important aspect in Chinese school leadership (Qian, Walker, & Yang, 2017). Confucian values place culture-building on the shoulders of organisational

leaders and encourage them to shape and maintain a familial atmosphere in which harmony (Huang & Bond, 2012), unity and loyalty are emphasised (Chen, 2005). In addition, vision is the glue that holds members together and propels the organisation towards achieving their goals (Rarick & Gallagher, 2000). School middle leaders make use of shared visions to motivate teachers and promote change (Dinham, 2007; Gurr, 2019).

The third point of Confucian values relates to the moral character of the leader, emphasising virtue. There are double moral standards in Confucian values because the standards are different for leaders and followers: the standards are more rigorous for leaders than followers and more rigorous for the top-level leaders than lower-position ones (Chen & Lee, 2008). Confucian societies regard a leader as a role model who reveals the value of pursuing self-perfection by means of learning, meditation, and self-reflection. The 'Leader as role model' is an important concept in China. Leading by example is an important part of exercising middle leadership; specifically, TRG heads who lead teacher learning must make use of their expertise (Zhang, Wong, & Wang, 2021). Middle leaders do not necessarily have to be the best teachers in their departments, but they are expected to set the moral standards, demonstrate strong performance, and model good practice (Bassett & Shaw, 2018). In this way, they can inspire teachers to emulate and place their trust in them. Influenced by the Confucian socio-culture, middle leaders tend to exert idealised influence and emphasize inspirational motivation and individualised consideration (Bass & Riggio, 2006).

In addition, Hofstede's (1991) constructs of power distance and collectivism have been extensively studied. Keeping with China's hierarchical nature (Hofstede et al., 2010), school leaders and teachers maintain a rigorous hierarchical relationship. Principals tend

to exercise a top-down and directive leadership role that assumes a social distance between themselves and their teachers (Liden, 2012). Principals make use of their authority and power to motivate teachers and create formal structures to routinize teaching and learning. The principals' authority is naturally accepted, and teachers are used to complying with the principals' directives (Walker, Hu, & Qian, 2012). However, teachers have been increasingly recognized as important agents within the era of education reforms, the traditional system of "principal responsibility" is undergoing change (Walker & Qian, 2018; Zheng, Yin, & Liu, 2019). Studies have indicated that principals who share leadership to other in-school leaders and teachers and encourage collaborative leadership may be more efficient and effective in achieving school progress (Liu & Hallinger, 2021). Certain teachers are nominated as key members with formal titles (Liang & Wang, 2019). Teachers occupying middle-level leadership positions are expected to transform their collegial units into more collaborative and collective communities of practice.

Collectivistic culture and the large size of schools also have a significant influence on school leadership. Hofstede (1980) used the concepts of individualism and collectivism to demonstrate the relationship between individuals and the groups with which they are affiliated. In collectivistic cultures, people are concerned with the goals of their group. Thus, the individual does what the group expects, asks, or demands without opposing the collective will. People have interdependent and socially centred identities because the manner in which they define themselves is closely related to their group (Bochner, 1994).

Since the founding of the new China in 1949, Confucian values have become the value of choice. These are characterized by closely associated with individuals who see themselves as parts of one or a collective where group benefits are more important than individual

needs (Wang & Mao, 1996).

Collectivism places a great deal of value on supportive and harmonious relationships among people. Chinese leadership and management behaviour are deeply rooted in this traditional culture, which stresses teamwork and avoiding conflict (Satow & Wang, 1994). Collectivism prompts team members to collaborate in hierarchical relationships (Ho & Tikly, 2012) and Chinese leaders tend to use these groups as management units.

Group approaches such as those used in TRGs are examples of collectivism in the Chinese context (Bush & Qian, 2000). TRGs comprise a group of teachers who teach the same subject and who focus on professional learning and ensuring teaching quality. Teachers in the TRGs conduct collective lesson preparation and engage in lesson observations and post-lesson discussions to improve teaching practice collaboratively. TRG heads lead teachers in groups and perform what is expected of them by school and group norms.

Leadership differs in the way it is enacted and transacted in schools of different sizes (Southworth, 2004). Small classes tend to be clustered in small schools, and average class size is larger in large schools (Loveless & Hess, 2007). The larger the school is, the more students and teachers there are. The more people there are, the more they need to be managed. Large schools invest more in professional learning, teacher cooperation, and have more differentiated leadership and technological provisions (Opdenakker & Van Damme, 2007). School leaders in schools of different sizes respond to educational change in different ways (Sebastian, et al., 2019; Southworth, 2004). Middle leadership for teacher learning changes according to the situations they face and the school size. For example, in small schools few people need to be motivated and all teachers may easily be involved.

The expansion of schools has required these institutions to change their organizational structures and management methods to adapt to the complexity of the organization and its integration with the external environment, while simultaneously maintaining the sustainable development. Specifically, large-sized schools have strengthened their organizational hierarchies and have more concern about leadership collaboration (Zhong, 2008). For large-sized schools' organizational structures, the vast majority usually distribute leadership responsibilities downward. They also enhance the effectiveness of leadership and management by adding grade groups and other middle-level organizational structures.

Yet as the size of the school increases so too does the responsibility of the principal to develop large numbers of other leaders. As schools grow bigger, vice principals are more likely to play leadership and leadership development roles with more TRG heads being deployed as middle leaders, promoting school development through shared problem-solving. The implementation of school reform provides transformative and distributed leadership strategies that contribute to the TRG heads' autonomy for revising instructional practices towards the goals adopted in development work (Zhang, Wong, & Wang, 2021). Furthermore, the increased responsibilities of principals have led to work intensification that has, to some extent, been solved by sharing some leadership responsibilities with middle leaders (Dinham, 2016; Irvine & Brundrett, 2016; Lowenhaupt & McNeill, 2018), such as TRG heads (Tang, 2021). This move empowers the TRG heads and triggers their leadership.

In the following section I move on to specific organisations, i.e., schools, to demonstrate formal positions and relevant leadership practices of middle leaders.

2.5 School Organisational Structure and Leadership in China

2.5.1 School Organisational Structure: Top-down Internal Power Hierarchy

School leaders work in a hierarchical power strucutre of schools: senior leaders at the top, middle leaders in the middle, and teachers at the bottom. Senior leaders, including principals, vice-principals and the Party secretary, are responsible for the school-wide educational plans and development. Senior leaders build internal accountability in response to external requirements (Qian & Walker, 2019), and oversees the school as a whole (Koh, Gurr, Drysdale, & Ang, 2011). The middle leaders' role is focused on sub-units while the senior leadership team (e.g., the principal) takes a school-wide view (Bush, 2013). Middle leaders direct several areas: the office for moral education (*deyuchu*), the office for teaching affairs (*jiaowuchu*), the office for teaching research (*keyanchu*), ancillary services (*zongwuchu*), the TRG heads (*jiaoyanzu*), grade groups (*nianjizu*), and lesson preparation groups (*beikezu*).

The principal, together with the vice-principals, supervise the directors of the office for moral education, the office for teaching affairs, and the office for teaching research and ancillary services. The office of moral education, the office for teaching affairs, and the office for teaching research supervise the TRG heads, grade groups, and lesson preparation groups. The Party organisation, chaired by the Party secretary, is responsible for supervising the work of the school's trade union, the women's federation, and the communist youth league (State Council, 2022).

TRGs reflect the typical structure of school for teacher collaborative work and collective learning (Paine, 1990; Wang, 2015; Yang, 2009). The head of the grade group takes

responsibility for the administration of the affairs of a certain grade (e.g., grade one), while the head of the TRG pays particular attention to the professional affairs of a subject. For example, the TRG for Chinese is responsible for monitoring the performance of the Chinese lesson preparation groups for every grade (e.g., from year 1 to year 6 in a primary school) to ensure the quality of Chinese teaching and to organise schoolwide teaching-research activities for the professional learning of Chinese teachers. The lesson preparation group is affiliated with the TRG of a certain subject (e.g., the lesson preparation group of Chinese in grade one). The lesson preparation group is responsible for supervising the individual teaching performance of teachers and arranging teaching-research activities for teachers within the group to ensure the teaching and learning quality of a certain grade.

Figure 2.1 illustrates the common organizational structure. Schools in China utilise structures for supporting teachers' job-embedded learning. TRGs are the typical enabling structures of teachers' collaborative work and collective learning (Tsui & Wong, 2010). This system creates a variety of opportunities for the TRG heads to enhance teacher development formally and informally. In addition to fulfilling their formally recognized administrative duties, TRG heads spend much time with teachers on their professional learning (Qian, Walker & Yang, 2016; Vanblaere & Devos, 2018). However, relatively little is known about the ways the TRG heads enact their roles and interact with teachers to facilitate different levels of professional learning, namely, the process that the TRG heads use to generate and sustain professional learning.

Figure 2.1. Common school organisational structure
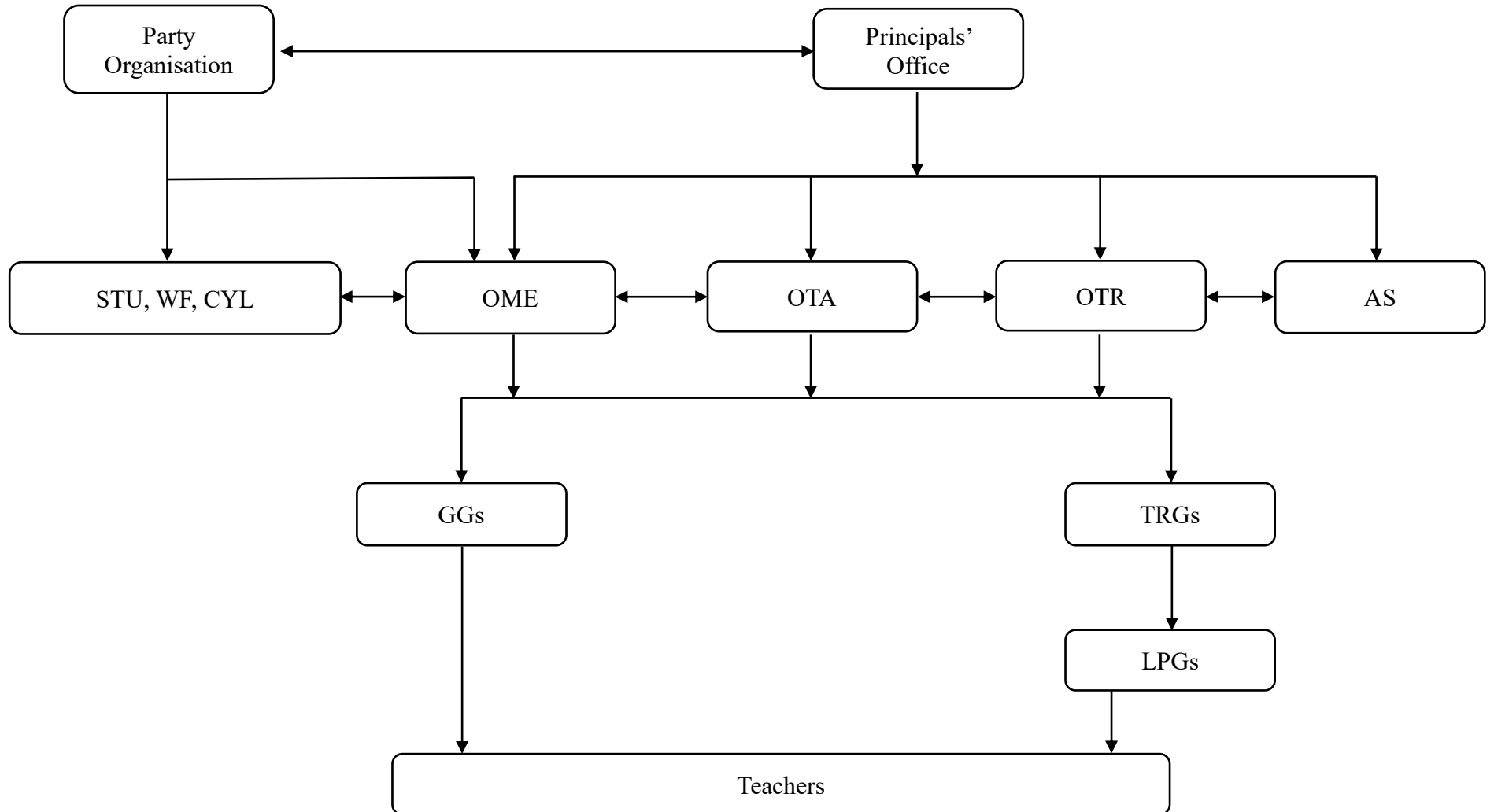
2.5.2 The Shifting Context of School Leadership

School leadership practices cannot be understood well without considering the shifting context (Leithwood, Harris, & Hopkins, 2020; Walker & Dimmock, 2005). This section provides a reform context for school leadership in China. Significant innovations, characterised by decentralisation and marketisation, have been introduced and have led to the restructuring of education in response to economic and societal transformations (Lingard, 2000; Mok & Welch, 2003). Conceptions of the roles of principals and teachers as school leaders have evolved with the educational changes.

Education systems worldwide, over the past three decades, have been experiencing decentralisation (Bjork, 2006; Hanson, 1998; Ho, 2006; Mok, 2003). Education decentralisation is regarded as a phenomenon of globalisation (Mok, 2003; Ngok & Kwong, 2003). The Chinese government also adopted decentralisation as a strategy to increase labour flexibility and empower local governments and schools, while meeting the demands for with more choice in education (Blackmore, 2000). Education decentralisation reform has been part of the agenda since 1985, when 'The Reform of China's Educational Structure: Decisions of the Communist Party of China Central Committee' was issued. The reform devolved power over educational issues from the Ministry of Education to bureaus of education, marking a shift from central control to local decision-making. This devolvement included the system of principal responsibility, which was introduced to expand school autonomy. School leaders have more authority to carry out school improvements which brings increased responsibilities.

Since then, a series of strategies has been enacted to decentralize decision-making over school issues, which historically was controlled by the Central Ministry of Education. The Outline for China's Educational Reform and Development of 1993, Decisions on Deepening Education Reform and Promoting Quality Education in an All-round Way of 1999, and Decisions on

Basic Education Development and Reforms of 2001 advanced the decentralisation movement to emphasize the financial responsibility of the county government with the decision-making power being distributed to the county education bureau to further clarify their responsibility. For example, governments issued specific decentralisation policies on curriculum and teaching. 'The Outline of Basic Education Curriculum Reform' issued in 2001 introduced a tri-level curriculum system (national, provincial, and school curriculum) in response to schools' needs and capabilities. Training teachers also posed challenges to school leaders for maintaining good quality education. Schools were required to change their traditional organisational structure in response to the transformation of teaching methods and teacher-student relations (Lo, Li, & Lai, 2010). Thus, school principals delegated the responsibilities of instructional supervision and teacher management to the TRGs with the expansion of the schools (Zhang & Fan, 2019).

The Outline of the National Medium- and Long-term Plan for Education Reform and Development (2010-2020), Opinions on Deepening the Reform of Educational Structure of 2017 and Opinions on Deepening the Reform of Educational Structure and Comprehensively Promoting Quality of the Compulsory Education of 2019 furthered the decentralisation movement by giving society, the market, and schools more authority over educational matters. Both government and private schools have more room than ever to decide school matters with their own characteristics. Accordingly, school-based management came to be emphasised. During the education decentralisation reform, TRGs, as important change agents for teacher learning, were highly valued (Shi, 2019; Zhang, M., 2019). The TRG heads are thus an an important source of leadership in leading and motivating teachers to effect meaningful changes in schools.

Influenced by neo-liberalism (Bourdieu & Wacquant, 1992), with its emphasis on decentralisation, accountability, and the global trend of marketisation and promotion of the

socialist market economy, China's education ministry initiated the process of marketisation. Since The Reform of China's Educational Structure: Decisions of the Communist Party of China Central Committee of 1985, various types of education have been encouraged, such as non-governmental, people-run, and social-grouping sponsored schools, thus providing diversified educational services for citizens (Mok & Chan, 1996; Li, 2007).

Another indication of the process of Chinese marketisation, the Compulsory Education Act of 1993 mentions multiple sources of educational funding, such as income from school-run industries, social donations, and funds for education. In the same year, The Outline for China's Educational Reform and Development was issued to reduce government control by developing a system in which government-run schools and non-state sectors participated in establishing and running schools. For example, although basic education is mainly run by the government, enterprises, institutions, and other social entities are encouraged to run schools through various channels and in various forms. The Suggestions on the Implementation of the Outline for China's Educational Reform and Development of 1994 proposed types of public schools sponsored by social groups and private schools sponsored by the government to transform the school system. These transformed schools accelerated the transformation of how schools are run, increased society's input, and improved weak schools, enhancing the overall education quality while meeting multi-level demands (Yin & Li, 2004). The government began to enact the macro-management function through legislation, resources allocation, strategic planning, and policy guidance.

A series of policies have been introduced to further promote the marketization process of education in subsequent ways, including the Action Plan for Revitalising Education for the 21st Century of 1998, Decisions on Basic Education Development and Reforms of 2001, Regulations for the Implementation of the Law of the People's Republic of China on the

Promotion of Privately-run Schools of 2004, Outline of the National Medium- and Long-term Plan for Education Reform and Development (2010-2020) of 2010, Opinions of the State Council on Encouraging Social Forces to Set up Education and Promoting the Healthy Development of Private Education of 2016 and the Law on Promotion of People-run schools of 2018. These policies further transformed the function of the government, changed traditional thinking about overarching public services, and introduced multiple channels of educational financing.

Social entities are now encouraged to set up schools directly or collaboratively set up schools with the government. The expanded supply of public educational services enables schools to compete with each other, emphasises school performance and achievement, and promotes higher educational outcomes. Education marketisation entails a change in the schooling environment and inter-school competition. These changes have raised expectations about the roles and practices of school leaders and may challenge them to provide quality education to meet the needs of students and parents. The role of school leaders also needs to be redefined to respond to change and maintain the quality of teaching and learning.

The quality-education and curriculum reform reflect decentralisation and marketisation in China. The most recent curriculum reform arrived with the aim of promoting quality education (*suzhi jiaoyu*). To provide good quality education, the reform moves away from exam-oriented education while constructing a revised school curriculum (Dello-Iacovo, 2009; Zhong, Q., 2006). These changes require innovation in pedagogical practices (Paine & Fang, 2006; Yin, 2013). School leaders and teachers need to cope with several challenges during the implementation of curriculum innovation to meet the new expectations (Qian & Walker, 2011). Middle leaders, specifically TRG heads, need to identify new educational needs, solve problems that arise, build teachers' understanding and capacity to shift their norms of practice,

and facilitate the students' holistic development (Ma, P., 2014). To facilitate new styles of teaching practice, schools now distribute leadership among teachers, highlight the status of TRGs, and emphasise the professional leading role of TRG heads (Zhang, M., 2019). TRG heads may face a more complex situation because of the rising expectations of their role which is to support teachers to be qualified in the reform context and optimise their learning. This situation necessitates an understanding of the expanded role of TRG heads to improve their exercise of leadership.

2.6 Situated School-based Teacher Learning in China: TRGs, Lesson Preparation Groups, the Apprenticeship Model, and Middle Leadership Practice

The ongoing educational reform accentuates the importance of teacher learning. In China, such development has a long tradition embedded in the workplace practice of schools. In 1999, the Continuing Education Programme for Primary and Secondary School teachers was issued; it encouraged school-based teacher learning and development calling for local government to provide support while making full use of the function of schools to develop teachers. Participating in learning activities has become a daily practice which distinguishes teacher development activities in China from most other countries in the world (Tsui & Wong, 2010). School-wide teaching learning activities are typically organized by TRGs, under which are the lesson preparation groups, which are the smallest units in schools. TRGs and lesson preparation groups provide platforms for teachers to discuss, practice, reflect, learn from good practice, and enact change.

Both TRGs and lesson preparation groups are mentored and supported by principals and directors of the office for teaching-research attached to schools. They are also supported by TRG heads, heads of lesson preparation groups, and teaching-research officers in the teaching-research office, which are established by the education department. The TRG heads and heads

of lesson preparation groups are normally recruited from backbone teachers who have performed excellently in teaching competitions and have conducted research on teaching and learning. The TRG heads and heads of lesson preparation groups may also have published research articles. In addition, they – and especially the TRG heads – participate in teaching-research activities regularly and introduce new ideas and practices to the community.

Apart from the TRGs and lesson preparation groups (i.e., the school-based teaching-research system), teachers are also developed through the apprenticeship model, in which the old guide the young. This mentor-novice scheme is a common practice in schools to help young and inexperienced teachers quickly get on the right track. Experienced teachers, typically backbone teachers, guide novice teachers' work at schools in one-to-one mentoring relationships (Guo, X., 2009). This mentoring period usually lasts one academic year. Novice teachers observe their mentors' lessons and learn from good practice. They are in turn observed by their mentors and receive feedback and suggestions for refinement. The mentors who are busy with research projects usually invite novice teachers to participate in their projects to facilitate the mentees' reflective practice. The aim of the mentoring process is to improve subject matter knowledge and pedagogical proficiency. This mechanism helps novice teachers learn how to teach, what to teach, and why to teach (Ma, L., 1992). Generally, novice teachers assume a relatively lighter teaching load and limited tasks to ensure that they have enough time to gather experience.

Over the years, several practices for improving teacher learning have emerged and some have been formed into standard practices, such as collective lesson preparation (*jiti beike*), lesson observation and post-lesson discussion (*tingke-pingke*), which include push-door lessons (*tuimenke*) and open lessons (*gongkaike*), the old guide the young (*lao dai qing*) mentoring practice, theme-based workshops (*zhuti jiangzuo*) and research projects (*keti yanjiu*). Principals develop and support teachers by facilitating action research and taking advantage of external

resources (Walker & Qian, 2022); however, it is not exclusively the principals' responsibility to build teacher capacity. This task is often shared by other sources of leadership, such as the middle leadership from the director of the office for teaching affairs, the director of the office for teaching-research, and TRG heads. Middle leaders have a strong influence over what teachers can learn and how teachers learn through their subject expertise and professional leadership (De Nobile, 2018).

School-based teacher learning occurs at multiple levels and middle leaders can help establish connections between different levels creating conditions for teachers to become deeply involved in the learning process (Zhang, Wong & Wang, 2021). There is no consensus at present on the general sets of middle leadership practices, namely, the core practices of middle leadership for improving school-based teacher learning in China. Although some middle leaders have described a number of their successful leadership practices in leading teacher learning and development, there is limited empirical evidence to unpack the process of how middle leadership promotes teacher learning.

There is thus a need to conceptualise these leadership practices with a view to sharing the Chinese model of leadership for teacher learning at schools. TRG heads have the potential to do this well because of their proximity, both hierarchically and physically, to teachers. Teachers often work with different sorts of advice and coherent instructional guidance provided by the TRG heads. China has accumulated many leadership strategies regarding supporting teachers using TRG heads (middle leaders), whether as individuals or as teams, which makes it possible to extract the wisdom of educational leadership from them and construct local theories.

2.7 Chapter Summary

In this study, role perception and enactment of school middle leaders are explored. The sources of middle leadership power can be grouped into positional power, which refers to formal status and access to resources, and professional power, which includes subject and pedagogical expertise and access to networks. Apart from the power bases of middle leadership, the sociocultural and institutional context can inform our thinking about the ways in which middle leaders react to and develop practices within a Chinese hierarchical school context (Hallinger & Leithwood, 1998; Walker & Dimmock, 2002).

The formal structure of a school delineates how middle leaders, specifically the TRG heads fit into it. In addition, significant innovations, characterised by decentralisation and marketisation, have been introduced and have led to the restructuring of education in response to economic and societal transformations (Lingard, 2000; Mok & Welch, 2003). Conceptions of the roles of TRG heads have also evolved with the educational changes. This situation necessitates a redefinition of the expanded role of TRG heads to improve their exercise of leadership. This chapter identifies the contextual factors and their role in shaping middle leadership while emphasising the need to investigate instruction-oriented middle leadership. The next section reviews research regarding middle leadership for teacher learning nationally and internationally to further justify the need for empirical research into instruction-oriented middle leadership in China while developing the theoretical framework to guide this study.

CHAPTER 3 LITERATURE REVIEW

3.1 Scope of Chapter

The purpose of this chapter is to synthesise and critique literature relevant to studying middle leadership in schools. The first sub-purpose is to provide "a state-of-the-evidence" description of what is already known about instruction-oriented middle leadership. The second sub-purpose is to suggest an informative frame for the study. As such, the review clarifies the most important questions for inquiry, offers conceptual lenses, and provides a source of information about promising research methods. The final section further justifies the demand for empirical research into instruction-oriented middle leadership for teacher learning in China.

3.2 Global Discourses in Middle Leadership in School

Middle leaders are divided into two categories, one is functional and the other is instruction-oriented (Mercer & Ri, 2006). The present study concerns how to promote teacher learning while focusing on instructional leaders with pedagogical support purposes in the middle level. I distinguish this role from others (equally important) at the middle level which focus on administrative support functions. In this chapter, I review the literature on instruction-oriented middle leaders and middle leadership for instruction which is relevant for the study. This section provides an overview of school middle leaders and middle leadership and then a focus on instructional leadership of middle leaders, specifically instructional leadership exercised by TRG heads in helping to develop teachers. In this section, I review the literature related to instruction-oriented middle leadership with a view to grounding the study and providing a conceptual and empirical base for the

phenomena I propose to study. The purpose of this section is threefold: 1) to summarize the basic information in the literature; 2) to identify patterns; and 3) to identify a conceptual gap and narrow the focus of the study.

3.3 Literature Search Rationale

To obtain an overview of previous research published in international periodicals relating to middle leaders and middle leadership in schools, I searched with Google Scholar, Scopus, Eric, and ProQuest using the search strings "school middle leader," "school middle manager," and "school middle leadership" covering the period from 1996 to 2022.

I selected peer-reviewed journals to ensure the quality of sources and the validity of the review. The inclusion criteria used to identify appropriate articles were: (a) timeframe, (b) type of publication, (c) topical focus, and (d) middle leadership in K-12 education. I excluded conference papers, books, book chapters and publications in which middle leadership was only peripherally included. The rationale for choosing the particular timeframe (1996-2022) was twofold. First, the knowledge base of school leadership has been developed in the subsequent years after a call for more research surrounding school leadership in the mid-1990s (Hallinger, 2013). Furthermore, middle leadership in schools has attracted increasing attention from academics since the late 1990s (De Nobile, 2018).

Complemented by the initial search terms used to locate the relevant literature, I performed a collection of discrete searches using synonyms and additional keywords found in the journal articles discovered in the first part: "department head," "subject leader," "coordinator," and "department chair." I also used a snowball strategy to obtain additional

pertinent articles by checking reference lists and citations in the articles which I identified in the previous two steps.

After reading the abstracts and articles that I identified, I selected a final set of 186 articles (including 173 articles and 13 review articles): 52 articles from 1996 to 2005, 44 articles from 2006 to 2015, and 90 articles from 2016 to 2022. These articles, as a group, provided an overview of research on middle leaders and middle leadership in schools across regions. Thus, the selection of articles offered both width and depth.

3.4 Analysis Strategies

When examining the articles, I intended to pinpoint the main findings in the studies. The content of the articles was structured and reduced by coding and categorising the text using open and axial analyses (Corbin & Strauss, 2015) so that the essence of these studies could be discerned (Garfinkel, 1967). The open analysis, gave rise to categories on the same horizontal level, and led to the following three categories: (1) middle leadership role, practice and perceived impacts; (2) factors of middle leadership; (3) middle leader development. As the present study focuses on how middle leadership contributes to teacher learning and influential factors on this process, the review analysis was mainly concerned with the middle leadership roles and practices which provided a framework. The axial analysis about middle leadership roles, practices and perceived impact was sorted into five sub-categories: (1) defining departmental purpose and direction; (2) managing and facilitating teaching and learning; (3) creating and maintaining a positive culture; (4) developing and improving curriculum; and (5) promoting teacher learning. Three sub-categories constituted the category "factors of middle leadership": (1) personal context; (2)

relational and organizational influences; and (3) external forces. In this review, these categories will be used to structure the presentation of the articles and their findings.

3.5 Middle Leadership Role, Practice and Perceived Impacts

The following sections describe the key findings derived from literature. The 186 studies were synthesised by research topic (e.g., middle leadership role and practice). An article was occasionally categorized into more than one branch (e.g., middle leadership role and practice and factors of middle leadership). Most of the studies focused on middle leadership roles and practices. Before 1997, the research focus was on leadership roles and practices, but after 2007 scholars began to explore topics on leadership development, and the supporting and inhibiting factors of middle leadership. However, a strong preference for studying leadership roles and practices remained. Because middle leadership positions vary in different contexts, I use the term "middle leaders" to cover these different middle leadership positions.

Given the initial purpose of the study, the review focused on a content analysis on middle leadership roles and practices and the influential factors of middle leadership during the interaction of middle leaders and other colleagues at schools.

Given the focus of the exploration, qualitative research methods dominated over the past decades. The articles had multiple interpretations of what a middle leader does, whom they lead, their purpose for leading, and the capacities middle leaders need. The theme of middle leadership roles and practices became well-established in the literature since the mid-1990s. Initially, Ernest (1989) indicated the important role of the heads of departments in enhancing the level of teaching. From Ernest's time, there has been an increased

recognition that middle leaders exert a positive influence on instruction. Further investigations made cases for an intimate connection between middle leadership and the teaching and learning process along the lines of Turner's (1996) review of the research undertaken on heads of departments. The pattern of results of these studies reported five role domains and how middle leaders perform their roles.

3.5.1 Middle Leaders as Vision Builders: Directing Teachers on Departmental Missions

Scholars observed the setting-direction role of middle leaders. The findings from these studies detailed middle leaders' setting-direction role in framing departmental goals and communicating the goals (e.g., Anderson & Nixon, 2010; Bryant, Wong, & Adames, 2020; Dinham, 2007; Gurr & Drysdale, 2013; Thorpe & Bennett-Powell, 2014).

These studies regarded middle leaders as vision builders, suggesting three sub-dimensions of middle leaders' visionary leadership behavior focusing teacher attention on student learning. Middle leaders work with principals to form team goals and ensure that the teams' mission and direction are on the right track (Bryant, 2019; Koh, Gurr, Drysdale, & Ang, 2011). Middle leaders make linkages to make sense of a school's direction and departmental goals (Brown, Rutherford, & Boyle, 2000; Turner & Bolam, 1998). Middle leaders communicate and share departmental values, plans, and goals to their teacher team and build consensus about goals and priorities (Dinham, 2007; Klar, 2012; Seobi & Wood, 2016). Specifically, middle leaders motivate and stimulate teachers with challenging, but achievable goals and give teachers an overall sense of purpose for their work (Busher, 2005; Tapala, Fuller, & Mentz, 2022; Thorpe & Bennett-Powell, 2014).

3.5.2 Middle Leaders as Instructional Supervisors and Models: Facilitating the Teaching-Learning Process

The vision-builder perspective represents only a part of the total picture. Studies have documented the middle leadership role as an instructional supervisor and model (Zepeda & Kruskamp, 2007). Acting in the role of instructional supervisors, middle leaders pay close attention to classroom practices and the supervision of such practices (Gurr, 2019; Hammersley-Fletcher, 2002; Javadi, Bush, & Ng, 2017). Middle leaders have a positive influence on teaching and learning by establishing strong teacher learning communities (Bryant, Wong, & Adames, 2020; Patuawa, 2021). They create dialogs among teachers to promote reflection and make suggestions to teachers (Bassett & Shaw, 2018). Middle leaders are successful models for teachers as they explain teaching strategies (Brown & Rutherford, 1998; Dinham, 2007; Hammersley-Fletcher & Brundrett, 2005).

Studies highlighted the significance of middle leadership and the critical role of the middle leader for improving student learning (Busher & Harris, 1999; Dinham, 2007; Edwards-Groves et al., 2019) by leading in and around classrooms (Grootenboer, Edwards-Groves, & Rönnerman, 2015; Harris, 2005). Middle leaders focus teachers' attention on improving student learning (Bryant, 2019; Bryant, Wong, & Adames, 2020; Peacock & Melville, 2019). Monitoring is the common strategy that middle leaders use to improve student learning (Busher, Hammersley-Fletcher, & Turner, 2007; Javadi, Bush & Ng, 2017). Middle leaders monitor student progress, conduct student assessment and communicate with parents (Busher, 2005; Crane & De Nobile, 2014; Hannay & Ross, 1999).

3.5.3 Middle Leaders as Culture Builders: Promoting Culture for the Team

Middle leaders develop their team by building its culture (Busher & Hammersley-Fletcher, & Turner, 2007). They improve the departmental and school-wide contexts (Busher, 2005) by building a collaborative learning culture, creating structures to support collaboration, and developing productive working relations with and among colleagues. Middle leaders entrust teachers and create a culture of openness where teachers' expertise is recognized and teachers are empowered (Dinham, 2007; Hammersley-Fletcher, & Strain, 2011). They also redesign school structures to make use of teachers' motivation and capacity (Bennett et al., 2007; Grice, 2019; Grootenboer, Edwards-Groves, & Rönnerman, 2016).

Middle leaders encourage teachers to share their knowledge and resources with others (Crane & De Nobile, 2014; Fitzgerald & Gunter, 2006; Forde et al., 2019) and sustain learning communities (Bryant, Wong, & Adames, 2020). They engage in collective action, cultivate relational trust for collaboration (Edwards-Groves & Grootenboer, 2021; Fitzgerald, & Gunter, 2006) and foster a collective sense of responsibility (Forde, Hamilton, Ní Bhróithe, Nihill, & Rooney, 2019; Gurr, 2019; Koh, Gurr, Drysdale, & Ang, 2011).

Middle leaders create a culture that builds on relationships. They build productive relationships and interactions with the principal and across departments (Bassett & Shaw, 2018; Seobi & Wood, 2016; Heng & Marsh, 2009). They create a deep sense of connection, foster a strong sense of the teachers' role in how the department functions, and encourage teachers to behave in a collegial and collaborative way (Busher & Hammersley-Fletcher, & Turner, 2007; Fluckiger, Lovett, Dempster, & Brown, 2015).

3.5.4 Middle Leaders as Curriculum Coordinators: Improving and Developing the Curriculum

Research findings have highlighted both the potential and the power of middle leaders as coordinators in developing curriculums for their subjects (e.g., Forde, Hamilton, Ní Bhróithe, Nihill, & Rooney, 2019; Li, Poon, Lai, & Tam, 2021; Peacock, 2014). Middle leaders interpret and translate curriculum documents and materials and align them with their school (Heng & Marsh, 2009; Klar, 2012; Loh & Hu, 2021) and students' needs (Koh, Gurr, Drysdale, & Ang, 2011; Heng & Marsh, 2009; Sinkinson, 2005).

Middle leaders set direction for curriculum implementation (Chow, 2016; Gurr, 2019; Hammersley-Fletcher & Brundrett, 2005; Peacock, 2014), how the curriculum is taught and evaluated (Leithwood, 2016), and motivate teachers to work on curriculum development and innovation (Leithwood, 2016). Middle leaders are knowledgeable about curriculum and keep informed of current developments (Busher, 2005; Dinham, 2007). They act as mediators between curriculum innovation and teachers to improve curricular practices (Gurr, 2019; Li, Poon, Lai, & Tam, 2021) and protect teachers from being overwhelmed by frequent changes (Farchi, & Tubin, 2019; Loh & Hu, 2021). During the implementation process, middle leaders guide and support teachers' enactment of the curriculum (Leithwood, 2016; White, 2001), adopt and model new practices in accordance with new curriculum frameworks (Brown & Rutherford, 1999; Dinham, 2007; Koh, Gurr, Drysdale, & Ang, 2011), and help teachers meet curriculum targets (Busher, 2005; Ogina, 2017).

3.5.5 Middle Leaders as Builders of Teachers' Capacity: Boosting Teacher Learning

A recurrent theme in the literature is the need for middle leaders to keep focused on teacher learning (Bryant, Wong, & Adames, 2020). The building of teachers' capacity cannot be seen as only part of middle leaders' role, but rather be understood as the very essence of their leadership (Thien, Uthai, & Yeap, 2022). This often relates to maintaining teachers' focus on continuing their learning and improving their practices, establishing structures for teacher learning, and empowering teachers' leadership potential.

Middle leaders shape teachers' attention and instructional behaviors (Farchi & Tubin, 2019). They bring teacher practices in their teams more closely in line with school goals and the requirements of external education policies (Busher, Hammersley-Fletcher, & Turner, 2007; Koh, Gurr, Drysdale, & Ang, 2011). Middle leaders act as instructional leaders to observe teachers' classroom practice and give them feedback on their teaching (Lillejord & Børte, 2020; Ogina, 2017) while providing teachers with pedagogical help and support through direct assistance and suggestions, mentoring, and coaching (Brown & Rutherford, 1999; Hammersley-Fletcher, 2002).

Middle leaders seek out effective practices beyond departments and schools and model these practices in teaching and professional learning (Dinham, 2007). They also promote collaborative departmental culture (Ho, Bryant, & Walker, 2022) and team-based professional learning (Bryant, Wong, & Adames, 2020). They establish collaborative routines and boost collective minds (Gurr, 2019; Heng, & Marsh, 2009).

Middle leaders share resources and encourage other teachers to do the same (Dinham,

2007). They encourage and empower teachers' voices (Gear, & Sood, 2021). Middle leaders foster distributed leadership among teachers, demonstrate the norms of collegiality and build relational trust (Edwards-Groves et al. 2019).

The teacher supervisory role, once solely the domain of senior leaders, is becoming increasingly common for middle leadership (De Nobile, 2018). The opportunity to have an influence and to lead teachers is now prioritized by middle leaders (Heng & Marsh, 2009). Middle leaders have a direct impact on the quality of teacher learning and development (Edwards-Groves et al., 2019). A growing but limited corpus of literature has centered on teacher development dimension of middle leadership (see Bryant, Wong, & Adames, 2020; Edwards-Groves, Grootenboer, & Ronnerman 2016; Ho, Bryant, & Walker, 2022).

Bryant, Wong and Adames (2020) explored how middle leaders build teachers' professional and leadership capacities in an IB school in southern China. Middle leaders coordinate instructional improvement initiatives, create structures for curriculum implementation, and sustain professional dialogue to support teacher learning. Edwards-Groves, Grootenboer, and Ronnerman (2016) posited that building relational trust is important for middle leadership and revealed that middle leaders build five dimensions of trust to promote action research and teacher development. Ho, Bryant, and Walker (2022) examined the relationships among middle leaders, working environment, and teacher entrepreneurial behaviors in Hong Kong schools through the three dimensions of the "person-environment fit model" emphasizing the leading experience of middle leaders for teacher entrepreneurial behaviors while demonstrating that experienced middle leaders can influence and shape the person-group and person-job working environment fit.

Researchers have investigated the potential and major influence of middle leaders on understanding and developing teachers (e.g., Edwards-Groves et al., 2019; Mampane, 2018). However, our understanding of the breadth, depth, and nature of middle leadership for teacher learning remains under-devleoped (Bryant, Wong, & Adames, 2020; Edwards-Groves et al., 2019; Hairon, Goh & Chua, 2015).

Although there are several works exploring the holistic role of middle leaders and middle leadership in schools, a small corpus of studies directly investigating the impact of middle leadership in specific areas. Studies relevant to middle leaders' impact on specific areas have been reviewed (see table 3.1).

Table 3.1. Middle leadership impact on specific areas derived from the research, 1996-2022

Source	Research aims	Findings of middle leaders' major impacts
Ho, Bryant, & Walker (2022)	The quantitative study investigates the extent to which middle leaders with different length of experience shape teacher entrepreneurial behavior.	Teacher entrepreneurial behavior was influenced by the synergy effects between the person-group and person-job environment. Middle leaders with more years of experience exert more influence on promoting entrepreneurial behavior. Middle leaders have limited influence on shaping person-organisation environment.
Li, Poon, Lai, Tam (2021)	This quantitative study examines how middle leaders implement system-wide curriculum reform through building teacher capacity.	Middle leaders exert substantial and positive influence on teacher development. Middle leadership accounts for over 60% of the variation of perceived student learning.
Bryant, Wong, & Adames (2020)	This mixed-method study explores how middle leaders enact their potential to enhance teacher capacity.	Middle leaders build collective responsibilities and use various strategies to build teacher capacity. Interaction patterns are associated with emerging roles and strategies.
Edwards-Groves, Grootenboer, Hardy, & Rönnerman (2019)	This qualitative study explores middle leaders' impact on site-based education development.	Middle leaders create conditions that drive site-based education development. There is a need for

		future research exploring the site-based practices that promote teacher development.
Tay, et al. (2020)	This mix-method study examines how middle leaders enact the assessment leadership role for learning.	Middle leaders used technical, tactical, and ethical approaches in their assessment leadership for learning.
du Plessis, & Eberlein (2018)	This qualitative study provides an understanding of how middle leaders develop teachers in schools.	Middle leaders are crucial links between principals and teachers. Middle leaders exert a horizontal and a vertical influence.
Mampane (2018)	This qualitative study examines the role of middle leaders in developing teachers	Middle leaders promote the positive experiences of teamwork and peer support for improving teacher development.
Vanblaere, & Devos (2018)	This study offer quantitative perspective on the role of middle leaders for developing teacher learning communities.	Middle leaders play a key role in fostering the interpersonal characteristics in the departments.
Edwards-Groves, Grootenboer, & Ronnerman (2016)	This cross-nation qualitative study examines how colleagues perceive the role of middle leaders on facilitating action research and teaching development in schools.	Middle leaders develop five dimensions of trust for action research and teacher development.
Myende, & Bhengu (2015)	This qualitative study examines the experience of middle leaders in relation to their involvement in strategic planning.	Middle leaders are involved of some forms of planning. However, the data demonstrates middle leaders' limited participation in substantive issues on strategic planning.
Aubrey-Hopkins, & James (2002)	This qualitative study discusses the experience of middle leaders in improving the teacher practice in their departments.	Middle leaders establish a culture of collaboration to develop teachers. Middle leaders focus on improving teachers whose practice is dissatisfied.
Wise (2001)	This qualitative study explores the aspects of the monitoring role of middle leaders.	Middle leaders place a high priority on mentoring teachers.
Abolghasemi, McCormick, & Conners (1999)	This quantitative study explores how middle leaders play a role in supporting the alignment of teacher practice and school vision.	Middle leaders play a mediating role in the alignment of teacher practice and school vision.
Mcgarvey, Marriott, Morgan, & Abbott (1997)	This mixed-method study explores middle leaders' responsibilities with regard to support differentiated teaching.	Middle leaders' role of supporting differentiated teaching is developing and its effectiveness enhanced by the principals' support.

Research on middle leaders' impact on specific areas has focused on preliminary investigation on how middle leaders facilitate teacher learning. Middle leaders have a significant influence on teachers' capacity (Bryant, Wong, & Adames, 2020; Vanblaere, & Devos, 2018). However, knowledge about this practice is growing but limited. How do middle leaders individually and collaboratively promote teacher learning? How do school leaders and teachers understand middle leaders' role in building teacher capacity? Thus, there is a need to have further empirical and conceptual works across different contexts to enhance the understanding of the nature of middle leadership for teacher learning.

Over the last few decades, a body of knowledge has facilitated the understanding of the role and role enactment of middle leadership across contexts. How do middle leaders apply these basic leadership practices stated above? The evidence suggested that middle leaders' fulfilment of their responsibilities was associated with strategies such as managing time effectively (Abdul Razzak, 2015; Irvine & Brundrett, 2016), building relationships including brokering between top-level leaders and teachers (Edwards-Groves et al., 2019; Koh, Gurr, Drysdale, & Ang, 2011; Ng & Chan, 2014), translating and adapting (Bennett, Woods, Wise, & Newton, 2007; Loh & Hu, 2021; Nehez, et al., 2022), role modelling (Gurr, 2019; Heng & Marsh, 2009), using visions (Dinham, 2007; Irvine & Brundrett, 2016), creating communicative spaces and communities of learners (Bryant et al., 2020; Herrington, 2004), and enhancing teachers' participation (Ghamrawi, 2010; Li, Poon, Lai, & Tam, 2018).

3.5.6 A model for understanding middle-level drivers of teaching and learning

I propose a model to help locate the work of middle leaders through the synthesis of the

research findings regarding roles and practices of middle leadership in the Western context. This model demonstrates five core roles and five core middle leadership practices that are derived from the above analysis (see Figure 3.1). These roles and practices suggest the nature of middle-level leadership.

Figure 3.1. Middle leadership role and practice

Instruction-oriented middle leadership		
Role	**Practice**	**Enactment**
Middle leaders as vision builders	Directing teachers on departmental mission	1. Forming vision and setting goals 2. Making linkages and making sense of school directions and departmental goals 3. Communicating goals with teachers and form consensus
Middle leaders as instructional supervisors and models	Facilitating teaching-learning process	1. Attending to classroom practices and supervising such practices 2. Exemplifying teaching strategies 3. Improving student learning and development
Middle leaders as culture builders	Promoting culture for the team	1. Building collaborative learning culture 2. Creating structures to support collaboration 3. Developing productive working relations with and among colleagues
Middle leaders as curriculum coordinators	Improving and developing the curriculum	1. Interpreting and translating the curriculum documents 2. Setting direction for curriculum implementation 3. Guiding and supporting teachers' enactment of curriculum 4. Mediating between curriculum innovation and teachers to improve teacher curricular practices
Middle leaders as builders of teachers' capacity	Boosting teacher professional learning	1. Maintaining teachers' focus on improving their practices 2. Establishing structures for teacher learning 3. Empowering teachers' leadership potential

3.6 Influential Factors of Middle Leadership in School

Studies have revealed that middle leaders need to attend to a range of factors to exercise influence (Fitzgerald & Gunter, 2006; Gurr, 2019). Scholars have contributed to this line of research by exploring what major factors shape middle leadership practices. Variations in middle leadership practices can be fully explained by professional, relational, organizational, and external influences. Research has supported these influences (e.g., Moshe, 1999; Hoult, 2002; Hirsh & Bergmo-Prvulovic, 2019).

Professional context. Some professional factors in the variation in middle leadership in schools, such as middle leaders' subject knowledge and expertise, experiences, educational beliefs, and values have already been identified. Studies have revealed that expertise in relationships is an important part of successful middle leadership (Bennett, Woods, Wise, & Newton, 2007; Simkins, Coldwell, Caillau, Finlayson, & Morgan, 2006).

Interpersonal skills are not sufficient to underpin instruction-oriented middle leadership. Avidov-Ungar and Shamir-Inbal (2017), and Bennett, Woods, Wise, and Newton (2007) claimed that middle leaders' subject knowledge and their expertise as teachers help them gain authority and reinforce their leadership. Irvine and Brundrett (2019) showed that reflection, evaluation, the integration of experiences including educational experience (Busher, & Harris, 1999), job-embedded learning experience (Turner, 2006) and leadership experience (Ho, Bryant, & Walker, 2022) played a central role in middle leadership and enabled experienced middle leaders to make better informed decisions. Middle leaders feel confident with professional learning which expands their knowledge and enhances their teaching and leadership effectiveness (Ng, & Chan, 2014; Thorpe, & Bennett-Powell,

2014).

In addition to middle leaders' prior knowledge, expertise and professional learning, middle leaders' educational understanding and belief also shape their leadership outcomes (Busher & Harris, 1999). For example, Ng (2015) found that how middle leaders understand quality education influenced the way they led educational reform.

Relational and organizational influences. Variations in middle leadership practices are likely relate to relational and organizational influences. The size of the department (Glover et al., 1998), the culture and leadership structure of the school (Tapala, Van Niekerk, & Mentz, 2021), the leadership approaches of school principals (Hammersley-Fletcher, & Kirkham, 2005), and teachers' behavior influence middle leadership practice. The size of the teams rather than administrative matters can impact the extent to which middle leaders attend to leadership (Glover et al., 1998). Role clarity has been linked to the effectiveness of middle leadership practice. Principals define and communicate middle leaders' roles to properly promote middle leadership (Bryant, 2019).

Additionally, principals identify middle leaders' developmental needs and foster their development (Grootenboer, Edwards-Groves, & Ronnerman, 2014; Gurr, 2019) through developing Cascade, Parallel Structure, and Emergent Specialist organizational structures (Bryant & Walker, 2022). Support from principals is important for middle leaders' team performance (Bryant & Walker, 2022; Dinham, 2007).

Research has discerned that a teacher's attitude and relationships influence middle leadership enactment. The effectiveness of middle leadership in developing teachers may be limited if teachers are unwilling to be observed by middle leaders to improve their

teaching skills (James, & Hopkins, 2003; Leithwood, 2016). Inharmonious relationships among teachers impedes middle leadership; thus, middle leaders need to spend copious time on conflict-solving (Tapala, Van Niekerk, & Mentz, 2021). In addition, middle leaders tend to exert their greatest influence when schools create a positive culture (Heng, & Marsh, 2009) and use distributed leadership (Peacock, 2014).

External forces. Out-of-school factors on roles and processes of middle leadership have been noted in the literature exploring issues around the agency of school middle leaders within a wider context. The work of middle leaders in school is shaped by the wider agenda of government control over the curriculum and requirements to ensure accountability and learning standards (Hammersley-Fletcher, & Strain, 2011). Advisors from local education authorities supervise middle leaders' work and departmental teaching strategies while providing suggestions to middle leaders (James & Hopkins, 2003). A particular external influence on middle leaders in England and Wales is the Office for Standards in Education which provides policy context in defining required competencies of middle leaders (Hammersley-Fletcher, 2002). School middle leaders translate and interpret external policies, which in turn impact the extent to which middle leaders adjust their practices (Tay, et al., 2020; Shaked, & Schechter, 2019). Additionally, the socio-cultural context has a significant influence on curriculum decisions made by middle leaders (Busher & Harris, 1999).

Considering middle leaders' role at different levels (Day, & Grice, 2019), their leadership is mediated by professional, relational, organizational, and external contexts. Influences of these contexts have been identified from a collection of independent studies. Attention has been paid to the dynamic, interactional nature of different context types and levels in the

process of middle leadership. However, it is unknown how these influences are interrelated.

3.7 Theorising Middle Leadership: What Do We Know?

The growth in the importance of middle leadership has been accompanied by theory development. After reviewing empirical evidence of middle leadership at schools, I will now review the theoretical basis of middle leadership to uncover how middle leadership is conceptualised. Almost half of the studies cite at least one theory.

Instructional leadership is the most common theoretical framework in school middle leadership research. In addition to instructional leadership, studies have also used the theory of practice architectures (e.g., Edwards-Groves, Grootenboer, & Ronnerman, 2016), sense making as a conceptual framework (e.g., Shaked, & Schechter, 2019), communities of practice (e.g., Hammersley-Fletcher, & Kirkham, 2007), and contingency theory (e.g., Roden, 2003).

Middle leadership is an under-utilised instructional leadership source (Leithwood, 2016). Instructional leadership can be used as a framework to understand the effects of middle leaders. Studies have shown how research evidence supports the concept of instructional leadership. White (2001) indicated that the aspects of leadership practice of middle leaders which focused on leading teaching and learning and improving teacher development are in part similar with instructional leadership. Cardno and Bassett (2015) indicated instructional leadership is associated with monitoring and evaluating teacher performance. Ogina (2017) suggested that instructional leadership extends beyond sole position of the principal. Busy principals have distributed some of their workload, i.e., leadership accountabilities, to middle leaders (Seobi & Wood, 2016). However, how are these instructional leadership

responsibilities shared with middle leaders?

Ogina (2017), who explained how department heads perceive their instructional leadership role and how they maintain the quality of their teaching and learning, found that department heads perceived their instructional leadership role as supervising teachers and evaluating teacher performance which includes modelling, motivating teachers, and establishing harmonious relationships between and among teachers to enhance teaching and learning (Ogina, 2017). Another study indicated department chairs' instructional leadership was associated with instructional supervision including supporting and developing teachers, facilitating the teaching and learning process, while suggesting a lack of time limited their exercise of instructional leadership indicating that leadership development was needed (Zepeda & Kruskamp, 2007). Kelly and Salisbury (2013) examined the role of department chairs as instructional leaders which was comprised of setting the department vision, assessing instructional effectiveness, fostering teacher development and developing and improving curriculum. In addition, their study indicated that training and creating positive school conditions were needed to improve department chairs' instructional leadership.

Seobi and Wood (2016), in one under-resourced school in South Africa, engaged department heads in action research to develop their leadership to support teachers and maintain teaching and learning quality. Javadi, Bush, and Ng (2017) revealed that monitoring is the significant instructional leadership role of middle leaders. Klar (2012) indicated that principals foster instructional leadership of department chairs by cultivating school-wide distributed instructional leadership, identifying needs of other instructional leaders, and providing support for other sources of instructional leadership.

Scholars have begun to seek middle-leading positions, such as curriculum area middle leaders, pedagogical leaders and department heads to reshape the understanding of instructional leadership. Preliminary empirical evidence suggests that the core practices of middle leaders' instructional leadership include leading teaching and learning, improving teacher learning, and motivating and monitoring teachers. Research has referred mostly to the role and responsibilities of middle leaders' instructional leadership. Scholars have noted the potential and important influence of instructional leadership by middle leaders on peer learning but the knowledge base on the topic remains under-developed.

3.8 Review Articles on Middle Leaders and Middle Leadership in Schools

In addition to the analysis of the relevant research, it is important to identify previous systematic reviews into school middle leaders and middle leadership. These reviews have examined middle leadership to some degree and each one has offered critical perspective.

Turner (1996) published a review of the previous 15 years of research on middle leaders' role in secondary schools in England and Wales and synthesised knowledge of middle leaders' influences on the teaching-learning process. The review demonstrated the role of middle leaders, including the routinizing activities of the departments, monitoring and evaluating the work of the department, planning of the curriculum, students' learning experiences, engaging in teacher development, and liaising with other departments and external agencies. This review proposed a model indicating the context of the middle leaders' role in improving instruction. The review indicated that there was still very limited studies exploring the holist roles of middle leaders. Several years later, Turner (2003) conducted another review of the recent theoretical literature and empirical research on

middle leaders to understand their role more clearly and to suggest future research. The review identified three aspects of the research progress: theoretical ideas (e.g., the use of contingency theory), policy issues (e.g., Teacher Training Agency standards for subject leaders), and the research focus of the work of middle leaders while indicating the characteristics of effective and ineffective departments. The review suggested future research, including the use of non-contact time, data management, and the professional learning of middle leaders.

Bennett, Woods, Wise, and Newton (2007) reviewed empirical studies, between 1988 and 2005. This review provided some clarity about middle leaders' tensions, challenges, and contexts. The two key tensions derived from the literature, were, first, between middle leaders' whole-school focus and their loyalty to their teams, and second, a hierarchical leadership structure and the use of collegiality. Three key issues were associated with these tensions: the concept of collegiality, professionality, authority and monitoring, and authority and expertise. The authors found a number of factors, including the degree of uncertainty, structures, and subject-based professional learning shaped middle leaders' role perceptions.

Nobile (2018) proposed a theoretical model of middle leadership in schools based on an extensive review of research. The model comprises influencing factors of middle leadership, potential influence of middle leadership, and a typology of roles and how middle leaders perform their roles. This theoretical model serves as a useful starting point for empirical works.

Harris, Jones, Ismail, and Nguyen (2019) conducted a bibliometric analysis of articles

between 2003 and 2017. The review demonstrated that middle leadership research has an ongoing research agenda. Qualitative approaches using interviews and observations dominated the research methods. There is a need for more sophisticated empirical works with more contexts to be explored and theoretical analyses to develop the knowledge base.

Tang, Bryant and Walker (2022) conducted a systematic review of instruction-oriented middle leadership. This review synthesized a core set of middle-level instructional leadership practices and identified influences on leadership practices. The review demonstrated a need for increased research around instruction-oriented middle leadership impacts and influences on instruction-oriented middle leadership in different education systems and a greater range of methodologies to understand middle leaders' instructional roles.

Tang (2022) conducted a review of studies on middle leaders and middle leadership published between 1995 and 2021. The review noted the limited empirical research and theoretical conceptualizations for Chinese middle leadership. The review also observed that the Chinese knowledge base requires increased theoretical and empirical considerations.

Most recently, Lipscombe, Tindall-Ford, and Lamanna (2023) analysed empirical articles on middle leadership between 2006 and 2020 to understand the definition of middle leaders, responsibilities of middle leaders, and their influence and professional learning. The authors noted the difficulty of defining middle leadership. Middle leadership positions and responsibilities vary in context, and middle leaderhip impact teacher development and school reform although there is limited direct research on their impact.

Gurr (2023) provided a definition of middle leaders and examines established and recent reviews, alongside a discussion of cohesive research programs and studies on the impact of middle leaders. The review revealed that middle leaders exert positive impact on teacher work and student achievement by creating conditions for collaborative behaviors. Their work is enhanced by high expectations, a focus on leadership, clear roles, support from principals and senior leadership, and professional development opportunities. The review noted that relationship-focused leadership model becomes important to obtain a deeper understanding of the work of middle leaders.

These reviews suggest the need for more empirical work on middle leaders' role, their interactions with teachers and school leaders, and how factors that shape middle leadership and its outcomes while conducting such research across different national contexts using a greater range of methodologies.

3.9 Implications of the International Knowledge Base

Studies have focused on the functions of middle leaders and middle leadership in schools in general. Given this focus, qualitative research methods have been dominant over the past decades. Sustained attention has been given to middle leadership roles and practices. These studies have extended from department heads to middle leaders with multiple positions (e.g., curriculum coordinators). As is well documented in the literature, the role of middle leaders is multifaceted (Bennett, Woods, Wise, & Newton, 2007; Shaked, & Schechter, 2017). Studies have painted a similar picture, although different contexts have been explored; for example, reviews have identified five common roles, namely, vision builders, supervisors and models, culture builders, curriculum coordinators, and builders of teachers'

capacity; five common dimensions of the work of middle leaders, namely, directing teachers on departmental missions, facilitating teaching-learning processes, promoting culture for the team, improving and developing the curriculum, and boosting teacher learning have also been identified. These roles and practices are connected as a model explaining the nature of middle leaders and middle leadership in schools.

Because of middle leaders' proximity to and their direct collaboration with teachers (De Nobile, 2018; Dinham 2016; Edwards-Groves, Grootenboer, & Ronnerman 2016), studies have concerned the potential and major influence of the middle-level on understanding and supporting teachers (e.g., Edwards-Groves et al., 2019; Mampane, 2018). However, there is a dearth of literature regarding the middle leaders' influence on teacher learning processes, although more investigations have been conducted on the holistic nature of middle leadership. The knowledge of how middle leaders facilitate teacher learning is still under-explored (Bryant, Wong, & Adames, 2020; Edwards-Groves et al., 2019; Hairon, Goh & Chua, 2015). Specifically, understanding domains of influence, how they prioritize their tasks, how they find support to foster teacher learning, and what conditions and how these conditions intertwine to exert influence on this process need probing. Further, due to the engagement of middle leaders in instructional matters, scholars suggest middle leaders are instructional leaders (e.g., Cardno & Bassett, 2015; Leithwood, 2016; Seobi & Wood, 2016; Xie, 2017) but little further exploration of how middle leaders exercise instructional leadership to enact their essential role, namely, facilitating teacher development, even in the Anglo-American societies, has rarely been developed.

Moreover, empirical evidence indicates the multiple factors that act on the exercise of middle leadership include personal context, relational and organizational influences, and

external forces, specifically, the professional learning of middle leaders, teacher attitudes, principal support, school culture, and support from external mentors. Since this set of conditions has been synthesised from multiple studies, it is unknown how these factors are interrelated. Thus, there is a need to explore the depth and complexity of the context of leadership. In addition, middle leaders in schools are increasingly recognized as playing crucial role in building teacher capacity (Harris, & Jones, 2017).). However, relatively little effort to date has gone into understanding the factors affecting the way middle leaders lead teacher learning.

To fill in this conceptual gap, the present study initially explores how middle leaders exert influence over other teachers, domain of influence, and focus their influence to understand teacher development of instructional leadership. Attention is also paid to the dynamic, interactional nature of different context levels and their interrelated influences on the ways in which middle leaders bring about improvements in teacher practice. This gap was identified after I reviewed middle leadership literature in China.

Most researchers have used interviews and observations to collect data. For example, some scholars have examined how middle leaders implemented their leadership in the reform context to ensure the educational quality (e.g., Mercer & Ri, 2006). Given the nature of the topic, qualitative research methods have dominated over the past decades.

3.10 Middle Leadership and the TRG Heads in Mainland China

In this section, the relevant English and Chinese-language literature on middle leadership in China is reviewed to provide new advances regarding middle leadership in the Chinese

context. The purpose of this review is twofold: to identify patterns and gaps in current knowledge on middle leadership.

3.10.1 Literature Search Rationale

I used the following databases for identifying potential literature: Google Scholar, Scopus, Eric, ProQuest and Chinese databases including China Academic Journal Full-Text Database (Education and Social Sciences), the China Master Theses Full-Text Database and China Doctor Dissertations Full-Text Database (Education and Social Science).

A set of keywords in two languages – "middle leaders," or middle leadership" *(zhongceng lingdao)*', "subject leader" (*xueke zuzhang*), "director" (*chuzhang*) and "head of TRG" (*jiaoyanzu zuzhang*) – and for English literature, the study added an additional keyword "China." In addition, the review focused on instruction-oriented middle leadership which is relevant for the study. A snowball strategy was used to obtain additional pertinent articles by checking reference lists.

I identified potential studies in Chinese-language in core journlas and English-language pieces in peer-reviewed journlas to ensure the quality of sources and master and doctoral theses to ensure the originality of the review. I focused primarily on the post-1996 literature. The rationality of this choice is threefold. First, there is a greater need to understand school leadership in different educational context since the mid-to late 1990s (Hallinger, & Leithwood, 1998). Second, school leadership in China began to appear and increase in the international community towards the end of the 1990s (Walker & Qian, 2015). Third, scholars paid specific attention to middle leadership in schools from the late 1990s. Thus, the time period covers 1996-2022.

After reading the abstracts and identified articles, a final set of 111 articles (including 79 articles and 32 master theses) were selected: nine from 1996 and 2004, 58 from 2005 and 2013, and 44 from 2014 and 2022. These articles provide an overview of research on middle leaders and middle leadership in Chinese schools and the findings across regions and school contexts. Thus, the selection of articles offers width and depth.

3.10.2 Analysis Strategies

After screening the studies and selecting those that met the predetermined inclusion criteria, I read the full text of each study to condense the data. The relevant data included research types, topics, theoretical perspectives, and the key findings of the studies. A spread sheet helped to store the data and conduct coding. The analysis of the extracted data relied on descriptive statistical coding. The findings on research types, topics, theoretical perspectives, and the key findings of the studies are synthesized in the following sections.

3.10.3 Studies on Middle Leadership in China: To What Extent and in What Ways Is Middle Leadership Being Investigated

Educational systems in China, consistent with global trends, are characterized by frequent reforms (Walker, & Qian, 2018), and school middle leaders play an important role. When large-scale reforms get under way, school middle leaders are increasingly recognized as motivators of teachers while simultaneously serving as mentors and capacity builders (Zhang, Wong, & Wang, 2022). China has established the TRG head position as a formal leadership position in the middle-level of every school with the purpose of supporting teachers' learning and development since 1952 (Qian, & Walker, 2013). TRG heads are an important source of middle leadership. This review covers middle leadership in China,

focusing on studies about TRG heads. I analysed empirical and non-empirical articles to identify primary patterns and research trends. Empirical studies were reviewed for the central topics and major findings. Non-empirical studies were analysed based on writing style (e.g., descriptive writing style), sources, and focus.

3.10.3.1 Non-empirical Research: Dominant Pattern

Most of the studies on middle leadership in China have focused on TRG heads, and most have been non-empirical. The data sources of the non-empirical studies were mainly from scholars and practitioners in universities, secondary schools, and primary schools with a handful of perspectives from education departments and teacher training colleges.

Two article types were identified. Introductions and descriptions were the first core pattern of the non-empirical articles. These collections mainly focused on introducing famous middle leaders, portraying their roles, and narrating their successful leadership experiences. Commentaries was the second pattern. These articles discussed middle leadership roles and practices, factors influencing middle leadership, and middle leader preparation and development.

The first core pattern shaping studies was mainly from the perspective of practitioners in primary schools and secondary schools. Three sub-patterns were identified: descriptions of middle leadership roles and practices, summaries of successful middle leadership practices and conclusions of core strategies of middle leader development.

The articles on middle leadership roles describe what middle leaders needed to do. Most of the descriptions and introductions focused on this theme. Studies describing the middle

leadership of TRG heads noted their important role in developing novice teachers (Xiong, Wu, & Liao, 2007) and revealed other dimensions of middle leadership which comprise modelling, creating a positive environment, building teaching capacity (Liu, 2009; Wang, 2006; Ye, 1992), rewarding and motivating teachers, caring for teacher emotion (Wang, 2006), establishing professional learning communities and promoting cross-community (TRGs and lesson preparation groups) collaboration (Kang, 2012), implementing curriculum reform (Ye, 1992), and leading school-based research (Ye, 1992; Kang, 2012).

Scholars indicated the importance of leading from the middle. In response to the reform, Kang (2012) suggested reconsidering and transforming the role of TRG heads. Successful TRG heads promoted collaborative professionalism, provided individual support for teachers, involved teachers into the decision-making process and promoted collective responsibilities. In addition, effective TRG heads promoted school-based research by working with teachers for research topic selection, forming consensus, and making implementation plans. Concurrently, effective TRG heads focused attention on developing novice teachers (Xiong, Wu, & Liao, 2007). The articles noted the importance of middle leaders' systems thinking (Liu, 2013) and self-understanding (Kang, 2012; Zhang, 1996).

Some articles described how middle leaders can be better prepared and supported based on their school experience. Schools developed middle leaders through pre-service training and rigorous leader selection mechanisms (Cai, 2019), school-based job rotation (Chen & Chen, 2006; Ge, 2005; Liu, 2014), external learning opportunities (Ge, 2005; Wei, 2019), and evaluation and rewarding (Chen & Chen, 2006; Wei, 2019). Principals supported the development of middle leaders by distributing leadership to middle leaders, defining their accountabilities, and promoting their reflection (Qi, 2007). However, there were few

descriptions about how to prepare the TRG heads. The description of leadership preparation focused on other sources of middle leadership, such as directors of office for teaching affairs.

The second core pattern shaping studies was commentaries from the perspectives of scholars in universities. These articles were constructed in various analytical depths. Three sub-patterns were discerned: middle leadership roles and practices, factors influencing middle leadership, and middle leader development. There were a few studies on dilemmas and problems facing middle leaders.

The commentaries focused on discussing middle leadership roles and where their authority comes from. The TRG heads played a linking role, mediating demands between teachers and principals (Guo, 1995; Hu, 2015; Jiang, 1997); they also had a coordinating role, leading teaching-research activities (Xie, 2022; Zhang, 1996) a mentoring role, providing pedagogical support for teachers (Zhang, 2010), and they acted as student facilitators, ensuring the quality of the learning experience of students (Yu, 1992). Sources of middle leadership authority primarily emerged from their subject expertise (Du, 2013). The TRG heads normally had a high level of teaching and research capacities. They were autonomous within their daily work activities and coordinated professional learning activities for teachers (Liu, 1992; Du, 2013).

School context, relationships with and among teachers, and the relationship with principals (Zhao & Zhang, 2016) influenced the exercise of middle leadership. Ineffective organizational structure of schools, authoritarian principals, and a lack of a rewarding system inhibited the exercise of middle leadership (Zhao & Zhang, 2016). To facilitate the

exercise of middle leadership, school needed to transform the traditional organizational structure and promote and implement distributed leadership (Yang & Yang, 2006). Li (2005) discussed why TRG heads became outsiders when training for curriculum reform and provided suggestions. Schools needed to establish rigorous leader selection mechanism and build their capacity (Li & Xie, 2006). Moreover, schools were required to design the training related to their work and seek effective modes of training (Yang & Yang, 2006).

Non-empirical studies provided an understanding of the TRG heads' role, the core enactment of their leadership, the influencing factors on the TRG heads' leadership, and strategies for facilitating their leadership. Further empirical exploration is needed to echo these non-empirical findings.

3.10.3.2 Empirical Research: Limited but Growing

There is a limited but growing number of empirical studies on middle leadership in China, most of which are master theses. There have been no doctoral dissertations on school middle leaders and middle leadership in China. Among the master theses, most of the studies have focused on the roles and responsibilities of middle leaders (Li, Y., 2017; Liu, 2017; Wang, H., 2017), specifically on the middle leadership role of the TRG heads (e.g., Chen, 2011; Jiang, 2013; Wang, 2012; Xie, C., 2017) and their competence (Guan, 2011; Li, X., 2013; Lv, 2011; Zhang, C., 2016; Zhang, D., 2017; Zhang, Q., 2017; Zhao, L., 2015) covering a wide range of topics, including leadership effectiveness (Wang, W., 2006; Wang, X., 2009), impacts of the TRG heads on teachers' attitudes towards work (Wang, S., 2007), professional learning of TRG heads and its influencing factors (Hou, 2022; Pu, 2013; Ren, 2015; Tang, 2013; Zhao, 2010). Most of the research followed a "problem-solution" mode.

Regarding empirical journal articles, scholars have explored the roles and responsibilities of TRG heads (Mercer & Ri, 2006; Yang & Zeng, 2005), leadership competence (Gao & Hu, 2016; Yang & Zeng, 2005), leadership preparation and development (Chen, 2012; Du, 2021; Xie, F., 2013), challenges and difficulties facing TRG heads (Xie, J., 2013), and influencing factors of the TRG heads (Hu & Gao, 2012). In addition, the research has focused on leadership of the TRG heads within TRGs. However, TRG heads are also functioning beyond TRGs, e.g., lesson preparation groups, and at the organizational and system level.

Given the initial purpose of the study, i.e., understanding leadership interactions, the review focuses on the content analysis on middle leadership roles and practices and factors influencing middle leaders, specifically the TRG heads.

The reviewed studies included leadership roles, leadership practices and leadership competence. Some studies provided a holistic picture of the TRG heads' roles and practices (e.g., Chen, 2012; Lv, 2011; Mercer & Ri, 2006; Wang, 2012) including team mission and vision, creating and maintaining a positive culture for teaching-research, coordinating curriculums, ensuring teaching and learning standards, leading teaching-research activities and improving teacher development (e.g., Jiang, 2013; Wang, 2012; Mercer & Ri, 2006; Wang, 2012; Yang & Zeng, 2005). However, empirical evidence regarding how the TRG heads enact specific practices is still very thin. The limited empirical evidence indicated middle leadership in China is similar to the middle leadership model derived from literature beyond China.

Some articles focused on one aspect of middle leadership practice. One study focused on

the TRG heads' curriculum leadership roles and practices (Li, 2010). Another study examined the TRG heads' role in leading teacher learning in rural schools (Chen, 2011) and summarized best practices of TRG heads. Yet another study contributed to discussion of how middle leaders mediate the tensions between different levels of teachers' learning in a secondary school through interviews and observations. In this study, middle leaders including the TRG heads used a combination of bureaucratic and professional leadership approaches to support teachers' sustainable learning (Zhang, Wong, & Wang, 2022). Two studies investigated the relationship between the TRG heads and teacher attitudes and professional learning (Wang, 2007; Zhang, Wong & Wang, 2022). Other studies focused on the TRG heads' competence (e.g., Gao & Hu, 2016; Hu & Gao, 2012; Jiang, 2013; Zhang, 2016).

Empirical studies also covered factors influencing middle leadership. One article indicated that principal leadership styles and the departmental environment influenced the exercise of the leadership of the TRG heads (Jiang, 2010). Another article also indicated that TRG heads' values and belief, their expertise and research competence, school climate and principals' support had significant impact on their leadership (Li, 2010), while yet another article suggested that leadership competence, the structure of TRG and the TRG heads' learning influenced the exercise of middle leadership (Hu & Gao, 2012). One study indicated that a positive school condition, individual competence, stakeholders' trust, and internal motivation influenced the practice of the TRG heads (Pu, 2013). These studies identified the professional context, relational, and organizational influences on the exercise of middle leadership. However, the empirical evidence about the influence of external forces on the TRG heads is limited compared to studies conducted outside of China, such

as the Office for Standard in Education in England and Wales. Additionally, the research did not indicate how these factors intertwine to influence the exercise of middle leadership.

3.11 Theory and Conceptualisation: Limited Attention

In China, there is a lack of theoretical evidence regarding the influence of middle leaders and middle leadership. Instructional leadership derived from the Western context has been a dominant paradigm in the reviewed articles' theoretical analyses (Tang, 2022). There were only two non-empirical studies and two empirically based master theses that used instructional leadership to conceptualise middle leadership. The two non-empirical studies focused on how to facilitate the TRG heads' instructional leadership, suggesting that schools need to restructure traditional organizational design and promote professional learning of the TRG heads to support the exercise of their instructional leadership (Yang, X., & Yang, J., 2006; Du, 2013).

The master theses covering the instructional leadership of the TRG heads and its development, demonstrated the influencing factors, and suggested strategies for developing their instructional leadership. Xie, C. (2017) noted the main challenges experienced by TRG heads when implementing instructional leadership and found personal- and school-level influencing factors. Professional factors comprised educational beliefs and values, teaching experience, professional titles, and teaching skills and abilities. School factors included school types, finance support, administrative participation, leadership evaluation and development. Hou (2022) explored a single case of the TRG head and found that the development of instructional leadership of a TRG head progressed from adolescence to maturity through the stages of preparation, formation, and induction. The

TRG head's instructional leadership was mainly reflected in five aspects: inspiration, planning and implementation, teacher learning, team building, and self-management. The TRG head's instructional leadership was influenced by a variety of factors, including personal leadership perceptions, professional qualities, significant others, and school-related systems. Finally, the cultivation strategies for the instructional leadership of the TRG head were proposed, including clarifying the role of the TRG head, enhancing the awareness of the TRG head's instructional leadership, seeking resources to enhance the TRG head's professional quality, and optimizing school conditions to help improve the TRG head's instructional leadership.

Compared to the literature beyond China on middle leaders' instructional leadership which focused on exploring the roles and practices of middle leaders' instructional leadership, research in China focused on the development of their instructional leadership.

3.12 Implications of Literature in China

The literature concerning middle leadership in the Chinese educational context has tended to be descriptive without any rigorous empirical studies being conducted. Most of the studies have been conducted on the basis of traditional Chinese research mode of reasoning' and 'argumentation (Yang, 2005). Studies relied more on descriptions of the observed phenomenon. The pattern of results presented in the reviewed studies suggests that the corpus of knowledge on middle leadership in China is still in its early stage of development. The emerging evidence appeared to maximise the potential of the middle-level leaders in schools.

There is a much greater focus on leadership development and leadership capabilities of

middle leaders. In China, middle leaders, specifically TRG heads, work collaboratively with teachers, vice principals, and teaching-research officers (external mentors) to lead teacher learning (Tang, 2021). Studies on how middle leaders do it is non-empirically focused. The empirical studies focused on challenges facing middle leaders and how to develop middle leaders to support teachers. Thus, TRG heads' leadership for teacher learning has been inadequately conceptualised and empirically explored.

Researchers found that TRG heads are situated well to build teacher capacity at schools (Huang, 2012; Qian, & Allan, 2021). However, only three empirical studies touch upon leadership strategies and the practice of TRG heads to lead learning among teachers. A study conducted in rural schools described best practices of TRG heads in leading teacher learning (Chen, 2011) and the other two studies described the leadership strategies of TRG heads for developing novice teachers (Huang, 2012; Li, 2010). These understandings suggest a sphere of influence of TRG heads over other teachers but it remains incomplete. In addition, simply describing leadership strategies (e.g., promoting collective learning, modelling good practice and facilitating reflective practice) does not explain much about how different dimensions of leadership influence teachers or the sphere and focus of the influence. This process of influence is complex and involves multiple interactions but studies largely failed to uncover the interactions among TRG heads' leadership, personal context, relational and organizational influences and external forces towards leading teacher learning. An understanding of the different levels, layers, and complexities of contexts would provide a more rounded and in-depth exploration of the process of developing teachers by middle leaders.

Further, the teacher developer role of TRG heads is largely understood from their own

perception. It is unknown how principals, teachers, and related stakeholders perceive their leadership role in developing teachers. Moreover, the reviewed studies which were conducted around 10 years ago are now outdated in response to the shifting context.

There have been few studies using relevant theories to conceptualize middle leaders and middle leadership in China. Leadership roles and practices described in the research indicate that middle leaders tend to exercise instructional leadership in Chinese schools although it was not explicitly mentioned in most of the studies. The five core practices of the middle leaders can be placed in somewhat similar categories of instructional leadership. However, there have been few studies conceptualizing the leadership practices of middle leaders as instructional leadership.

3.13 Theorising: A Core Set of Instructional Leadership Practice and Its Relevance to Middle Leadership

The reviewed studies suggest that middle leaders tend to exercise instructional leadership in schools (Cardno & Bassett, 2015; Leithwood, 2016; Ogina, 2017). This section summarises the core set of instructional leadership practices and provides its rationale for conceptualising middle leadership. I divide this section into two main parts. The first part reviews the prominent instructional leadership models in use for studying school leadership and defines the core characteristics of school leadership, entitled "the nature of instructional leadership practices." The second part reflects on the relationship between these core dimensions and middle leadership models which have emerged from an extensive review of literature about school middle leaders and middle leadership to provide theoretical rationale for the study. The comparison indicates that instructional leadership

exists not just in principals but at the middle-leader level as well. As the study was conducted in the Chinese context, Walker and Qian's (2022) instructional leadership model, thus, becomes a important part of the analytical framework.

Principalship practices in effective schools demonstrate the importance of instructional leadership (Hallinger, 2015; Hallinger, Gümüş, & Bellibaş, 2020; Hallinger & Murphy, 1985; Leithwood, 2001). Early studies in effective schools suggest that instructional leadership practices of principals can help interpret the differences in school performance, especially at the primary level (Andrews & Soder, 1987; Edmonds, 1979; Hallinger & Murphy, 1985). Instructional leadership gained popularity during the early 1980s (Ng, 2016; Hallinger, 2003, 2005). Over the past 40 years, the understanding of principal instructional leadership has been developed significantly. The enactment of their role requires the involvement of other leaders, including middle leaders (Bryant, 2019; De Nobile, 2018; Dinham, 2007; Hairon, 2016; Hallinger, Adams, Harris, & Jones, 2018). Principals need to collaborate with middle leaders to facilitate teaching and learning in which specialist subject knowledge is required to underpin instructional effectiveness (Bush, 2015).

This section identifies the core dimensions of instructional leadership seeking to elaborate on middle leadership practices by integrating 1) Hallinger and Murphy's instructional leadership model derived from the American context which is comprehensive and dominant and frequently examined in empirical studies (Boyce & Bowers, 2018; Hallinger, 2018), 2) a synthesised model of leadership for learning which was developed by reconceptualizing instructional leadership somewhat more broadly (Hallinger, Gümüş, & Bellibaş, 2020) which is a distributed sources of school leadership for instruction, and 3)

Walker and Qian's instructional leadership model which is the only one instructional leadership model in China.

Hallinger and Murphy's instructional leadership model includes three dimensions of instructional leadership: defining school mission, managing the instructional programme and promoting a positive school learning climate (Hallinger & Murphy, 1985). These dimensions were reinterpreted into 10 leadership sub-dimensions (see figure 3.2). This instructional leadership model and the related tool, i.e., the Principal Instructional Management Rating Scale, have been used by more than 500 studies. Over the past decades, instructional leadership has been recognized as a primary role of school principals (Hallinger, Gümüş, & Bellibaş, 2020). Principal instructional leadership promote teacher development through optimising structural and material conditions. Principals inform teachers of opportunities for professional learning, lead school-based teacher development activities, and foster knowledge sharing among teachers (Bellibaş, Gümüş, & Liu, 2021; Blasé & Blase, 1998; Hallinger & Murphy, 1985; Kulophas & Hallinger, 2021).

Figure 3.2. Instructional leadership model (Hallinger & Murphy, 1985)
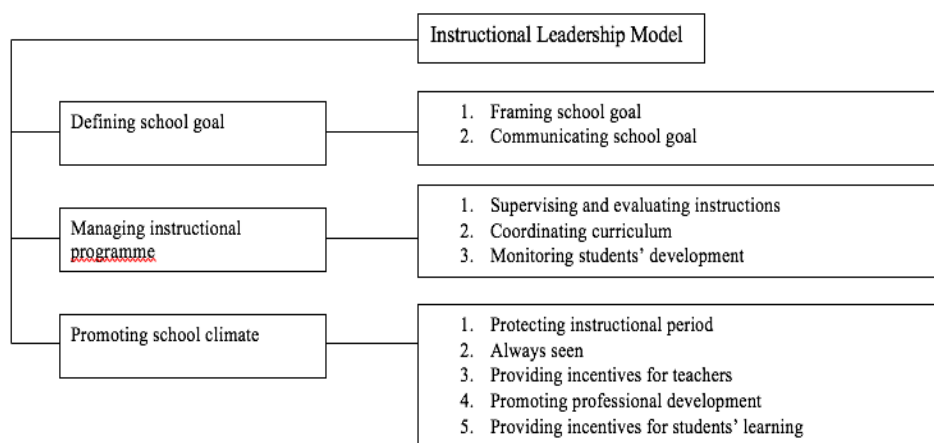
The instructional leadership model has been extensive and global in scope. In China, Qian,

Walker and Li (2017) proposed a preliminary instructional leadership model of school principals in 2017 and modified the model by including larger and diverse informants from 101 primary schools in six provinces (Walker & Qian, 2022). This refined model is comprised of six dimensions including defining purpose and direction, managing and improving teaching and learning, nurturing positive and collaborative teacher culture, developing and improving school curriculum, fostering teacher learning to enhance teacher capacity, and promoting connections with external stakeholders (see figure 3.3). The research, based on data, indicates that Chinese instructional leadership practice focuses great attention on teacher learning. Principal instructional leadership in China provide a number of professional learning opportunities to teachers, build learning communities and emphasize the importance of professional learning of their teachers (Qian & Walker, 2021; Qian, Walker, & Yang, 2017; Walker & Qian, 2022).

Figure 3.3. Instructional leadership model in China (Walker & Qian, 2022)

Defining Purpose and Direction	• Identify and develop school uniqueness • Communicate and form consensus on school values • Align school structure with the values
Managing and Improving Teaching and Learning	• Supervise and evaluate teaching • Monitor student learning and development • Optimize school conditions to improve teaching and learning
Nurturing Positive and Collaborative Teacher Culture	• Promote positive interperonsal relationship with and among teachers • Adopt monetary and non-monetary incentives to motivate teachers • Enrich teachers' well-being and extend care to their personal lives
Developing and Improving School Curriculum	• Align curriculum with instruction and assessment • Design and develop school-based curriculum
Fostering Professional Development to Enhance Teacher Capacity	• Support school-based teacher professional development • Seek and utilize external resources to develop teachers • Promote and coordinate school-based action research
Promoting Connections with External Stakeholders	• Build partnerships with peer schools • Maintain good relationships with local governments • Enhance parental invovlement and garner community support

While the concept of instructional leadership focuses on the role of school principals, leadership for learning, which builds on Hallinger's earlier instructional leadership model (Hallinger, 2011, 2018) suggests broader sources of school leadership, such as heads of departments and subject leaders (Hallinger, 2010) to recast the process of instructional supervision. The model illustrated in figure 3.4 synthesizes conceptualizations over the past several decades (e.g., Hallinger & Heck, 2002; Hallinger & Murphy, 1985; Leithwood, Anderson, Mascall, & Strauss, 2010; Murphy, 1988). Three dimensions construct this model including vision and goals, academic structures and process, and people capacity. Leadership for learning contributes to teacher development by establishing goals and expectations, providing resources, coordinating and participating in teacher learning activities, and nurturing a supportive environment (Hallinger, 2011; Hallinger & Heck, 2010).

Figure 3.4. A synthesized model of leadership for learning (Hallinger, 2011)
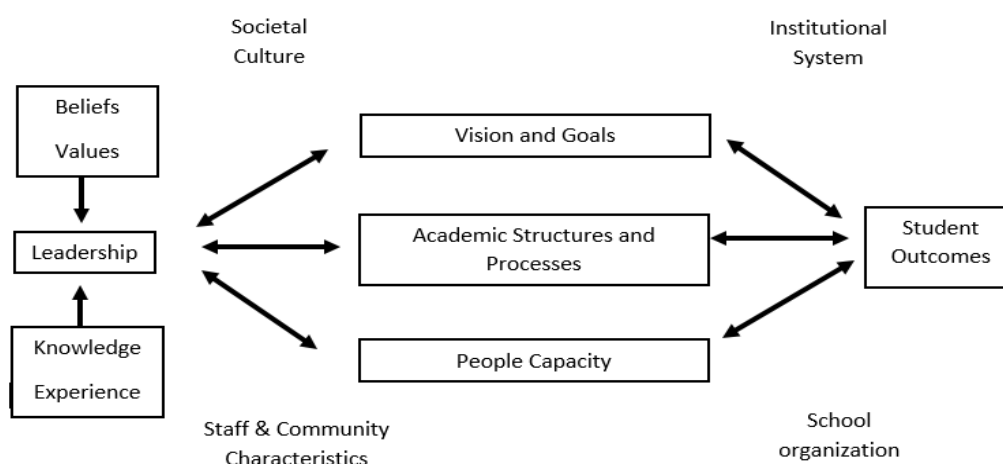
Via the review, I have identified conceptual similarities among Hallinger and Murphy's

instructional leadership model, Walker and Qian's instructional leadership in China, and a synthesized model of leadership for learning. Table 3.2 summarizes these findings and shows that the similarities among the models are more significant than the differences. Both models have school leaders enacting the following core leadership practices to improve teaching and learning:

●Setting vision and goals

●Coordinating curriculum

●Improving instruction and student learning

●Promoting positive school climate

●Improving teacher learning and development

Table 3.3 compares of the core dimensions of instructional leadership and middle leadership models to indicate commonalities in these three models. The practice of middle leadership as described in the middle leadership models overlap with the concept of instructional leadership. They have similar dimensions on vision building, facilitating teaching and learning processes, maintaining positive culture, improving curriculums, and promoting teacher development.

These dimensions are enacted at different levels. Regarding instructional leadership, vision development, and culture building, particular attention is paid to the organizational level, while middle leadership emphasizes the departmental level. However, few studies have connected the middle leadership concept with instructional leadership in a way that would allow for empirical validation. Accordingly, the present study explores how TRG heads (middle leaders) build capacity among teachers to understand the teacher development

dimension of instructional leadership enacted in middle leadership positions. Considering that the study was conducted in the Chinese context, Walker and Qian's (2022) school leadership model as a frame for studying instructional leadership practice in China becomes an important part of the analytical framework, guiding the study. Additionally, the middle leadership models derived from the review can also facilitate the data analysis from the middle-level leadership perspectives.

Table 3.2. Comparison of instructional leadership models

Instructional leadership	Instructional leadership in China	Leadership for learning	Core characteristics
Framing school goal	Identifying and developing school uniqueness	Vision and goals	Setting vision and goals
Communicating school goal	Communicating and forming consensus on school values		
	Aligning school structure with the values		
Supervising and evaluating instructions	Supervising and evaluating teaching	Academic structures and processes	Coordinating curriculum; supervising and evaluating instruction; monitoring student learning
Coordinating curriculum	Aligning curriculum with instruction and assessment; designing and developing school-based curriculum		
Monitoring students' development	Monitoring student learning and development		
Promoting instructional period	Optimizing school conditions to improve teaching and learning		Promoting positive school climate
Always seen	Promoting positive interpersonal relationship with and among teachers		
Providing incentives for teachers	Adopting monetary and non-monetary incentives to motivate teachers		
	Enriching teachers' well-being and extend care to their personal lives		
Promoting professional development	Supporting school-based teacher professional development; seeking and utilizing external resources to develop teachers; promoting and coordinating school-based action research	People capacity	Improving teacher learning and development
Providing incentives for students' learning			
	Building partnerships with peer schools		
	Maintaining good relationships with local governments		
	Enhancing parental involvement and garner community support		

Table 3.3. Comparison of core dimensions of instructional leadership and middle leadership model

Core dimensions of instructional leadership	Middle leadership model (emerged from empirical international literature on middle leadership in schools)	Middle leadership model (emerged from empirical literature on middle leadership in schools in China)
Setting vision and goals	Defining departmental purpose and direction	Setting teams' mission and vision
improving instruction and student learning	Facilitating teaching and learning	Ensuring teaching and learning standards
Promoting positive school climate	Creating and maintaining positive culture	Maintaining positive culture for teaching-research
Coordinating curriculum	Developing and improving curriculum	Coordinating curriculum
Improving teacher learning	Improving teacher learning	Improving teacher learning

3.14 Chapter Summary

The number of studies on school middle leaders and middle leadership beyond China have increased recently while the number of studies in China have fluctuated with few in the last two years. There is not the same level of interest in middle leadership in Chinese schools as my review notes compared to Western counterparts. In addition, the knowledge base in China generally has not emerged from empirical studies, but instead focuses on stories told by famous middle leaders and their prescriptions for practice based on personal experience as opposed to international research which is empirically oriented.

Research on middle leadership presents a robust focus on leadership roles and practices, specifically, the middle leaders' role (e.g., teacher developer, curriculum strategist, culture builder etc.), what middle leaders do (e.g., activities organizing, instructional supervision, vision building etc.), what they do that makes a difference (e.g., conducting classroom observation, modelling good practice, communicating and sharing values and goals with teachers and form consensus etc.), and leadership competencies and styles (e.g., interpersonal skills, capacity to empower teachers and develop supportive networks etc.).

Middle leaders play a major role in building teacher capacity but limited empirical research on how their leadership is understood by teachers and school leaders, how they lead teacher learning individually and collaboratively. It is necessary to not only describe middle leaders' perceptions, involvement, roles, expectations, and contributions, but also the way and why they enact these (Fischer, Dietz, & Antonakis, 2017; Leithwood, Spillane & Diamond, 2007) because similar leadership practices may be located differently in different contexts (Walker & Qian, 2022).

On the other hand, the knowledge base of middle leadership has developed for the last three

decades (De Nobile, 2018), while the understanding of middle leaders' instructional leadership is not sufficient (e.g., Ogina, 2017; Xie, 2017). When discussing how middle leaders can become instructional leaders, I argue that middle leaders share a knowledge base with the teaching profession, take on professional responsibility, while having less responsibility for the administration (Leithwood, 2016; Tang, 2022). Research has shown that middle leaders tend to exercise instructional leadership in schools (e.g., Cardno & Bassett, 2015; Leithwood, 2016). The practices of middle leadership also reflect the key categories of core dimensions of instructional leadership. The core dimensions of instructional leadership can help discern middle leaders' instructional leadership practice and articulate relations among these dimensions. However, there are few studies, both inside and outside of China, investigating how middle leaders exercise instructional leadership to enact their significant role, namely, facilitating teacher development. In China, this is a topic worth studying because instructional leadership practice focuses great attention on teacher learning (Walker & Qian, 2022).

Studies have uncovered the multiple factors that act on the exercise of middle leadership including the professional learning of middle leaders, teacher attitudes, principal support, school culture, and support from external mentors. Since this set of conditions has been synthesised from multiple studies, it is unknown how these factors are interrelated. In addition, there is a lack of school factors that are specific for the process of promoting teacher development through middle leadership.

In China, TRG heads are situated well to build teacher capacity (Chen, 2011; Huang, 2012; Li, 2010). TRG heads work directly with teachers and engage them in professional learning. However, studies on how TRG heads lead teacher learning have been non-empirically focused. Empirical studies have focused on challenges facing middle leaders and how to develop middle leaders to support teachers. Few empirical studies have investigated TRG heads and related

stakeholders' perceptions of middle leadership, their conceptualisations of middle leadership, their interactions with their contexts, and leadership at different levels.

To fill this conceptual gap, the present study explores how TRG heads exert influence over other teachers, specifically how they work individually and collaboratively to lead teacher learning, and how they obtain empirical knowledge of teacher development dimension of instructional leadership. The study may extend the understanding of layered instructional leadership for teacher learning and lead to the development of an instructional leadership construct.

CHAPTER 4 METHODOLOGY

4.1 Scope of Chapter

The first three chapters have situated the practical and theoretical context of the study. I reviewed the contextualized nature of middle leadership and its literature to identify the research agenda and develop a framework to analyze the leadership of TRG heads. These chapters frame the purpose of the current study while explaining the close relationship between instruction-oriented middle leaders and teacher learning; this is accomplished by developing an understanding of 'what' and 'how' instructional leadership is enacted. In this chapter, I explain the methodology used for answering the research questions. I first describe the analytical boundaries of the study. I then discuss the methodological issues related to answering the research questions. I philosophically position myself in the constructivist camp and apply a constructivist paradigm. I introduce qualitative research and the main research strategy chosen within the constructivism paradigm and provide a rationale for conducting qualitative research and the main research strategy, i.e., case studies of TRG heads. In order to ensure the reliability of the study, I describe the research site, the sampling strategies that correspond with the research questions and the approach to data collection and analysis. Finally, I discuss the trustworthiness of the research methods.

4.2 The Study's Analytical Boundaries

This section clarifies the analytical boundaries of the study, and restates the research purpose and the research questions. As indicated in chapters 1, 2, and 3, previous studies on middle leadership for teacher learning in China have been premised on non-empirical research and lack empirical evidence, especially regarding the nature of middle leaders, the scope of their influence, how their role is understood and how they work to support teacher learning. The

overall research purpose, accordingly, is to understand the role of TRG heads and their strategies, practices, and antecedents of their practice in developing teachers. Specifically, the purpose is to understand how TRG heads enact instructional leadership and what drives them to act in particular and different ways. The overall goal can be divided into four sub-purposes (See the sub-purposes in section 1.3).

In light of the research purpose, the overarching research question is: How is the instructional leadership role of TRG heads understood, exercised, and facilitated leading to teacher learning? Four interrelated questions have been formulated to assist in answering the primary research question.

1. To analyse different perspectives on the role of TRG heads in leading teacher learning;

2. To explain how TRG heads lead teacher learning through instructional leadership individually and collaboratively;

3. To untangle the complex interactions among various factors regarding middle leadership for teacher learning; and

4. To advance the knowledge base by summarising a set of middle leadership strategies in leading teacher learning.

Clarifying the study's analytical boundaries highlights some important concepts, such as middle leaders and middle leadership, TRG heads, instructional leadership, roles and teacher learning.

Middle leadership, the intermediate layer of leadership in schools concerns leading teachers who assume responsibility for developing and improving certain aspects of a school, such as student affairs, curriculum and instruction, teacher development (Bennett et al., 2007; Bush, 2009; Gurr & Drysdale, 2013; Irvine & Brundrett, 2019). The head of a teaching-research group is one of the positions of middle leaders in Chinese schools. Experienced teachers who

enjoy a high status, such as backbone teachers, special class teachers, and master teachers, and those who work for many years at schools (Tam, 2010) are normally appointed to this position by the senior leadership team. Their roles and responsibilities are mainly to support teacher learning by organising school-wide teaching-research activities and supervising the performance of the lesson preparation groups to ensure good teaching quality.

There are two general conceptions of instructional leadership, a narrow and a broad one (Sheppard, 1996). The narrow concept, which is normally applied in small and poor urban schools (Hallinger, 2003; Meyer & Macmillan, 2001), focuses instructional leadership directly influencing the teaching and learning process, such as conducting classroom observations. The broad one includes all leadership activities that exert indirect influence on student achievement, such as school climate, the culture of change, and ensuring instructional time by developing a school-wide instructional plan (Ng, 2016). In this study, the broad concept was adopted. Five core dimensions conceptualise instructional leadership: setting a vision and goals; improving instruction and student learning; promoting a positive school climate; coordinating the curriculum; and improving teacher learning and development. These core dimensions were constructed by integrating Hallinger and Murphy's instructional leadership model derived from the American context into a synthesised model of leadership for learning which was developed by reconceptualizing instructional leadership somewhat more broadly (Hallinger, Gümüş, & Bellibaş, 2020).

Regarding the concept of role, I adopted Biddle's (1979) line of thinking for this study. Biddle conceptualised a role as typical behaviour characteristic of a certain group of people in a context. Role enactment is the process of behavioural and cognitive responses (Lynch, 2007).

Teacher learning, which is the same as teacher learning (Avalos, 2011), in the present study refers to how teachers learn, as well as changes in their cognition, orientation towards students,

professional attitude and identity, subject and pedagogical knowledge, and skills (De Vries, Jansen & van de Grift, 2013; Kyndt, Gijbels, Grosemans, & Donche, 2016; Meirink, Meijer, & Verloop, 2007).

The focus of the following sections is on methodological issues related to answering the research questions, which include philosophical assumptions that researchers bring to their studies (research paradigm), the research design, and the methods for data collection and analysis (Creswell & Poth, 2018).

4.3 Research Paradigm: Philosophical Orientation Proposed in the Study

Methodological issues cannot be reduced to a set of procedures. One needs to consider philosophical assumptions that researchers bring to the study, the research design, and specific data collection and analysis methods (Creswell & Poth, 2018). Although philosophical ideas remain largely hidden in research (Slife & Williams, 1995), they nevertheless influence the research design and practice, and need to be identified (Merriam & Tisdell, 2016). I philosophically position myself in the constructivist camp and apply a constructivist paradigm, because it serves as the most appropriate basis regarding ontology (the nature of reality) and epistemology (the nature of knowledge) to account for multiple participants, their varied experiences, the differing contexts in which they work, and the participants' interpretations of the situation being studied.

Constructivism, a term often used interchangeably with interpretivism (Merriam, 1998), is based on the assumption that social reality is constructed and variously interpreted by the individuals or groups who engage with it (Crotty, 1998). The researcher and respondents are interactively linked, such that the findings are constructed and a consensus construction is distilled as the investigation proceeds (Guba & Lincoln, 1994). Specifically, individuals imbue their experiences with meanings, leading researchers to explore the complexity of their views.

In this situation, researchers seek to determine the meaning of a phenomenon from the perspective of the participants and from situation to situation. Interpretive inquiry replaces prediction and control with understanding, meanings, and behaviour (Carr & Kemmis, 1986) and the inquirers inductively structure a pattern of meaning (Creswell & Poth, 2018).

Accordingly, in the present study, I strive to understand and interpret the thinking and meaning the participants are making of the TRG heads' leadership practices related to teacher learning and the conditions that shaped their leadership by interacting with a sample of participants through interviews, participant observations and relevant documents. Constructivist inquiry is largely more amenable to inquiries about TRG heads' leadership practices because behavior cannot be predicted or controlled and remain context and time sensitive (Lincoln, 2005; Lincoln & Guba, 1985). The constructivist paradigm suggests a relativist ontology, a subjective epistemology, and a naturalistic set of methodological procedures, focusing on describing, understanding, interpreting, and interrelating (Denzin & Lincoln, 2017). The constructivist research paradigm addresses the purpose of the current study. The quality of constructivist research is guaranteed by credibility, transferability, dependability, and confirmability, rather than by internal and external validity, reliability, and objectivity (Lincoln & Guba, 2013). I provide enough thick description to make transferability possible, specifically the clues or insights that the current study findings may provide to help practitioners and scholars explore and understand similar situations.

4.4 A Qualitative Research Design and Rationale

Each paradigm has its own methodological requirements. The research design should be carefully fitted to the ontological assumptions of the paradigm; otherwise, useful sense-making cannot be achieved (Lincoln & Guba, 2013). In other words, the strategies used to understand realities need to be consistent with how the realities are defined. Constructivists aim to

understand and reconstruct previously held constructions (Guba & Lincoln, 1994), which is where qualitative research is most often located (Creswell & Poth, 2018; Glesne & Peshkin, 1992; Merriam, 1998; Nind &Todd, 2011; Silverman, 2000; Thomas, 2003). Hermeneutical and dialectical methodologies (Guba & Lincoln, 1994) and qualitative research, in which hermeneutic and inductive analysis is used to obtain the different perceptions of participants and relate their understanding and meanings to the research problem (Yin, 2018), fits within the constructivism paradigm.

Drawing from the philosophies of constructivism, qualitative researchers have focused on how participants understand and interpret their experience. The inquiry process is thus a set of complex interpretive practices and situated activities seeking to attain a general picture of how participants make sense of their situation (Denzin & Lincoln, 2017). Qualitative research, in contrast to quantitative research, allows researchers to explore how events, behaviours and perceptions are shaped by the specific context in which they occur. Such researchers therefore identify unexpected phenomena and their impact, and develop new grounded theories that bring an understanding of how behavior occurs (Maxwell, 2013), while explaining the processes that lead to specific outcomes (Miles & Huberman, 1984).

Four core characteristics constitute qualitative research: focusing on meaning and understanding, using researchers as data collection and analysis instruments, processing data inductively, and describing outcomes richly (Merriam, 1998). This research strategy guided me in understanding how teacher capacity was built by TRG heads and how they enacted and experienced their leadership to support teachers.

Informed and guided by the constructivist research paradigm, and attending to the research objectives and formulated research questions, (Denzin & Lincoln, 2000), I considered the qualitative, interpretivist approach, which pays particular attention to socially-constructed

perspectives, the most appropriate. Qualitative researchers investigate phenomena in the natural environment, trying to understand and explain them through the meaning that participants bring to the study (Denzin & Lincoln, 2017). The aim of an interpretive analysis is to gain deep understanding (Patton, 1985). This hermeneutic approach relies heavily on naturalistic methods, such as interviews, observations, and documents, which facilitate conversations between researchers and participants to build a meaningful reality together (Maxwell, 2013).

The empirical focus of this study was to capture the situatedness of how TRG heads play a role in leading teacher learning. This can be understood with reference to the meanings and purposes attached by TRG heads to their behaviour. Qualitative data can deliver rich insights about behaviour and actions (Guba & Lincoln, 1994) which can be developed by interacting directly with TRG heads and hearing their voices. The data thus tends to be non-statistical and descriptive. Compared with quantitative research, which generates objective and numerical data, qualitative research involves gathering narrative information, and therefore is a better fit for a study that aims to capture perspectives on leadership practices held by TRG heads.

4.5 Case Studies and Rationale

Within the qualitative paradigm, there are five approaches to suit differing purposes and research questions. They are narrative research, phenomenology, grounded theory, ethnography and case studies (Creswell & Poth, 2018). The focus of narrative research is on the detailed stories and life experiences of a single participant or a small number of participants, and one listens to their stories to understand their experience (Riessman, 2008). Narrative researchers view individual change as part of the process of narrative inquiry (Connelly & Clandinin, 2006). This approach is increasingly adopted to study educational experience (Clandinin & Huber, 2010). In the phenomenological approach, which has strong philosophical

underpinnings, one studies several individuals who have shared experience of a phenomenon and understand the essence of that experience (Giorgi, 2009). The participants' perception is regarded as the primary source of knowledge (Moustakas, 1994). Grounded theorists ask generative and concept-related questions, and focus on theory development (Charmaz, 2006). Theory may be generated initially from the data, or modified on the basis of incoming data if there is an existing theory with which to develop an interrelationship with the data gathered (Strauss & Corbin, 1994). Ethnographical investigation is used to explore how a cultural group works and to investigate topics such as power and dominance (Creswell & Poth, 2018). It facilitates the elicitation of cultural knowledge and concepts (Spradley, 2016) and the detailed examination of patterns of social interaction through prolonged participation (Hammersley, 2007).

Case studies are used to develop an in-depth understanding of a single case or multiple cases, often individual, programme, or process by collecting information via a variety of data sources, such as interviews, observations and documents (Stake, 1995; Yin, 2014). In general, case studies are particularly suited to 'how' and 'why' questions, when the researchers do not control those involved in the study, when the phenomenon investigated is contemporary and when covering the contextual conditions are relevant to the phenomenon under the study (Yin, 2014).

Informed by the research purposes and questions that focus on the holistic characteristics of the instructional leadership of TRG heads and to gain detailed evidence of how they develop teachers and exercise instructional leadership, I considered a qualitative multiple-case study to be the most workable for this study for three reasons. First, case studies are best for capturing answers to 'how' and 'why' questions (Flyvbjerg, 2006; Johnson & Christensen, 2017; Yin, 2014). This strategy enables researchers to develop an in-depth understanding and unpack the

complexity of the situation and its meanings. Based on the literature review in Chapter 3, the empirical evidence indicates the potential influence of TRG heads on developing teachers; however, it is not fully known how their role is understood and how they enact their instructional leadership role. The nature of the focus necessitates depth over breadth by asking 'how' type questions related to the meanings of the roles of TRG heads. The end product is a comprehensive and detailed description and analysis of the case and interactions pertinent to the case.

Second, case studies make it possible to pay special attention to process rather than outcomes, and exploration rather than confirmation (Stake, 2010). This approach enables one to arrive at a holistic view of the case and enhances the opportunity to illuminate how each part is related to the others within the system. Given the overarching research question concerning how TRG heads exercise instructional leadership to lead teacher learning, the following aspects were explored: how TRG heads work individually and collaboratively to develop teachers, how TRG heads find support, what conditions mediate their work in leading teachers, and how they do so.

Third, case studies cover the case and its context involving a variety of potentially relevant variables (Yin, 2018). In other words, case studies are adopted to arrive at an understanding of cases and this understanding involves how the case is influenced by the context within which it is situated (Yin & Davis, 2007). This study explores the leadership practices of TRG heads in a Chinese context, what the conditions mediate their leadership, and how these conditions impact the leadership. Thus, a qualitative case study is the most appropriate design to answer the research questions of the study. I use a multiple case approach. Each case is a school.

4.6 Sampling

The sampling for this study was at two levels: site and participants.

This study was conducted in Guangzhou, China (see figure 4.1). Guangzhou is the capital city of Guangdong and located at the center of the Peral River Delta which is the most important manufacturing base and economic powerhouse in China. Since 1978, Guangzhou has been a pioneer of China's reform and opening up. Given its geographical and cultural proximity to Hong Kong, and its traditional international trade, the economy of Guangzhou has been experiencing unprecedented development. It is also at the forefront of China's integration into the global economy with direct links to the world (Yang & Welch, 2001). In 2016, the Guangdong-Hong Kong-Macao Greater Bay Area was proposed to further enhance the Pearl River Delta's leading role in China. Guangzhou, which was included in the Greater Bay Area development planning, plays a pilot role in deepening reform and promoting successful experience. Guangzhou was also labelled one of the "smart education demonstration areas" in China in 2019 for its innovation in education and leading role in education informatization.

Figure 4.1. The position of Guangzhou in China

Therefore, TRG heads in Guangzhou may not be representative of their counterparts across China. Guangzhou is an experimental zone during the national curriculum reform: schools in Guangzhou were required to pilot instructional improvement approaches ahead of schools in most other parts of China (Qian, Walker, & Li, 2017). Thus, what Guangzhou is experiencing

now may well be what other cities will experience in the future. Thus, other regions can learn from the experience of the Guangzhou case.

Most studies of TRG heads have been conducted in East China, such as in Shanghai, Jiangsu and Zhejiang. However, few studies have been conducted in South China, especially Guangzhou. In addition, due to its distance from the political centre in Beijing and the cultural influence from the neighbouring Hong Kong, Guangzhou is characterised by a relatively liberal-minded local state and a strong civil society. Hence, school leaders may have different leadership perceptions and enactment compared to those in other leading cities, such as Beijing and Shanghai.

Since Shanghai has previously received much attention, I selected Guangzhou as the research site with a view to providing insights from a highly developed economic area and its education system to draw implications for elsewhere in China.

The focus is on the primary school level. There are two interrelated reasons for this choice. First, empirical evidence suggests that principals and teachers perceive instructional leadership to be greater in primary schools than in secondary ones (Wildy & Dimmock, 1993; Louis, Leithwood, Wahlstrom, & Anderson, 2010). School leaders bear significantly more responsibility for instructional leadership in primary schools than in secondary schools, concerning relations with teachers (Nguyen & Ng, 2014). Second, the influence of instructional leadership is more significant at the primary level (Hallinger & Heck, 2002; Louis et al., 2010). In China, TRG heads in primary schools face less pressure than those at the secondary level since secondary schools need to support their students for the college entrance exam and have less concern about curriculum and instruction (Qian, Walker, & Li, 2017). Because the focus of this study is the instructional leadership interactions and influence, the primary school level is an information-rich setting in which to obtain an understanding of the nature and complexity

of the instructional leadership of TRG heads. In this sense, the primary school level is eminently suitable for the purpose of the study.

Purposive sampling, which selects information-rich cases for in-depth study (Patton, 1990), was adopted to select participants. Information-rich cases are those from which the most can be learned (Merriam, 1998). I explored the instruction-oriented middle leadership in different types of schools and generated descriptions of TRG heads' leadership practices. Descriptions of practices common to all the schools were then compiled through an inductive process, culminating in the typology of leadership for teacher learning. Stratified purposeful sampling, entails selecting several cases at defined points of variation (Suri, 2011), was thus used to select participants from primary schools of different types and ranks. As Patton (1990, p. 177) argues, "[a]ny common patterns that emerge from great variation are of particular interest and value in capturing the core experiences and central, shared dimensions of a setting or phenomenon."

The stratified purposeful sampling avoids constraining the selection of participants to certain primary schools and develops insights of characteristics of different types (Gall, Borg, & Gall, 2003) to identify common patterns. Three types of target schools were included: low-performing schools, average schools, and high-performing schools. The aim was to sample six schools, two schools for each type, numbers considered feasible in terms of my time constraints and a qualitative research design. I attempted to uncover how the role of TRG heads in teacher development is understood, how they enact the instructional leadership to promote teacher learning in varied contexts of schools, and how different conditions shape their enactment. Participant selection intentionally maximised variation in school type, school location, school size, work experience and other attributes in the sample (see table 4.1).

Table 4.1. Characteristics of the schools and participants

School (n=6)	School context					TRG heads (n=18)		Vice-principal (n=6)		Teachers (n=24)	
	School category	School location	School type	No. of students	No. of teachers	Number	Years of leadership	Number	Years of leadership	Number	Years of teaching experience
School A	Public school	Rural	Low-performing school	530	24	3	3, 11 and 23 years	1	6 years	4	8, 16, 20 and 27 years
School B	Public school	Rural	Low-performing school	612	36	3	3, 15 and 23 years	1	6 years	4	10, 22, 23 and 25 years
School C	Private school	City	Average school	1400	80	3	3, 7 and 14 years	1	9 years	4	11, 13, 15 and 24 years
School D	Public school	City	Average school	658	36	3	6, 12 and 21 years	1	7 years	4	10, 14, 16 and 23 years
School E	Public school	City	High-performing school	1400	77	3	7, 13 and 16 years	1	15 years	4	12, 18, 23 and 25 years
School F	Public school	City	High-performing school	1100	63	3	3, 16 and 17 years	1	17 years	4	13, 22, 23 and 33 years

I selected the schools based on the best fit with the research questions. The selected schools emphasized and engaged in teacher development, had formal organizational structures that assigned responsibilities to TRG heads and provided opportunities to TRG heads to lead teachers. English, Chinese, and mathematics were the main subject in the schools. I selected the TRG heads and teachers in Math, Chinese and English, given their potential to provide informative data. To give a broader perspective, I also included vice-principals responsible for teaching and learning. In total, eighteen TRG heads (three for each school), 24 classroom teachers (four for each school) recommended by their TRG heads, and six principals (a principal for each school) participated in the study (see appendix D).

4.7 Data Collection: Interviews, Participant Observation and Documents

In the data collection, the answers to the research questions were generated through the interviews, observations, and documents which were conducted in July, September, October, and November 2020. The whole process of data collection lasted four months. I conducted a pilot study prior to the main study to verify the validity of the data collection tools, such as the interview questions (see appendix A).

To answer RQ1 and RQ2, I conducted individual semi-structured interviews with a sample of TRG heads and principals and carried out focus group interviews among teachers. These interviews aimed to understand how the role and role enactment of TRG heads in teacher learning is understood.

RQ2 was also addressed by means of participant observations after the interviews with TRG heads, principals, and teachers, which involved observing TRG meetings, classroom demonstrations by TRG heads, meetings about curriculum design and timetable scheduling, and other instructional developmental activities to gain a first-hand account of their leadership

enactment. I visited and spoke with the TRG heads and their teachers about their TRGs and the ways in which the TRG heads led teachers. I observed TRG heads as they work in their schools, which enabled me to ask them what they were thinking with regard to the specific leadership practices I witnessed when they led learning of peers. I took field notes while doing observation. Participant observations and interviews with TRG heads, principals, and the teachers gave me a holistic interpretation of how and why the TRG heads enacted instructional leadership for supporting teacher learning.

The interviews responses with TRG heads helped answer RQ3; the interviewees noted the conditions/structures that facilitated the exercise of their instructional leadership and uncovered how these conditions are interrelated. The responses to the first three research questions led to addressing RQ4.

I also reviewed the content in school documents to help answer the research questions. These included log books, meeting records written by TRG heads, and school policies for teaching and learning.

4.7.1 The Rationale of the Data Collection Methods

Interviews, observations, and documentary analysis were effective ways to create informative dialogues between me and the participants to collectively establish a significant reality (see Maxwell, 2013). Interviews are an effective approach for examining the underlying meaning of phenomena (Gillham, 2000). By asking about specific events and actions at factual and meaning levels, interview responses can help a researcher collect rich data about a topic (Wengraf, 2001). In this study, semi-structured and focus-group interviews were conducted to motivate participants to share their experiences, so that insider and deeper perspectives could be obtained. The interviews provided me with a first-hand perspective of the participants' initial reactions to the questions.

Documents, such as school policies, log books, and meeting records written by the TRG heads, were collected as secondary sources for analysis. Compared with interviews, documents can serve as a source of data that is fixed and accessible (Denscombe, 2017). Documentary research is retrospective and thus enables the researcher to gain information from the past, which facilitates the longitudinal aspect of the study. Documents can also help clarify and validate the data gathered from the interviews. Serving as a secondary data source, the documents add detail and depth to the findings.

The purposes for selecting participant observation in this study were fourfold. First, as a participant observer, I experienced the feeling of being both an insider and outsider. As an outsider I noticed things that became routine to TRG heads themselves, i.e., things that may lead to understanding their practices (Corbin & Strauss, 2015). As an insider, I could feel the emotions and experience some of the situations during the developmental activities led by the TRG heads just like the teachers would feel (Spradley, 2016). Second, observation facilitates a more holistic picture of the specific events or actions (as opposed to only referring to the interviews and documents). This experience enabled me to understand the process by which these different views were expressed (see Maxwell, 2008). Third, some information could not be obtained during interviews over a short period (Musante & Dewalt, 2010). Observations thus provided supplementary evidence about specific situations and events.

Finally, the observations provided some knowledge about the context or specific incidents and behavior that could be used as reference points for supporting the analysis. In light of the research purposes, research questions, and conceptual framework, I chose to observe the teaching-research activities which were normally organized once a week. Teaching-research activities are of great significance for developing teachers (Huang, 2012; Li, 2010). These activities include collective lesson preparation, lesson observations, post-lesson discussion led

by TRG heads, and lesson demonstrations conducted by TRG heads. All these activities focused on how TRG heads, teachers, and activities were connected, including what norms or rules structure the activities and interactions, how TRG heads in this setting organize themselves, and the patterns and frequency of interactions between TRG heads and teachers.

Observers at first may see only a stream of behavior, a series of acts that all seem distinct. With repeated observations, however, individual acts begin to fall into recognizable patterns of activity (Spradley, 1980). I observed teaching-research activities three times for each case school. English, Chinese, and maths were the main subjects, and the new curriculum philosophy was promoted among these subject. Thus, teaching-research activities of these subjects were observed. The activities usually lasted for about one hour and I included different kinds of teaching-research activities to observe. I made fieldnotes in an unstructured and semi-structured way to record key phrases and to identify major events which became an important source of data.

Triangulating the findings from different instruments increases the reliability and enriches the findings (Yin, 2014). Tracking the TRG heads through their work day or week, following them from place to place, event to event was also an effective way to collect trustworthy data. Although I was an outsider, it was important for me to take on an insider perspective in the target group during the data collection process which helped me identify and deter biases.

4.7.2 The Pilot Case Study

A pilot study was conducted to examine the validity of the interview questions. The pilot was conducted in two primary schools in Guangzhou and a primary school and junior secondary school in Shenzhen; in total, five TRG heads were interviewed and recorded in February 2019 in their offices. The participants' responses informed the study and were useful for the interviews in the main study.

The first interviewee provided little information about the nature of his role, how he promoted teacher learning and how conditions influenced his work. His interview took place at the beginning of his second year of being the head of a TRG, so he said he was still unfamiliar with this role. He noted that he was still learning from other TRG heads at peer schools. As a result, he could not respond to most of the research questions. During the interview, he mostly shared details about his teaching experience and how he had become the head of a TRG at his current school. Accordingly, I chose only experienced TRG heads to participate in the main study to obtain more useful information.

The preliminary findings from the pilot study informed both the conceptual framework and the final research questions. For example, during the pilot study, the TRG heads indicated that improving teacher learning and development was their main job. In combination with the conceptual framework of the previous chapter, the information I obtained reconfirmed the research focus on certain instructional leadership practices that promote teacher learning.

4.8 Data Analysis

Miles and Huberman's (1994) framework was used for data reduction, data display (see table 6), and drawing conclusions. Data reduction involves making decisions about which data segments to code and extract, and as well as determing which patterns best summarise a collection of segments. Data display refers to presenting an organized and condensed set of information that can lead to the generation of new ideas. Finally, initial conclusions are drawn from this interactive process, which heavily relies on coding the data (Punch, 1998).

I combined the deductive and inductive approaches (hybrid approach) to discern the theme of the patterns (Braun & Clarke, 2006) by using NVivo 12.0. The core roles and practices related to the goal of driving teacher learning (i.e., supporting school-based teacher learning, seeking

and using external resources to develop teachers, and promoting and coordinating school-based action research) were derived from Walker and Qian's (2022) model. Three influential factors shaping middle leadership in the literature (i.e., professional context, organizational and relational influences, and external forces) served as priori codes helping formulate more detailed codes. This initial framework suggests general domains in which one can create codes through an inductive process to capture TRG heads' instructional leadership practices and their influences. These practices serve as a preliminary model of instruction-oriented middle leadership that supports teacher learning.

The coding process involved multiple levels of analysis, ranging from descriptive to inferential. I integrated case-oriented and variable-oriented approaches. The case-oriented method allows for an understanding of differences between individual cases, while the variable-oriented approach facilitates the identification of themes and builds general explanations that fit each of the individual cases (Miles & Huberman, 1994).

Initially, I assigned initial codes under the guidance of the preliminary framework (descriptive codes and priori codes). The focus at this stage was to discover key analytic categories (interpretive codes) being led by the initial codes. I linked the codes and created categories to discern patterns and commonalities (pattern codes) and leading to revisions of pre-existing framework based on the data collected. Afterwards I construct thematic statements based on the earlier codes to demonstrate what they mean (theming the data). The last step through the data, involved scanning all the data and previous codes. As with the results of within-case and cross-case analysis, from codes to patterns, the commonalities and differences revealed the answers to the research questions. In this study, TRG heads adopted different approaches in different school settings to exercise the same leadership practice. There was thus variation within each sub-codes. Comparing, contrasting, corroborating and legitimating the dimensions

from the initial framework, the current codes then helped uncover the answers to the research

questions.

Table 4.2 provides an example of how coding was applied to the data.

Table 4.2. Example of coding notes on an interview transcript

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Ref. No.: 16.11.2020_X/p.2-3

Interview transcript (Extract)	Descriptive codes: initial framework	Interpretive codes	Pattern codes	Theming the data

First of all, [1]I can express my own ideas pertinently. I would be able to express my ideas on how to teach this lesson if it were me. I would take the lead myself, and then teachers can put forward their ideas. [2]Although I didn't participate in the training provided for the backbone teachers and so on, there are backbone teachers in the TRGs who went out to study, and I often let them come back and share some of what they had learned. I tend to cultivate a mutual help atmosphere. [3]Each teacher has a different direction. For example, some of them are suitable for theory-based learning and have higher theoretical levels, and their growth process is in that direction. [4]I normally organize them to participate in the training provided by the government and come back to learn together, and we will be that person's students together.

[1,2,3] *Supporting school-based teacher learning;* [4]*Seeking and utilizing external resources to develop teachers*

[1]*Leading by example;* [2]*Fostering knowledge sharing;* [3]*Understanding the professional learning needs of teachers;* [4]*Involving teachers in in-service training sessions*

Role model; *Knowledge broker;* *Peer mentor;* *Intermediary*

Nurturing 'practice-embedded' professional learning; *Optimising conditions for teacher engagement;* *Drawing on external resources to develop teachers*

Institutionalizing; *Intermediating;* *Integrating*

There are some external developmental activities for teachers. I have the professional autonomy to decide whether the activities are suitable for our TRG. I can make a selection and give advice to the school. In addition, I also provide useful external channels for teachers to learn.

Seeking and utilizing external resources to develop teachers → *Locating suitable resources for teachers*

Knowledge broker

Drawing on external resources to develop teachers

Integrating
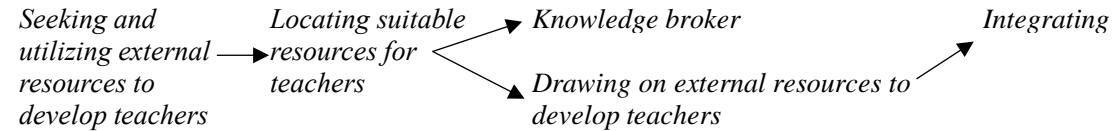
I work with the heads of lesson preparation groups. For example, we have applied for a research project this year. The heads of lesson preparation groups and I communicate and form consensus on responsibilities. Then they motivate and help teachers in their grade groups to conduct the research project. I mentor teachers in different grade groups while heads of lesson preparation groups supervise teachers in their groups.

Leading teachers' research-informed practice → *Managing research projects with teachers*

Peer mentor

Leading teachers' research-informed practice

Innovating
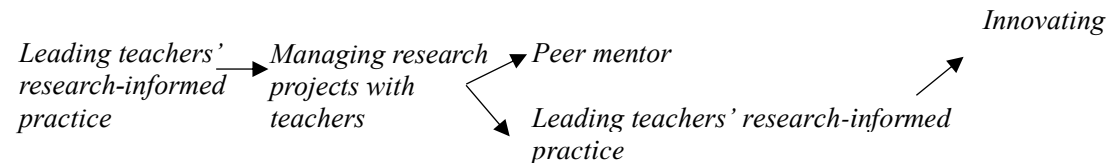
I have two research projects at this stage. [1]I work with teachers to complete the projects, including the literature review, data collection, and analysis. [2]In addition, I encourage teachers to read and share. I always share my good resources and practices in carrying out research projects among teachers. In the meantime, I collect the high-quality research reports written by other experienced teachers for teachers to learn and motivate them to build the research projects collaboratively.

Promoting and coordinating school-based action research

[1]*Designing and managing research projects with teachers;*

[2]*Offering guidance for teachers on research projects*

Knowledge broker

Leading teachers' research-informed practice

Innovating
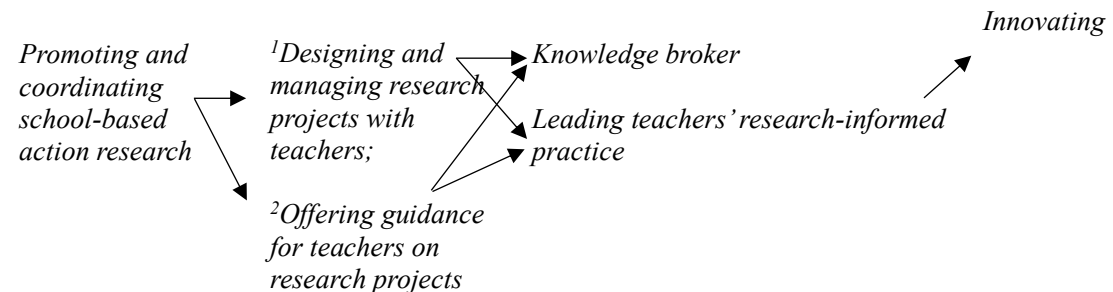
[1]I have just been appointed to this position – four months ago – and was a teacher two years ago. I am not familiar with the work of a head of a TRG. I am sorry that I cannot answer some of your questions relating to the development strategies of teachers and their changes under the guidance of the heads of TRGs. [2]At this stage, I follow and collaborate with the director of the office for teaching affairs to promote teacher learning and organise teaching-research activities. In addition, I seek advice from the previous heads of TRGs when I feel confused.

[1]*Professional context;* → [1]*a lack of leadership experience;* → *Leadership experience;*

[2]*Relational and organizational influences* → [2]*Support from the director of the office for teaching affairs and the previous heads of TRGs* → *Various staff groupings*

Multi-level influences
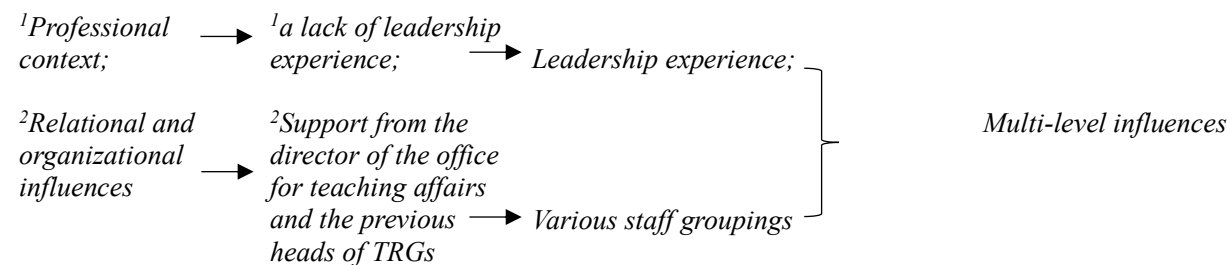
4.9 Trustworthiness of the Research

To ensure trusted findings and interpretations, I adopted the trustworthiness criteria illustrated comprehensively by Lincoln and Guba (2013). The criteria include credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985).

Regarding credibility, the study included multiple data sources, i.e., interviews, observations, and documents, for triangulation. The transcripts of the interviews and field notes were sent to the participants for review and providing suggested changes. I gave the participants two weeks to check whether their thoughts were understood correctly. After I finished the draft of findings and interpretations, I provided participants opportunities to comment on the accuracy of how I described and quoted them, and omit or add words to their quoted remarks.

Given the interpretivist nature of the study, applying the findings to other contexts is limited. In interpretivism, findings are transferable through thick description (Geertz, 1973). I provided details of the research context in Chapter 2 which can help determine whether the findings are applicable across school contexts and settings. I adopted stratified purposeful sampling to include participants from primary schools of different types and ranks to enhance applicability. However, the primary aim of the study was not transferability. Rather, I explained how TRG heads led learning of peers by being grounded in the core dimensions of instructional leadership and extended these to the middle level.

To achieve reliability, an audit is required in which the inquiry process, data, findings, and interpretations are reviewed for consistency (Lincoln & Guba, 1985). Thus, interview questions and schedules, observation schedules and field notes, interview transcripts,

coding notes, memos of data analysis, and other related documents were reviewed by my supervisors.

Confirmability of the study can be achieved through an audit trail, reflexive journal, and triangulation (Lincoln & Guba, 1985). I wrote in a reflexive journal specific to this research since I began the literature review. Then I noted the procedures of data collection and analysis. I included various participants, such as principals and teachers, and different types of schools, such as high-performing schools and average schools and adopted different data collection methods, such as interviews and participant observations to enhance confirmability.

4.10 Ethical Considerations

The participants agreed to participate in this study by signing consent forms and were informed of the research purpose and the time and place of the interviews. The invitation letter was sent to each potential participant and they participated in the study voluntarily. The information about the schools and participants was indicated in the consent forms and protected. Participants had the right to withdraw from the study at any time. Each participant received the interview transcripts and was given the opportunity to suggest any changes. Before undertaking observations, informed consent of the participants and permission from the sample schools were obtained. If there was a need to obtain copies of any documents provided by the school, a confidentiality agreement was signed. To protect the privacy of participants and maintain the confidentiality of data, identifiable data were stored on a separate page from the rest of the data and tear it off, with the link between identifiable information and data made through codes (see appendix E).

4.11 Chapter Summary

In this chapter, I have argued that a qualitative multiple-case study is considered the most appropriate for this research. Stratified purposeful sampling was used in order to select participants from primary schools of different types and ranks. The answers to the research questions were sourced through interviews, observations, and documents. Miles and Huberman's (1994) framework was used for data analysis involving data reduction, data display and conclusion drawing. To ensure the finding were reliable, I adopted the trustworthiness criteria illustrated in Lincoln and Guba (2013) including credibility, transferability, dependability and confirmability (Lincoln & Guba, 1985). Finally, ethical issues were considered. The participants agreed to participate in the study and had the right to withdraw from the study at any time. Their privacy was protected and the confidentiality of data was maintained. In the next chapter, I present the findings with each type of cases separately based on the data collection and analysis.

CHAPTER 5 THE GROUPS OF TRG HEADS IN LOW-PERFORMING

SCHOOLS

5.1 The Scope of Chapter

18 TRG heads participated in the study. I conflated the TRG heads into a common variable, namely, the school type, to present the findings because, as noted the literature review chapter, I showed that school context shapes middle leadership. Stratification by performance was only one aspect. I used purposeful, stratified sampling to maximise the variation and, thus, I included three types of schools. Chapters 5 to 7 present the findings of how TRG heads plays out in these different contexts and what factors, in addition to school context, drive them to enact in different ways. In each chapter, I explain the context of the TRG heads and analyse their role and role enactment in leading teacher learning, together with the conditions shaping their leadership. To answer the research questions, I uncovered the common patterns and provide insights into the variation in the leadership practices of the TRG heads related to processional practices. In this chapter, I explore the leadership of the TRG heads in low-performing schools.

5.2 The TRG Heads Context

I sampled two low-performing schools (school A and school B). Six TRG heads at these two schools participated in the study: Wang, Lin and He from school A and Bi, Tang and Lan from school B.

Both schools are located in small villages in Huadu District in the far northern suburbs of

Guangzhou. School A is a public school that was established in 1950. It is a medium-sized school with 24 teachers, 14 teaching classes, and 530 students. The school's stated mission is "to lay the foundation for a happy life for the students and offer focused, professional learning to the teachers." The students at this school are from the local village. The majority of them are unlikely to advance to university and tend to be characterised by low academic achievement. There is a low level of parental involvement and support for the growth of the students. In recent years, with the support of the district teaching-research officers and peer schools, the quality of teaching at the school has been steadily improving. It has even won teaching quality awards from the District-level Education Bureau in recent years.

He, Wang and Lin are the TRG heads at school A. He, the TRG head of Chinese, with 11 years of teaching experience, was appointed to the position of TRG head in 2020. She worked at a secondary school for six years before joining this primary school. Wang, the TRG head of English, with 26 years of teaching experience, was appointed to the position of TRG head in 2000. He had worked at this school for 26 years. Lin, the TRG head of Maths, with 17 years of teaching experience, was appointed to the position of TRG head in 2012. She has won a number of teaching awards and published several articles. Lin is a city-level backbone teacher.

School B is a medium-sized public school established in 1952 with 36 teachers, 15 teaching classes, and 612 students from local villages. One teacher has a master's degree, 26 teachers have undergraduate degrees and seven have associate degrees. There are two city-level backbone teachers. The school is a member of the No.5 primary school education group in Huadu District. School B participates in cross-school teaching, research, and

resource sharing in the education group to promote teacher learning and student development. Although school B is recognised by the education bureau as a low-performing school, it works together with other schools as a strategy for improving student outcomes.

Bi, Tang, and Lan are the TRG heads at school B. Bi, the TRG head of Chinese, was appointed to the position of TRG head in 2000. She has worked in the school for 33 years. Tang, the TRG head of English, was appointed to the position of TRG head in 2008 and has worked in the school for 20 years. Lan, the TRG head of Maths, with five years of teaching experience, was appointed to the position of TRG head in 2020. She has worked in this school for five years.

5.3 Categories and Emergent Themes

I conducted five-hours of interviews with the principals, TRG heads, and teachers and six-and-a-half hours of observer-as-participant observation of teaching-research activities; I also collected 12 documents from the two schools. Using the NVivo 12 software package, I descriptively coded the data relevant to the research questions and examined how frequently the codes occurred to identify patterns and themes (see Miles, Huberman, & Saldaña, 2020). Examining code co-occurrences between structural codes and content codes provided a multifaceted understanding of how the role of the TRG heads is understood, enacted, and shaped. The multiple roles and practices of the TRG heads and factors contributing to their leadership were frequently discussed by the participants. These included: (a) the TRG heads as *chengshang qixia (*intermediaries); (b) the TRG heads as *yinling zhe* (forerunners) and *bangyang* (role model); (c) routinising dialogic space; and (d)

school conditions. I examined the convergence and divergence of conceptually similar codes and conflated multiple codes, or split one code into multiples. The emergent themes I identified through the coding process are presented in the following sections. The summary section comprises a naturalistic generalisation of what was learnt.

5.4 Role Construction of TRG Heads in Leading Teacher Learning

5.4.1 The TRG Heads as *chengshang qixia* (intermediaries)

The recurrent leadership role of the TRG heads in promoting teacher learning mentioned by the participants can be described as *chengshang qixia (intermediaries)*. The TRG heads acted in this intermediary role to ensure the correct track of professional learning activities. A TRG head (B4) said, "we have a responsibility to coordinate the vision links between the district, school, and the TRG, and create opportunities for teachers to work together to design their own professional learning." Connecting and embedding are important aspects of the TRG heads' "pipeline" role. A principal commented:

> We usually have a plan that the district will tell us about, and after we have some plans, we will pass on the basic information to the TRG heads. The TRG heads will probably work with the teachers in the group enabling them to understand the content. Some ideas from the teachers will finally be incorporated into the TRGs' planning. Then the main agendas of the TRGs are finalized (A1).

When referring to intermediary work, the participants also highlighted the TRG heads'

roles of negotiating, orienting, and coordinating different groups of staff. A TRG head stated:

> The school and district teaching-research office assign some tasks and activities to our TRG. I have to delegate responsibility, in a reasonable distribution, and I have a coordinating role between the senior leadership team and teachers, who carry on the work above and below. One of the things I always say is that everyone should take the problem out and name it, and then whether it can be solved is another thing. I'll be responsible for gathering the principal's and teachers' opinions and helping to establish a connection between them. I think this is what we always call '*chengshang qixia' (intermediaries)* (B4).

The TRG heads encouraged a shared vision and commitment and helped establish a connection between the principal and the teachers. A principal (B1) claimed that "middle leadership is the point at which the school leaders and teachers interact. Middle leaders drive teachers forward by communicating information from the principal and district teaching-research office, and also by conveying information back to the top about teachers' particularities." The TRG heads used expectations and motivation from the district and school to drive teacher learning and development. The TRG heads, as links, strengthened the relationship between the principal and teachers. As a principal stated:

> Teachers might not feel free to express their ideas in front of me because of the "invisible distance" created by the status. I try to be visible and approachable. However, I cannot meet teachers every day because of my

tight schedule. The TRG heads can help bring teachers' thoughts and concerns to me because they meet the teachers every day and they can talk formally and informally. Teachers are always open to talking to their TRG heads about their challenges and concerns. The TRG heads can also convey my directives to the teachers (A1).

5.4.2 The TRG Heads as *yinling zhe* (forerunners) and *bangyang* (role models)

One principal (B1) claimed "the TRG heads often play the part of the pioneer if changes in teaching strategies are to be made and demonstrate possible ways to implement the new teaching strategies." The TRG heads' experiments with new teaching strategies became a potentially illuminating example for the teachers, providing them with pre-knowledge and experience before applying them in their classrooms. The TRG heads acted as *yinling zhe (forerunners)* to demonstrate job-embedded learning and development. A TRG head commented:

> I keep writing essays every year. Although I often teach grades 5 and 6, I feel different every year I teach. When the time comes to write my essay, I have some material to write about. I also often ask our teachers to write like this. I say, 'Don't envy me for winning awards for my essays every year. You can too. Accumulate some material – you will be good at writing.' When you find some theory, you can really support this kind of teaching method and practice, and it is better to have a theory to support teaching (A3).

The principal reinforced the TRG heads' pioneering role by commenting:

The TRG heads are normally *gugan jiaoshi* (backbone teachers). They are the mainstay of the school. I hope they can help the teachers, whether individuals or teams, by playing their leading role as expert teachers and influence the teachers who are young, new, or less experienced in teaching (A1).

The TRG heads spoke about leading teacher learning as role models: "Teachers are looking at you, so we need to have an active work attitude. For example, we have open lessons every semester in which we need to take the lead to do well. Although we cannot do it 100% perfectly, I think it's all about being a *bangyang* (role model) first."

The TRG heads had potential to lead. Their leading role meant that they influenced the teachers' learning atmosphere. A teacher commented:

If our TRG head is afraid to speak the truth when commenting on the lesson, she might be superficial, saying that the lesson was very good. If this is the attitude, the teaching is not good; she will not help the teacher improve if she does not want to offend people. I think this is because the TRG head is the one who takes the lead and if the TRG head is also the one who assesses the lesson, then maybe the teachers under them will have some concerns when assessing the lesson; that is, they will not dare to really put forward some useful suggestions. If our TRG head takes the lead in this way, the teachers under them will have fewer scruples. Teachers should have the courage to put forward their opinions on the shortcomings of the lesson so that a clash of ideas can really help the teacher improve the lesson (A7).

Thus, the TRG heads, as role models, shape teacher learning outcomes in a subtle way.

5.4.3 The TRG Heads as *daoshi* (peer mentors)

The TRG heads cared about every teacher. They spent much time trying to understand teachers' real needs or issues when trying to facilitate teacher development. The TRG heads assisted and coached teachers who were struggling. A TRG head (B3) said, "whenever teachers seek my advice about a need or problem, I spend considerable time trying to understand how the teacher framed the need or problem."

The TRG heads spoke to individual teachers about their expectations of them, observed what was going on in their daily teaching, provided teachers with feedback on teaching and student learning, worked with teachers to help them translate improvement needs into specific actions, and provided assistance to teachers when they needed it. In addition, the TRG heads paid particular attention to new teachers. They conducted lesson preparation and observations with new teachers to give them a good start and to enhance their effectiveness. A teacher shared her experience:

> Our TRG head is my *daoshi* (peer mentor). I am a newcomer in our TRG. Our TRG head co-works with me to prepare and refine my lessons. The TRG head also organises teachers to observe my lesson and provides me with feedback. My successful lesson demonstration is primarily due to the mentorship of our TRG head (A4).

As mentors for teacher development, a principal (B1) said, "the TRG heads know the

teachers in their team very well and have an idea of how to improve teacher learning, and I think our TRG heads have this responsibility." The TRG heads coordinated school-based seminars for which they liaised with school leaders, produced teacher development plans, and put the plans 'on the ground'. The TRG heads played the role of formative supervisors. One teacher commented:

> Our TRG head works with and through teachers to ensure that the instructional plans are smoothly implemented and that the school and group missions are achieved. In addition, she designates responsibilities to us based on our will and our strengths to promote professional collaboration and co-learning (A5).

The TRG heads helped teachers use peer coaching for professional learning. A principal explained the advisory role of the TRG heads:

> New teachers are not familiar with the other teachers in the TRGs. The TRG heads identify suitably experienced teachers to mentor the new teachers. Then, the TRG heads introduce the background of the experienced teachers to the new teachers and listen to the voices of the new teachers regarding their developmental needs. The TRG heads explain to the new teachers the reasons why they chose these experienced teachers to be their mentors. Then there might be an adjustment. Finally, the mentor-mentee relationship between experienced teachers and new teachers is confirmed. In this process, the TRG head plays the role of advising and mentoring (A1).

The TRG heads' mentoring role enhanced experienced teachers' leadership capacity and helped increase new teachers' knowledge while promoting their positive development.

5.4.4 The TRG Heads as Sources of Information

The TRG heads invested in the spread of knowledge across classrooms. The following excerpt from a teacher reflects the TRG heads' role as sources of information:

> Our TRG head brings some new direction to our teachers. For example, I just switched to teaching English two years ago. Before that, I taught Chinese. So there is a lot of direction on the English subject that I don't know. During the weekly teaching-research activity, she points out some new directions on the reform of the English subject that she has learnt from the teaching-research office and professional associations, such as master teacher studios (A6).

The TRG head actively engaged in external developmental activities and brought the resources back to the teachers. The TRG heads linked teachers' learning needs with external learning resources. One TRG head (B3) said, "School context matters. We cannot just copy and paste the good practices from high-performing schools because we don't have the same educational infrastructure. I am glad that our teachers learn and grow small step by small step." The TRG heads mobilised knowledge and examples of good practice from other settings based on the traditional "outside-in strategy." The TRG heads, as sources of information, built a connection between what the experts delivered and teachers' daily teaching practices as shown in the following excerpt.

> We are a rural school and many teachers say that we have relatively few opportunities to go out and learn. Often our lessons are really more traditional; that is, we teach the students what we know and we just finish the lesson. However, through the feedback from the TRG head collected from external experts, we are actually clearer in our minds about how we are going to teach lessons. Every time we organise teaching and research, each teacher might be more careful when preparing their lessons than usual; that is, more careful with studying the teaching objectives. So, the "outside-in" information and good practices let each teacher know how to provide a good lesson and she might be a little clearer in her mind (A8).

The TRG heads' external learning provides input on teachers' learning and development through knowledge brokering. According to a teacher (A8), "the TRG heads encourage us to visit other schools to look at and share practices." The TRG heads' support of cross-school learning links the TRGs with external entities and stakeholders to form broader communities of practice.

5.5 Role Enactment of TRG Heads in Leading Teacher Learning

5.5.1. Routinising Dialogic Space: "Professional Learning Structures are Central for Teacher Learning"

The TRG heads created structured opportunities for teachers to work and learn together. A teacher commented:

> Our TRG head organises weekly professional meetings as a regular

opportunity for teachers to discuss issues related to teaching and learning.

These meetings provide us with opportunities to discuss professional issues

one-on-one, in small groups, and in larger forums (B5).

One teacher (B7) said, "Teaching-research activities take place on a fixed day every week and our TRG head coordinates these activities for us." The teaching-research plans collected indicated the regular teaching-research activities organizaaed by the TRG heads. They initiated various forms of teaching-research activities, such as lesson preparation, lesson observations, post-lesson discussions, seminars, and workshops.

Through the informants' narratives, the TRG heads supervised and motivated lesson preparation and grade groups to facilitate collective lesson preparation and lesson observations to promote teacher learning. The heads provided various learning opportunities, such as conducting lesson preparations and observations with the new teachers, to build the newcomers' capacity and help them conduct effective classroom management. The heads organised teachers' training (provided by government) and provided support for them to participate in external teaching competitions. One TRG head (A4) said that she trusted her teachers, and they provide structure and guidance when it is asked for (or when manifestly needed without being asked for). She added, "professional learning structures are central to teacher learning."

The participants commented that new teachers were also developed through the apprenticeship model named the *Indigo-Blue Project* (*Qinglan gongcheng*) initiated by the education department, in which the old guide the young. Experienced teachers, typically *backbone teachers (gugan jiaoshi),* guided novice teachers' work at schools in one-on-one

mentoring relationships. This mechanism helped novice teachers solve problems related to insufficient understanding of how, what, and why to teach. One teacher reflected on her experience of this mentoring programme as follows:

> When I joined the school, there was a project called the *Indigo-Blue Project* and the TRG head served as my mentor. We collaborated in lesson preparation, she observed my teaching sessions, and provided me with valuable feedback. During lesson planning, she advised me to consider the desired teaching objectives and work backwards from the teaching activities to see if the teaching objectives had been achieved. Additionally, she conducted a demonstration lesson to illustrate effective teaching practices. She also encouraged me to participate in the 'Mingzhu Cup' teaching competition, a district-level competition for novice teachers, and arranged for experienced teachers within our group to assist me in refining my lessons. I greatly benefited from these experiences (A5).

Another significant detail mentioned by the informants was that the TRG heads routinised the structure of collaborative inquiry ensuring that teachers remained focused on instructional issues. One TRG head commented:

> At the beginning of the semester, I develop a teaching-research plan in accordance with the plans of the teaching-research office, the education department, and our school. The planning is mainly related to arranging which teachers will have an open lesson and when the teachers will prepare their lesson as a group. After they have prepared the lesson, we discuss and

so on to see the design of their teaching sessions, or they reflect on their

teaching first and we take a look (B2).

However, the teachers felt that during the teaching-research meetings, the TRG head spends too much time on delegating administrative tasks without enough time to deeply discuss teaching.

5.5.2 Promoting A Culture of Sharing, Collaboration, Support, and Participation: "Enjoy the Work, Enjoy Learning"

The TRG heads recognized the importance of the traditional teaching-research structure in schools for driving teacher learning. They optimised the learning environment within this structure. The TRG heads cultivated a culture of sharing, collaboration, and active participation within this structure for promoting the growth of teachers. School documents and the TRG heads' expressions in meetings stress collective learning, with expressions such as "comprehensive thinking", "cross-subject learning", "lesson study", and "collaboration".

Additionally, they prioritized maintaining supportive relationships with and among teachers, demonstrating respect, trust, and active listening. By valuing the teachers' voices and perspectives, the TRG heads ensured that the teachers felt appreciated and valued. The following is an extract from a teaching-research meeting:

TRG head (B2): Let's plan to have a discussion next week specifically

focused on promoting students' learning habits in the math classroom. The

topic can be divided into different parts. Let's distribute different sections to different teachers, who will then reading relevant literature, make connection between the literature and your teaching practice, and share ideas. What do you think of that?

Teachers: Okay. Could we have the flexibility to choose the part we would like to focus on based on our own interests and strengths?

TRG (B2): Sure.

Teacher Liu: In addition, I think this topic is of great importance. Could we deepen it and work on it as a research project?

TRG (B2): That's a good initiative.

Teachers: We totally agree with her.

TRG (B2): Great. Let's do it.

The TRG heads delegated responsibilities to teachers in accordance with their preferences with the aim of promoting collective responsibility and professional collaboration. A TRG head commented:

> Each teacher in the group is a questioner and a learner, as well as a question answerer and a demonstrator, and teachers participate fully and provide support for each other. I hope they enjoy the work and enjoy learning (A3).

The TRG heads united the team of teachers with their personalities and created a relaxed and harmonious atmosphere in which the teachers could grow. They also played a

pioneering role in the culture of teaching-research. A teacher, who saw the TRG head as a role model explains:

> When the TRG head speaks the truth and provides pertinent feedback during the post-lesson discussion, it creates an environment where teachers feel encouraged to express their own honest, diverse, and sometimes conflicting views. This fosters deep and high-quality dialogue among the teachers (B6).

A TRG head (A3) said, "I am trying to make the teachers more aware of the impact they could have through professional learning." The TRG heads encouraged the teachers to actively and collectively participate in teaching-research activities. They recognised teacher learning and accomplishments publicly, shared personal learning, and invited the teachers to share as reflected in the following excerpt.

> In addition to the designated teachers (such as teachers who teach Maths), we basically take turns to go out to study and strive for everyone to have this learning opportunity. I tend to allocate the opportunities to teachers if, in addition to the designated teachers (such as teachers who teach group 5), other teachers who have the time are also welcome to participate in external developmental activities. I hope they enjoy their work and enjoy professional learning as well. The teachers who learn from external activities can bring their notes for other teachers in the group and share what they learn from the out-of-school activities. I am trying to promote the teachers' individual development to transform to collective efficacy (A2).

A teacher (A7) added, "the TRG head went out to study and we followed what she had learnt and that was a gradual learning process. The TRG head shared some information with us and we would learn together. The TRG heads' active learning attitudes positively influenced the climate of teacher learning and facilitated teachers' active engagement.

5.5.3 Integrating Research as Part of Professional Practice: "My Experiences Facilitating Teachers as Researchers and Reflective Practitioners"

The TRG heads worked with teachers on action research and applied the research results to teaching. A TRG head (A3) noted that "especially after the completion of a research project, the model developed is then applied to our usual teaching and it feels more practical." The TRG heads bridged research with teacher practice through action research. The TRG heads designed and managed research projects with the teachers. A principal (A1) observed that "our TRG heads might also have to pay particular attention to this [leading action research] and take the lead more. Our TRG heads lead some teachers to apply the school-based and district-level research projects.

A TRG head (B4) noted, "becoming comfortable with the use of research through reflection on past experience and ongoing learning would be a meaningful part of teacher learning." The TRG heads kept teachers posted on pedagogical and research developments. They encouraged research-informed practice, organised research-led teacher development activities and cultivated a research atmosphere to enhance the teachers' research awareness and capacity. A TRG head highlighted the importance of the research-based learning:

With the deepening of the curriculum reform, relying solely on accumulated frontline teaching experience can no longer meet the needs of highly effective classrooms, so deeper teaching research is needed to better serve higher quality education. The traditional 'experience-based' teaching-research is being transformed into experience and evidence-based teaching-research in order to promote teachers' deep reflection and learning, and thus promote the deepening reform of learning and teaching (B4).

The TRG heads tried to transform the traditional teaching-research mode (relying on practical experience sharing) and encouraged research-based dialogue. A TRG head (A3) said, "I recommend to teachers that they read some professional books related to our subject to learn more theories and education ideas. Additionally, I encourage our teachers to regularly read professional and education news to anticipate changes that might affect instruction, reflect on evident trends, and determine what you can do to adapt to these changes." The TRG heads enriched and expanded teachers' theoretical knowledge using action research as a collaborative inquiry and learning process within the TRGs. A TRG head commented:

> I would like to share my experience facilitating teachers as researchers and reflective practitioners. We have conducted some research projects and written articles these past two years. Before that, there was not so much research output. We pushed ourselves and our teachers over the past two years, then it worked. I encourage our teachers to read and write. Miss Li has received a number of publication awards. I also received some research

awards. I hope that every teacher can engage in research-based practice, not just a few teachers but some of the elderly teachers as well (B4).

The TRG heads promoted the teachers' reflection and encouraged them to write articles. A TRG head (A3) said, "I also often ask them to write articles. I said, 'you do not need to envy me getting a prize for my essays every year. You can do so too. If you accumulate some material, you will be able to write.' When you find some theory, you can really support this teaching method and practice, it is better to have theory to support you."

5.5.4 Widening the Teachers' Resource Base: "Watch with External Eyes"

The TRG heads introduced new approaches and extended resource bases to widen the teachers' learning environment thereby opening up new possibilities for them to gain experience and insights. A teacher echoed this point:

> Our TRG head brings a new direction to us after she participates in external professional learning activities. There are not many opportunities for us to go out to study. The TRG head has more opportunities to go out and participate in external actives than we do, so she usually goes out and studies. She learns some new teaching ideas and gives us feedback when she comes back (A7).

The TRG heads participated in cross-school teaching and research and shared useful resources and teaching practices with the teachers while keeping the teachers posted on education developments and trends. They also invited experts to conduct lesson demonstrations and seminars at their schools. One TRG head commented:

In terms of the experts we invite at the school level, we are only proposing which famous schools in Guangzhou are doing well in various aspects and invite their leaders and teachers to come to give lectures to our teachers. It would be better if we had the resources to invite outside experts to give us a lecture to take the subject forward. We need to watch with external eyes (B4).

The TRG heads provided external channels for the teachers to grow. A TRG head (A3) said, "I sometimes provide the teachers with a channel to grow their knowledge, such as educational websites and information about teaching competitions. The teachers are often proactive."

In addition to "bring-in strategies," the TRG heads used a "go-out approach" to drive teacher development. They encouraged the teachers to keep an eye on external educational contexts. The TRG heads organised teachers to attend training sessions provided by the teaching-research office and education bureau. One TRG head explained:

Usually, I coordinate the teachers' external training with the director of the office for teaching affairs. For example, if there is an event on a certain day of the week, I determine which grade teacher will be asked to attend it. We negotiate. But I also talk to the teacher privately, asking if they are available on that day. If that teacher is really not available, sometimes I will ask another teacher to take their place (B4).

The TRG heads provided encouragement and extra support for the teachers' participation in external competitions. External teaching competitions were treated as a resource by the TRG heads and used in ways that bolstered the teacher learning. A TRG head commented:

> I encourage our teachers to participate in external competitions and conduct out-of-school lesson demonstrations. If a teacher needs to do a lesson demonstration, the TRG normally prepares the lessons with them. I am very glad that our teacher won the award for outstanding teaching. It is not easy for our rural school because a number of teachers in the excellent urban schools also performed lesson demonstrations. I am very satisfied with what our teachers have done. We are very united (A2).

In short, the TRG heads supported and enhanced the teachers' cross-boundary learning.

5.6 Summary of the Role Construction and Enactment of The TRG Heads

The findings reveal four main ways in which the TRG heads in the low-performing schools enacted their role *as chengshang qixia, yinling zhe* (forerunner) and *bangyang* (role model), *daoshi (*peer mentor), source of information. The four core practices include routinising dialogic space; promoting a culture of sharing, collaboration, support, and participation; integrating research as part of professional practice; and widening the teachers' resource base. The following sections contain the findings regarding the influencing factors and their impact on the TRG heads' leadership when leading teacher learning in low-performing schools.

5.7 Influential Factors and their Impacts on TRG Heads' Leadership for Teacher Learning

The literature suggests that school middle leadership is shaped by professional, relational, organisational, and external conditions (e.g., Bryant & Walker, 2022; Dinham, 2007; Ho, Bryant, & Walker, 2022). This section comprises an exploration of how diverse professional, relational, organisational, and external contexts influence the nature and enactment of the TRG heads' leadership for teacher learning and how these factors shape their leadership in low-performing Chinese schools.

5.7.1 Professional Context

5.7.1.1 Subject Matter Expertise and Teaching Experience

Learning to lead was found to be learning to learn. The findings reveal that subject matter expertise was regarded as very influential for the work of the TRG heads in low-performing schools. The TRG heads were promoted to middle-level leadership positions to lead teacher learning based on their subject knowledge, excellent pedagogical skills, and teaching and research capacity. Their modelling role was emphasised by the teachers interviewed. Because of their limited authority, they influenced teachers and maximised their influence by relying on their expertise rather than positional power, as one teacher indicated:

> Although our TRG head has limited authority, we are willing to follow her and listen to her. We believe she can lead us and improve our teaching effectively because she has won a wealth of teaching awards and has conducted a number of research projects. Her professional experience encourages us and she is a good example for us to follow (A7).

The TRG heads' narratives indicate that their teaching experience strengthened their professional understanding of what to teach, how to teach and why, as well as their capacity to reflect on and articulate their professional understanding and promote individual and collective responsibility to learn and lead. This positive relationship was observed when the TRG heads journeyed into teachers' professional lives and offered guidance. The majority of the TRG heads were successful teachers who had rich teaching experience averaging 20 years. The TRG head with only three years of leadership constituted a single case. This TRG head said, "I feel anxious because I am a newcomer and most teachers in our group have been working for more than 20 years. In terms of the question about how to lead teacher learning, I am sorry that I have no idea at this stage (B3).

This comment can be compared to one made by the TRG head who had 20 years of teaching experience:

> I am a veteran (*shushou nvgong*). I have been working in this school for almost 20 years. Lisa (pseudonym) has transferred from lower-secondary school to our school this semester. She is unfamiliar with the practice of teaching in the new educational environment. On the one hand, I invite her to observe my lessons and, at the same time, I observe her lessons and provide feedback (B4).

The TRG heads with longer teaching experience felt comfortable with the way they supported the teachers.

5.7.1.2 Leadership Experience and Interpersonal Skills

The strong leadership experience and interpersonal skills of the TRG heads were consistently noted in the low-performing schools.

The TRG heads suggested that leadership experience in complex and diverse contexts can help them respond effectively to the challenges they encountered in their current schools. With more leadership experience, the TRG heads accumulated role-specific knowledge, skills and abilities, which enabled them to become increasing more effective in leading peer learning. The TRG heads had myriad demands on their time. Leadership experience led them to act intuitively and helped them prioritise. The TRG heads' rich leadership also experience gave them insight and knowledge into a variety of working conditions, which helped them perform their jobs as school leaders. Leadership experience permeated their professional space as they moved into leadership positions. A newly-appointed TRG head commented:

> I have just been appointed to this position four months ago and became a teacher [just] two years ago. I am not familiar with the work of a head of a TRG. I am sorry that I cannot answer some of your questions relating to the development strategies of teachers and their changes under the guidance of the heads of TRGs. At this stage, I follow and collaborate with the director of the office for teaching affairs to promote teacher learning and organise teaching-research activities. In addition, I seek advice from the previous heads of TRGs when I feel confused (B3).

The TRG heads used goals to track the teachers' progress and enhance their efficacy. In addition, they collaborated with the teachers to set grade-level goals and provided assistance to teachers in setting short-term goals for teaching and learning. Drawing on their professional experience, the TRG heads noted the benefits of creating an active learning environment among the teachers at the schools. They, thus, encouraged the writing of journals, reading and reflection. The teachers reported that they had won a number of writing and teaching awards under the guidance of the TRG heads. The heads believed that teaching could be improved through peer interactions and collective effort. They ensured that the teachers worked in teams and across subject areas in an attempt to build broad relationships and learn from other schools, although there were many constraints on them, such as the small sizes of the groups, which placed a heavy burden on their teaching and research efforts, the insufficient professional training provided and students with neglectful attitudes. The following is a description of my observation of a teaching-research activity led by an effective TRG head at a low-performing school.

> At the first meeting of the first semester in the academic year 2020/2021, the TRG head (A3) presented with an upbeat and confident attitude. She shared the initial teaching-research plan with the teachers and revised it together with them. She explained how the initial teaching-research plan had been formulated and helped the teachers understand the key points. She paid attention to the facial expressions of every teacher. If the teacher displayed negative emotions, she asked for the reason and offered help accordingly. The teachers actively participated in discussing the plan. They expressed their own ideas and provided suggestions on how to put the plan

into action. They also shared the problems they had encountered with teaching during the previous semester and sought advice. The meeting lasted for almost two hours.

A TRG head stated the following:

> My experience as a learner and a teacher tells me that teachers need facilitators and peer learners who can push them and work with them at the various stages of their careers. One of my roles is to participate in the teaching-research activities as a learner and learn with the teachers. In terms of my role as a facilitator, I encourage, laughter, listening and questioning. Although I don't expect teachers to accomplish great achievements, I am still rather strict with them, but make sure they are comfortable with that. I don't think I am a leader of the teachers; I have just been teaching for a longer period than the other teachers in the group. Some of my experience might prevent them from making the same mistakes I made (A3).

Subject-matter expertise, teaching experience, and leadership experience and skills are important professional factors and influence the instructional leadership of the TRG heads. The effective TRG heads used their professional agency to facilitate positive teacher change in challenging circumstances.

5.7.2 Relational and Organisational Influences

5.7.2.1 School Conditions

The teachers at the low-performing schools had a lower degree of professional autonomy than their counterparts at the high-performing schools. The teaching-research activities were led by the TRG heads and they always initiated teachers' interactions. These interactions were generally task-based so the teachers rarely engaged in spontaneous discussion. A TRG head from a low-performing school commented:

> I understand our teachers and students well. Our students are from a low socioeconomic background. Their parents are busy with work and have limited time to take care of them and their studies. Thus, our teachers face many challenges, including student learning and taking care of their well-being. What I expect is that they try their best to teach and complete the tasks on time (A2).

Because of the school context and the students' low motivation, the TRG heads at the low-performing schools felt less confident about fostering learning and teaching. They thus had relatively lower expectations of teachers than those in the high-performing schools. TRG heads from school A and from school B who worked at low-performing schools noted:

> As a head of a TRG, I hope that I can drive every teacher forward and facilitate significant progress. However, my limited capabilities enable teachers to grow only slowly over time. Additionally, our teachers have insufficient professional learning opportunities. I feel satisfied, even though

they show tiny improvement. For example, the teachers in the large-sized schools organise a variety of student activities, which definitely provide opportunities for them to develop communicative and organisational skills. However, there are comparatively few extra-curricular activities for the students at our school (A3).

I tend to delegate responsibilities along with deadlines to the teachers. It is difficult for the teachers to complete scheduled tasks (such as co-organising student extra-curricular activities) on time by relying on their self-motivation (B2).

The TRG heads at the low-performing schools provided a high degree of leadership. They tended to rely on a directive leadership style and set clear, specific, and measurable teaching goals based on the school mission and vision. They translated these goals into teacher practice and monitored whether the teachers achieved the goals. The heads were concerned about whether the teachers could complete their teaching tasks on time, rather than on teacher empowerment. The efforts of the TRG heads were not focused on making great changes but rather maintaining the teacher groups' status quo and then, incrementally, trying to improve their teaching practice.

The TRG heads at the low-performing schools allocated considerable time to assigning administrative tasks, resulting in little time for discussing pedagogical practices. A teacher from a low-performing school complained about the inappropriate amount of time devoted to administrative tasks:

Our expectation is that teaching-research activities should be focused on

pedagogical improvement and too much time should not be devoted to the allocation of tasks. A large part of our teaching-research activities is often devoted to miscellaneous matters, such as the arrangement of teachers to take responsibility for taking students to mathematics competitions and scheduling monthly student examinations. These are important, but most of our time should not be spent on assigning tasks. It's putting the cart before the horse and, in the end, the time devoted to lesson study is extremely limited (A6).

Because of the limited number of teachers in the low-performing schools, the TRG heads also always took on the responsibilities of the heads of lesson-preparation groups and grade groups (the head of a grade group is responsible for the administration of the affairs of a certain grade, whereas the heads of the teaching-research and lesson preparation groups are responsible for the professional affairs of a subject). The TRG heads, specifically those at the low-performing schools, were referred to as *yijiaoti* (a one-man operation). Thus, the TRG heads at low-performing schools needed to devote more time to completing administrative-related tasks. Notably, the role of the principal in this process is important. A TRG head (A3) noted, "If the principals could provide clear guidance and sufficient resources, we would be able to complete tasks smoothly; then we would have more time to observe teachers' lessons and conduct lesson studies with teachers."

There were some negative responses from teachers in the low-performing schools. Some of them suggested that the mentoring role of the TRG heads was not always present. One teacher noted:

I have been working at a lower-secondary school for five years, but now I have transferred from a secondary school to a primary school. I suppose differences exist between primary and secondary teaching strategies. However, most of the time I figure out how to teach and manage the classroom by myself (B7).

A teacher also commented:

The head of TRG does not play a particularly significant role in promoting teacher learning and development. She could effectively contribute to our professional learning if she could spend more time providing feedback from monitoring activities and modelling good practices. In addition, due to time constraints in the formal meetings, there is no room for in-depth discussions. I had hoped she would recommend some suitable books to facilitate our reflection (B8).

The TRG head suggested that there was insufficient access to quality teaching resources for developing teachers. A TRG head (A2) said, "We have insufficient opportunities to go out to study. We often climb a tree to seek fish."

One TRG head (A4) added: "Although the government always emphasises the need for balanced resources across schools, there is still a big gap between our schools and those in the urban areas." Another TRG head (B3) said, 'I have sufficient learning opportunities, both internal and external. When I go out for learning, I take notes and make recordings. This way, I can share good practices and resources with our teachers." Although there are insufficient development opportunities for teachers, the TRG heads brought resources and

drove teacher learning through their own involvement in external learning activities.

5.7.2.2 Various Staff Groupings

The mutual and interactive influence of teachers on the TRG heads was a strong theme throughout the data. The majority of the participants indicated an awareness of this influence. For example, a TRG head felt the teachers had an immense influence on her:

> I noted the teacher factor. Improving teacher development is the biggest part of the job. It's not students; it's dealing with teachers and makes my job far more complicated. But I am very lucky. The teachers are very supportive. All of them are happy to complete the assignments and I can see that everyone is discussing them when they have completed them (B3).

The TRG heads' co-workers impacted their leadership journey. However, not all the case schools had the position of head of lesson preparation groups, especially at the low-performing schools. Thus, the TRG heads needed to play the roles of both heads of the TRGs and the lesson preparation groups. A TRG head shared her experience by stating:

> We don't have heads of lesson preparation groups. I sometimes feel on the edge of exhaustion. I also need to play the role of the head of a lesson preparation group. If our school created head of lesson preparation group positions, they could help take care of teachers in their own grades (every grade has a head of lesson preparation group). Then I might have sufficient time to enact my role as a TRG head (B4).

The interview and observational data revealed that the TRG head collaborated and co-led with the directors of the office for teaching affairs. One TRG head commented:

> Usually, I coordinate the teacher external training with the director of the office for teaching affairs. For example, if there is an event on a certain day of the week, I determine which grade teacher will be asked to go and listen to it. We negotiate. But I also talk to the teacher privately, asking if they are available that day. If that teacher is really not available, sometimes I will ask another teacher to take his or her place (B4).

The qualitative data revealed that the complexity of the layers of middle leadership reflected the structural complexity of interactions among school leaders.

The TRG heads demonstrated that strong and supportive principals could positively influence their commitment to the professional growth of teachers. The newly-appointed TRG head (B3), said "I benefit from the principal's support, which helps me clarify expectations and minimises my sense of helplessness." Principals fostered the affective commitment of the TRG heads by providing a supportive work environment. In addition, congruence between the principals' and the TRG heads' perceived value of teacher development made the work of the TRG heads easier in terms of developing teachers.

In the teaching-research activities, the principals played the role of summarising and integrating differing points of views that had been presented. The principals listened to the TRG heads, met their needs, and invited relevant experts to the schools to conduct lesson demonstrations and seminars. They provided a positive and engaging learning environment that promoted the work of the TRG heads. Most of the TRG heads regarded their principal's

participation in the teaching-research activities as a source of encouragement and believed it demonstrated caring about their achievements and the challenges they faced.

5.7.3 External Forces

A principal (A1) said, "Our TRG heads are bounded by external agendas and supported by a wider network and experts." The following sections are dedicated to external forces, including supervision from the districts in which the schools were located and the external experts who impacted the leadership journey of the TRG heads. The latter were frequently involved in out-of-school teaching-research activities organised by the district-level education bureaus and the teaching-research offices.

5.7.3.1 The District

A TRG head commented:

> The district education bureaus and teaching-research offices have created a networking platform for the sharing of good practices through lesson study, cooperative learning, reflections and presentations by teachers, as well as workshops to develop the teachers professionally. These activities have provided opportunities for us to develop our learning capacity through close interactive engagement with each other, with teachers from other schools, and, occasionally, with external experts (B4).

The TRG heads often participated in these activities, following which, they shared the current school reform efforts with the teachers at their own schools and introduced beneficial resources and innovative pedagogical practices. Participation affected the

professional beliefs and the instructional skills of the TRG heads. The districts had differing resources and teaching-research activities, which influenced the professional learning of the TRG heads and thus influenced their strategies for developing teachers. One TRG head shared her experience:

> Despite the government's attempts to fill this gap, a large imbalance in high-quality teaching resources still exists. Our resources cannot be compared with those of schools in urban areas and high-performing educational districts (A2).

The district-level teaching goals and initiatives developed by the district education bureaus and the teaching-research offices influenced the focus of the work of the TRGs. These goals and initiatives provided direction by offering ideas to help structure school-based teaching-research plans and goals, and teacher developmental activities. The TRG heads and principals developed teaching-research goals and the mission of their subjects based on the district's. Each district had its own unique focus, opportunities, and challenges. Thus, the TRG heads had differing priorities when working with teachers. This is illustrated by a TRG head from Huadu District:

> Huadu district has initiated a three-year plan to improve school facilities and school performance. Accordingly, we focus more on helping teachers adapt to the new teaching facilities and on identifying suitable resources for teachers to adjust their existing teaching practices at this stage (A4).

5.7.3.2 Out-of-school Training and Experts

Engagement in the master teacher studio enabled the TRG heads to see the bigger picture of teaching and research. They brought what they had learnt in the studio to their own schools. A TRG head indicated the influence of the host of the master teacher studio:

> I am a member of a master teacher studio in the district and I often ask my mentor (the host of the master studio) to come to my school to conduct lesson demonstrations and workshops to mentor the teachers in my school. In addition, the mentor recommend some books to me. I think some of these books are suitable for the teachers. I would recommend that they read them (B4).

The participation of external professional training improved the TRG heads' subject-related knowledge and reinforced their role of leading teacher development. A TRG head commented:

> I need to improve my professional competency, especially after participating in the training, and go out to visit other schools as a learner to participate in their school management. I found that I was 'looking at the sky from the bottom of a well' *(zuojingguantian)*. There is too much to learn if I play the leading role in teacher learning. I need to 'walk in the front' (A4).

District teaching-research officer's leading role and their policy initiatives affected the quality of teaching-research. The district teaching-research officer worked with the TRG

heads to develop the school-based teaching-research planning and set the goals for teacher development. One principal (A1) said, "We have a WeChat group. At the beginning of the semester, the teaching-research officer has an initial plan of teaching and research; we and the TRG heads detail and implement the planning in our own TRGs. If there are some extra activities during the semester, the TRG heads always inform and discuss with us in the WeChat group."

5.8 Responses to the Research Questions and Summary of the Chapter

The TRG heads in low-performing schools enacted the roles *chengshang qixia* (intermediary), *yinling zhe* (forerunner), *bangyang* (role model), *daoshi* (peer mentor), and were a source of information to drive teacher learning. There were four main strategies adopted by the TRG heads to improve professional learning, namely, routinizing dialogic space, promoting a culture of sharing, collaboration, support and participation, integrating research as part of professional practice, and widening teachers' resource base. In this chapter, I identify the key factors that potentially shape the leadership of the TRG heads in terms of driving teacher learning and exploring why their leadership is enacted in certain ways. Three primary sets of influence emerged: professional context, relational and organizational conditions, and external forces. Combined influences will be analysed in the discussion chapter. The next chapter will move on to the presentation of the findings of average schools.

CHAPTER 6 THE GROUPS OF TRG HEADS IN AVERAGE SCHOOLS

6.1 The Scope of Chapter

In this chapter, I explore the leadership of the TRG heads in average schools in relation to teacher learning and its influencing conditions. In the first section, I provide the context of the TRG heads, followed by an in-depth portrait of the TRG heads as leaders of professional practices in average schools.

6.2 The TRG Heads Context

I sampled two average schools (school C and school D). Six TRG heads from these two schools participated in the study. Ye, Lin, and Li were from school C. Luo, Lu, and Xu were from school D.

School C, established in 1999, is located in Baiyun District in the northern suburbs of Guangzhou. It is a medium-sized school with 80 teachers, 35 teaching classes and 1,400 students. The school is managed by an education group and is recognised as an exemplary school by the Baiyun District education bureau.

Li, Ye and Liu are the TRG heads at school C. Li, the TRG head of Chinese as a subject, had 15 years of teaching experience and was appointed to the TRG head position in 2020. She worked at another primary school for 12 years before joining this one. She was also a TRG head at her previous school. Ye, the TRG head of English, with 24 years of teaching experience, was appointed to the position of TRG head in 2009 when she joined school C.

Liu, the TRG head of Maths, had 19 years of teaching experience and was appointed to the position of TRG head in 2016.

School D, a public school established in 1960, is located in Haizhu District in the southern part of Guangzhou. It is a medium-sized school with 36 teachers, 16 teaching classes and 658 students. Thirty of its teachers have undergraduate degrees or above. One teacher is over 50 years old, nine teachers are between 40 and 49 years old, 16 teachers are between 31 and 40 years old and seven teachers are under 30 years old. Thus, the majority of the teachers are young or middle-aged. School D attends to teacher learning by enabling the research capacity of the teachers. The school has been recognised by the district education bureau as an exemplary school.

Luo, Lu and Xu are the TRG heads at school D. Luo, the TRG head of Chinese, with 25 years of teaching experience, was appointed to the TRG head position in 2002. Luo is a city-level backbone teacher who has worked at this school for 25 years. Lu, the TRG head of Maths, who has 23 years of teaching experience, was appointed to the position of TRG head in 2011. Xu, the TRG head of English, with 23 years of teaching experience, was appointed to the position of TRG head in 2017.

6.3 Categories and Emergent Themes

I conducted five-hours of interviews with a sample of principals, TRG heads, and teachers, and seven hours of observer-as-participant observations of teaching-research activities, and collected 13 documents from the two schools. The multiple roles and practices of the TRG heads and factors contributing to their leadership were frequently mentioned by the

participants, including: (a) the TRG heads as *lianjie* (links); (b) the TRG heads as *xianfeng* (precursors); (c) cultivating a culture of effort and joy for the teachers; and (d) the influence of the principal. The subsequent sections consist of a presentation of the themes that emerged from a coding process. The summary section comprises a naturalistic generalisation of what was learnt.

6.4 Role Construction of TRG Heads in Leading Teacher Learning

6.4.1 The TRG Heads as *zhongjian ren* (mediators) and *hezuo zhe* (co-leaders)

The participants regarded the TRG heads as *zhongjian ren* (mediators), who strengthened the links between the principals and teachers' changed practice. A principal commented:

> The TRG heads in the school are situated in the mid-level leadership positions. They are first and foremost subservient to the school's arrangements for the overall teaching and the research work of the school. The TRG heads are also implementers. They carry out the school's teaching and research arrangements within the TRGs. They then organise the teachers in the TRGs to learn and lead teachers to do better in teaching and research, so they are both implementers and leaders in the TRGs (D1).

The TRG heads further shed some light on their interpretative role in translating abstract ideas into the teachers' collective learning and shared practice. In my observation at a sample school, I noticed:

> The TRG head first talks to the principal to gain an understanding of the central purpose of what the school has set out to do and how the whole thing

is being handled. Then the TRG head tells the teachers that it's not really as complicated as they think it is. After attaining consensus among the teachers and the principal, the TRG head simplifies the work and then distributes tasks to the teachers.

This TRG head responded:

I invest time in getting to know my teachers. I report their views to the principal and communicate with the principal to see if we can accommodate their views and, thus make some changes. My central concern is to use these activities to improve the teachers' teaching and research capacity without overburdening them (D2).

The field notes indicate how the TRG heads worked at the interface between thinking about school-wide activities and the actual carrying them out with the teachers in the TRGs, and how the TRG heads exercised their influence through both lateral and hierarchical points of contact to lead teacher development.

The teachers said they became exhausted when their schools constantly imposed education reforms and changes. The TRG heads negotiated with the senior leaders when they noticed the teachers were burning out. They gave the teachers space to reflect and helped them cope with traditional and new reform expectations, while trying to sustain their passion for professional learning. One TRG head described her role as a pipeline supporting teacher learning while protecting the teachers from too many initiatives and safeguarding their instructional time.

Instructional innovations and school-based reform as a response to directives from the district is a good thing, but too many initiatives will confuse the teachers and impact their efficacy. The teachers are willing to ask for help and talk to me about their ideas when they are having trouble completing their assigned tasks. On the one hand, I try to help them to solve their problems and, on the other hand, I negotiate with the directors of the office for teaching affairs and the vice-principals to reduce their workload to a certain extent in order to ensure that they have teaching reflection time (C3).

When some teachers had a heavy workload, the TRG heads tried to check whether they were willing to take on more work. The TRG heads expressed concern about teachers' ability to balance classroom teaching and assignments. The principals expected the TRG heads, as *hezuozhe* (co-leaders), to create structured opportunities for the teachers to work together, a stated by a TRG head:

For each week's teaching and research, I first communicate with the director of the office for teaching affairs. Then I combine the requirements of the director and the teachers' developmental needs to decide on the theme of the teaching and research. In addition, we have a meeting with the senior leadership team at the beginning of each semester to discuss the general direction of the semester's work and the planning. Then I make sense of the planning and involve the teachers to finalise it (D2).

The TRG heads carried out the tasks of promoting collective understanding of school-based change and adjusting the teachers' practices to meet the demands of the school's innovations. This role involved both the upward communication of the teachers' feelings to the school senior management and downward communication of the demands, which required mediation. They restructured the relationship between the senior school leadership team and the teachers. The TRG heads ensured that *lianjie* (links) were in place and that opportunities for meaningful development among the teachers were maximised.

6.4.2 The TRG Heads as *daoshi* (peer mentors) and *bangyang* (role models)

The second pattern concerns the mentoring and modelling role played by the TRG heads. They demonstrated that the teachers were developed at these schools through professional collaboration, such as collective lesson preparation, lesson observation, and post-lesson discussion. They provided organised support for the teachers during the process. The TRG heads did not accept the idea of monitoring teachers' work for quality control, but instead preferred the idea of collectively learning from one another. They regarded themselves as assistants rather than leaders. Specifically, they formulated action plans and model practices for collective lesson preparation, lesson observation, and post-lesson discussion. TRG head of school D commented:

> During post-lesson discussions, I first express my own ideas on how I would have taught this lesson if it were me. I take the lead and act as a *bangyang* (role model) and then the teachers can put forward their ideas (D4).

The teachers frequently described their TRG heads as *daoshi* (mentors). They mentioned

the mentoring and demonstration role played by the TRG heads, especially when supporting novice and young teachers. A teacher (D7) said, "I feel that the TRG heads act like mentors, guiding us young teachers by advising us on teaching and research."

TRG heads enacted the mentoring role in different spheres – in the apprenticeship model, (the old guide the young), the TRGs, lesson preparation groups, and the research project groups. The TRG heads worked on their own professional practices and took on some sharing and supportive roles with other school leaders to drive teacher development. A principal stated:

> We have key ideas in our approach to teacher development, but if we want to implement them on the ground, we need some teachers to be exemplars and mentors. The TRG heads, who are those teachers who help fellow teachers, are crucial. The TRG heads collaboratively develop and enforce clear expectations and developmental activities for the teachers. The TRG heads are willing to share their successful practices with the other teachers who, in turn, are willing to learn from them (C1).

The participating principals recognised the need for TRG heads who could be mentors and model good practices, as well as support teachers as peers. A teacher (D8) added, "The TRG head, in general, plays a leading role as a backbone to help other teachers, especially those who are young, new or less experienced in teaching." A teacher (D7) also mentioned, "I feel that the TRG head acts like a mentor for us, guiding us young teachers, advising us on teaching and research."

6.4.3 The TRG Heads as *xianfeng* (precursors)

The TRG heads were prepared to take risks and create a safe environment for the teachers to do so. A teachers stated:

> Because of the TRG heads' expertise and their close proximity to the teachers, the TRG heads are situated in a good position to lead us. They play the role of *xianfeng* (precursor) to exemplify good practice for us (C7).

A principal added:

> To be honest, TRG heads really play the leading role in teaching and research at our school. They are the backbone of our school. As a principal, I need to be engaged in administrative tasks. I am not as specialised as they are. They are on the frontline; thus, they have more time to research (C1).

When faced with promoting a new teaching method, the TRG heads first adapted it in their own classrooms and then summarised some of the effective implementation strategies before promoting them among the teachers. A principal also reinforced the leading position of the innovation of TRG heads:

> He is very good in his own profession. He acts as a mirror and *xianfeng* (precursor), so that the other teachers are inspired by him, which influences their professionalism. In other words, a TRG head has a good knowledge and understanding of his subject, so he can lead other teachers in the subject to study more profound theories, help them to find the right direction and

adapt teaching practices against the backdrop of education reform (C1).

The participants in this study suggested that the TRG heads were situated in a good position to lead teaching innovation and adjust teachers' practices in response to the reform context. A principal (D1) said, "They understand the teachers and their developmental needs well because they are also teachers. The TRG heads worked with the teachers and turned their common confusion into research projects, which resulted in instructional transformation. A teacher commented:

> In terms of teaching and research, the TRG head plays a great leading role. Because the TRG head has conducted research projects, she has research experience and guides us to do action research. We can identify the collective teaching issues as our research topics and address our concerns through the research. The research results can guide us to improve our teaching (D6).

The TRG heads, as forerunners, exercised their professional leadership to inspire the teachers to advance in their professional learning. One principal commented:

> The TRG heads are, first and foremost, leaders of teacher learning. They are front-runners. They broaden their horizons through constant learning in the form of going out and being led by experts, and inviting experts to promote the TRG heads' learning in school. This is to allow the other teachers to be inspired by them to influence their own professionalism. In fact, it means that if the TRG heads have a good understanding of the professionalism of

their subject, they can also motivate other teachers in their subject to study more profound theories, which will have a guiding effect in terms of writing papers (C1).

6.4.4 The TRG Heads as *liantiao* (chains) of External Activities and as *chuanyin zhe* (messengers) for Teacher Learning

A fourth pattern concerns the brokering role the TRG heads play in advancing teacher learning. They mobilise knowledge and practical examples from other school settings and bring the relevant expertise to life for the teachers, as noted by a TRG head:

> We have a range of external learning opportunities. I bring what I've learnt to the teachers, such as how to write research projects. I take photos when I learn and share them in the WeChat group so that the teachers can learn as well (C3).

The TRG heads brought external resources to TRGs. They acted as *chuanyinzhe* (messengers) to share their theoretical knowledge and teaching experience they have learnt from outside with to our teachers. The TRG heads provided a chain of external workshops or sessions in which teachers were mandated to participate. One TRG head shared her experience:

> There are weekly notices from the district. We need to send relevant teachers to attend district activities to drive teacher learning. I coordinate and select suitable teachers to participate in the activities. It's all about

coordination. If there are some competitions that are sent down from above,

I also coordinate the teachers' attendance (D3).

The TRG heads' coordination helped turn external expertise into the teachers' decision capital. The TRG heads advised external experts to conduct collective lesson preparation and lesson observations with teachers and to conduct seminars at the schools. A principal commented:

> If our TRG heads want to invite experts to conduct workshops at the school, the school fully supports them. The TRG heads observe the teachers' teaching and discuss their teaching issues and confusion with them. The TRG heads suggest the names of relevant experts. The school will, accordingly, invite these experts to address the teachers' concerns and confusions through workshops (D1).

The TRG heads collaborated with the teaching-research officer and principal to promote cross-school professional learning. A teacher commented:

> The teachers participate in external activities to advance their learning. During this process, our TRG head communicates with the teaching-research officer in the district to get information about cross-school activities, discusses these with principal, and organises teachers to participate in these activities (C5).

A TRG head (D3) said, "As a TRG head, I need to enhance my capacity and, secondly, I

communicate with the senior leadership team to seek more external opportunities for teacher learning." The TRG heads contributed to teacher learning across institutions. A TRG head (C2) said, "There is also the uploading and distribution of activities within and outside the school, which we have to refine the programme." The activity log written by a TRG head (D4) mentioned that the TRG heads tasks regarding managing externalities include: providing suggestions for connecting internal and external teacher development in the school leadership team meetings; bringing external resources back to the teachers; maintaining good relationships with the external experts; coordinating task activities with the external experts and school leaders to curate the interactions among the teaching-research officers, school leaders and teachers; and facilitating ongoing professional dialogue.

6.5 Role Enactment of TRG Heads in Leading Teacher Learning

6.5.1 Offering Job-embedded Structure for Teacher Learning: "There Needs to be Sufficient Infrastructure in Place to Support Teacher Learning"

The TRG heads offered job-embedded time for teachers to plan and work collaboratively. TRG head (D4) said, "The principals delegate instructional power to us to reinforce our leading role and to enable us to organise teacher development activities, most of which are teaching-research activities in the TRGs." In addition, the principals and directors of the office for teaching affairs participated in and co-organised the teaching-research activities systematically and co-developed theme-based teaching-research. A principal (D1) mentioned their participation in the teaching-research activities to provide support:

The teaching-research activities continue all the time. Our school is arranged in this way: The principal attends and helps to organise teaching-research activities related to Chinese as a subject, the director of the office for teaching-affairs attends those related to Maths, and the vice-principal participates in and coordinates those related to English. The teaching-research activities of each subject are supported by not only TRG heads, but also by other school leaders. As a vice-principal, I always participate in the teaching-research activities and express my ideas during the activities, unless I am away taking care of external professional activities and am not at the school. Then I miss out (D1).

The TRG heads provided opportunities for and enhanced the process of job-embedded learning to improve the teachers' practice. A principal commented:

The TRG heads take the initiative by giving demonstration lessons and inviting certain teachers to come and observe their lessons on a small scale, especially a new teacher or a teacher with poor teaching skills. After they have observed the lessons conducted by the TRG heads, the TRG heads, in turn, observe the weak teachers' lessons. Observing and being observed is an effective way to improve each other (D1).

Another principal added:

Increased teacher capacity is reflected in the teachers' teaching ability. Some teachers have knowledge but lack experience of classroom

management, so we will ask them to observe the lessons of teachers with good classroom management, listen to how others manage students' emergencies in the classroom, or how to ask questions of latecomers, or how to manage some of the weaker classes. The teacher will also listen to the details of how to motivate the less disciplined students to learn. The TRG heads routinise communicative space for the teachers to examine their practice and utilise students' learning as an impetus for determining professional learning needs. I think the TRG heads can lead teachers in this process (C1).

A TRG head (D2) said, "There needs to be sufficient infrastructure in place to support teacher learning." The TRG heads organise the teachers to work collectively to help the new teachers get off to a good start and integrate it into a routine structure. A TRG head commented:

> New teachers come every semester, so we have a regular meeting organised by the TRG heads about lesson preparation, which is to teach them how to prepare lessons, and how to grade the students' work and give them feedback (C3).

Additionally, the TRG heads promoted the apprenticeship model by considering the match between experienced teachers (mentors) and new teachers (mentees). The TRG heads coordinated the open lessons to refine the teachers' teaching skills. The teachers shared their experience of the process of conducting open lessons:

We have open lessons. The TRG heads organise joint lesson preparation with the teachers who conduct the open lessons. The teachers who conduct the open lessons demonstrate the lessons within the TRG. We comment on the lessons and provide suggestions about how to refine them. Then the teachers find that their lessons become better than previously. After the open lessons, we provide feedback to the teachers again. The TRG heads ensure that every teacher has the opportunity to conduct an open lesson. The teachers gain direct benefits from the open lessons, regardless of whether they conduct the open lessons or the other teachers in the TRG do so (C6, C8).

The TRG heads worked to put a structure in place that routinely enabled teachers to learn with and from one another. "At the beginning of the semester, I and the teachers in the group set the teaching-research themes and we carry out the teaching-research activities according to these themes," said a TRG head (D4). The TRG heads supported thoughtful visions to provide systematic professional learning.

6.5.2 Cultivating a Culture of Effort and Joy for Teachers: "Work Hard and Be Happy at Work"

The TRG heads stated that they did not supervise the teachers or regard themselves as supervisors. A TRG head (D3) stated, "I do not supervise or evaluate. I've built trust and friendship with my peers." The majority of the TRG heads regarded themselves as partners or friends who provided suggestions and feedback whenever they needed to support the teacher learning. A TRG head explains:

The main thing between us is about unity and cooperation. It doesn't say who is in charge of whom and I don't want the teachers to call me "head." They can call me by my nickname. I think it is more harmonious and comfortable to get along in this way. I hope that my team can work hard and be happy at work. When teachers need help, I am willing to help them. I am always involved in the preparation of lessons, and observing the lessons and trial lessons of anyone who has a lesson or needs to prepare for a seminar. I help him to polish the trial lessons, word by word. The teachers will see from the actual practice, when you do things. You do not need to say a lot of things (D2).

A principal further added:

The TRG heads intentionally sit with the teachers to eat together and use the mealtime to communicate with them. We hope to unite the teachers through the TRG heads. We believe that a motivated and united environment exerts a positive influence on teacher learning (C1).

Despite holding leadership positions, the TRG heads did not adopt an authoritarian approach. They instead led by example, demonstrating selflessness and taking on challenging tasks themselves. They understood the teachers' differing career stages and provided support to those who found certain tasks difficult. Their support helped the teachers become more reflective and intentional about their teaching, which in turn led them to want to help each other. A teacher mentioned the positive learning culture in their subject group:

> We plan lessons, gather materials and model instruction for one another. If
> a teacher has a lesson demonstration or a teaching competition, we help him
> or her to prepare and hone the lesson, and provide our suggestions (D8).

My analysis of the data indicated that the TRG heads organised seminars and workshops, and encouraged knowledge sharing among the teachers. They urged the teachers to read and highlighted the importance of reading for professional learning. Additionally, the TRG heads promoted the sharing of good practices among peers. The TRG heads fostered cross-subject collaboration to create more collaborative opportunities for the teachers. A TRG head commented:

> We conduct initial cross-subject collaboration. We focus on cross-subject
> lesson observation and post-lesson discussion. I organise our teachers to
> observe teachers of other subjects. We've observed music classes, IT classes,
> and arts classes. Because, after all, we are not professional in other subjects,
> we just talk about how we feel about the lessons (C3).

The TRG heads encouraged collective participation embedded within the context of practice through team lesson refinement, mentoring conversations, collaborative analytic dialogues, and formal staff meetings.

6.5.3 Engaging Teachers in Action Research: "Learn from Going through the Process"

My analysis of the data suggested that the TRG heads facilitated action research by collaborating with the teachers as a team, helping them identify teaching challenges and

transform them into research topics and projects. This approach aimed to enhance instructional effectiveness. They strengthened the teachers' roles as learners and researchers, and encouraged their participation in research initiatives. The TRG heads also facilitated the formation of research teams to jointly apply for research projects. They remained attentive to the research development needs of the teachers and provided support in addressing any difficulties they encountered during the research process. A principal commented:

> Our research topics emerged from the issues discussed in the teaching-
> research activities. The TRG heads lead teachers to discuss major issues of
> their teaching and deepen the discussion and develop related research topics
> for the research projects (C1).

The TRG heads delivered personalised research support and offered guidance for teachers on research projects. One TRG head shared her ideas about encouraging the old teachers to conduct action research:

> Providing adequate research support to teachers, particularly older teachers,
> is crucial. They grew up in traditional education, receiving spoon-fed
> education as students and afterward working under a traditional teaching
> system. As a result, their teaching practices are predominantly based on
> experience, and they may have limited internal motivation to engage in
> research-led activities and may lack creative abilities (D4).

The TRG heads emphasized that it is a gradual process for teachers to recognize the significance of research and develop research skills. In order to facilitate this, the TRG heads engaged in collaborative efforts with the teachers to design and manage research projects. Additionally, they worked closely with principals to invite university experts to schools, organizing seminars and workshops to enhance teachers' understanding of academic and research skills. They provided recommendations for relevant journals and books, and guided teachers in reflecting on any teaching challenges they encountered, as described by a teacher:

> In addition to seminars and workshops, our TRG head encourages us to read and share. They always recommended quality journals and books to us to read and help us reflect on our teaching problems. Moreover, they collect some relevant literature to help with the research projects we are working on. We learn from going through the process (C8).

Apart from coaching led by experts, the TRG heads emphasised reciprocal coaching. They encouraged the teachers to share their experiences of conducting research and to collaborate, help, and learn from each other while conducting the research projects.

The TRG heads emphasised the need to adopt more evidence-based instructional improvement strategies. They encouraged the teachers to use research to improve their teaching and learning. They promoted implementing their research findings in their teaching practice, as described by a TRG head:

I encourage teachers to put theories into practice, particularly after completing a research project. The teaching model that is developed through research is then implemented in our regular teaching, making it feel more practical and applicable (C3).

The TRG heads expected the teachers to innovate their teaching practices based on research evidence and encouraged them to formulate research topics from their daily experiences in the classroom. To make the teachers feel more confident and supported, they worked with the principals to create sufficient internal and external training opportunities for them. They also employed various strategies such as modelling, monitoring, mentoring, and coaching to demonstrate how evidence could be applied to enhance learning and teaching practices.

6.5.4 Connecting Teachers to External Expertise: "Have a 'helicopter' view"

The TRG heads engaged and supported teachers in professional networks outside their schools to strengthen the teachers' content and pedagogical knowledge. Then, the TRG heads encouraged teachers to share that knowledge in the teaching-research activities within their schools. A teacher noted:

We assign different teachers to go out and study each time, and when we come back we can exchange and learn from each other. The support of the TRG heads is crucial (C7).

One TRG head further explained:

I encourage the teachers to participate in external competitions and

activities. I lead them to participate, stay with them, support them, and take time to help them (D2).

The TRG heads helped establish connections between school-based teacher learning and external professional networks. "We need to have a 'helicopter' view and use external enablers to improve internal ones. This emphasises the power of two [internal and external learning]," stated a TRG head (C3).

The TRG heads sought external professional learning opportunities for the teachers. A TRG head commented:

> There are seven teachers in our TRG, three of whom have been sent to study in the district. The cross-school study is held every Thursday. A number of outstanding teachers join in the study. The three teachers in our TRG who attend the study share what they've learnt with our teachers when they come back. We've applied for these three teachers to attend the study but the government didn't approve at the beginning, so we just applied to sit in and listen to how the teachers prepared lessons and conducted post-lesson discussions (D3).

In addition to collaborating with school leaders, the TRG heads also received guidance from the district-level teaching-research office. This office provided district-level teaching-research plans to schools on a semester basis. The TRG heads then used these plans, along with the plans from their own schools, to formulate the work plan for their TRGs.

The teaching-research officers strengthened the instructional leadership of TRG heads and made specific suggestions for the schools. The TRG heads fostered strong working relationships with the teaching-research officers, ensuring regular communication to support teaching improvement and teacher development. One TRG head shared her working experience with a teaching-research officer, highlighting the support received. She commented that

> I have the convenience of reaching out to the teaching-research officer at any time since we are part of the same WeChat group. This allows us to have online discussions if we are unable to meet in person. I greatly appreciate that whenever I have questions or need assistance, the teaching-research officer promptly responds to my queries (D2).

The TRG heads kept the teachers posted on the latest education reform trends. A TRG head responded:

> Every semester, the district issues new visions regarding teaching and learning. We have to communicate them to our teachers. We have to keep up with the times, to know the whole direction of the outside, a direction and mode of teaching and learning (D4).

The TRG heads and teachers worked together via continual communication about priorities of the educational plans devised by the district, teacher implementation challenges, and problems and possible solutions to align teacher practice with external demands and facilitate teachers' positive change.

6.6 Summary of the Role Construction and Enactment of the TRG heads

There were four main ways in which the TRG heads in the average schools enacted their roles as *zhongjian ren* (mediator) and *hezuo zhe* (co-leader), *daoshi* (mentor) and *bangyang* (role model), *xianfeng* (precursor) *and 'liantiao'* (chain) of external activities and *chuanyin zhe* (messenger) for teacher learning. The four core practices included offering job-embedded structure for teacher learning, cultivating a culture of effort and joy for the teachers, engaging the teachers in action research, and connecting them to external expertise. In the following sections, the findings regarding the influencing factors of their leadership and how these major factors shaped their leadership for teacher learning are presented.

6.7 Influential Factors and Their impacts on TRG Heads' Leadership for Teacher Learning

The literature suggests that school middle leadership is shaped by professional, relational, organisational, and external conditions (e.g., Bryant & Walker, 2022; Dinham, 2007; Ho, Bryant, & Walker, 2022). This section explores how various professional, relational, organisational, and external contexts influence the nature and enactment of the TRG heads leadership for teacher learning while shaping their leadership in average Chinese schools.

6.7.1 Professional Context

6.7.1.1 Subject Matter Expertise and Teaching Experience

The participants claimed that the TRG heads' subject matter expertise and teaching experience was crucial for their role as potential driver of teacher learning. A TRG head (D3) said, "As a TRG head, I can only say that the first thing I can do is improve myself

first.

A principal further explained:

> The TRG heads are expected to enact professional leadership. Generally speaking, the TRG heads normally have a high level of teaching and research skills. Their professional skills need to be a little better than those of the other teachers; otherwise, the TRG heads can't play the role of guiding others when teachers ask for advice (D1).

A principal explained, "If the TRG heads have a good understanding of the professionalism of their own subjects, they can also lead the other teachers in the subject to study more profound theories, which will have a guiding effect in writing papers." This illustrates the importance of the subject matter expertise of the TRG heads when they provided guidance and support for professional learning and shaped professional learning outcomes. A TRG head explained the reasons for which she could be positioned as the TRG head:

> The first is that the school feels that I work more solidly and I've won a number of teaching awards. Plus, my students' academic outcomes are relatively good. Additionally, I also conduct research projects with external experts. For the reasons mentioned above, the principal thought that I could lead teachers to grow their expertise more effectively compared to other teachers. I also find that I feel more confident to lead teachers with increasing expertise and teaching experience. Considering the external demands, you learn what you have to convey to teachers and what you don't

to promote teachers' positive change and avoid teachers' overburden simultaneously based on your professional knowledge (D3).

The TRG heads with rich teaching experience and expertise were able to diagnose their teachers' needs and expectations and to motivate them to act accordingly. Expertise and experiences could be used for mentoring, facilitating the creation of professional knowledge of the TRG heads and thus shaping their leadership outcome. The evidence collected in the average schools indicated that the TRG heads with more years of teaching experience and increasing expertise tended to achieve higher leadership performance to drive teacher learning.

6.7.1.2 S Leadership Experience and Interpersonal Skills

The strong leadership experience and interpersonal skills of the TRG heads were consistently observed. Past leadership experiences influenced the TRG heads' leadership approaches. An experienced TRG head commented:

> I have been a TRG head for almost 20 years. Teachers see me as a responsible person able to influence them. Leadership experience is an important factor in selection and promotion decisions. These experiences facilitate me from solely focusing on my own tasks to promoting collective responsibilities. I try to build teachers' leadership capacity with my accumulated leadership experiences (D3).

Leadership experience facilitated the TRG heads' internalization of having a leadership image and role. Compared to the experienced TRG head noted above, a newly-appointed

TRG head explained:

> Because of a lack of leadership experience, I feel unconfident in my ability to lead a teacher team. I normally ask for experienced middle leaders' advice to learn from their experience. This form of experience, acquired by approaching other middle leaders to tap into their experience, is common among those in the early stages of their middle leadership roles in our school (C2).

The TRG heads' attitudes regarding leadership may change as they gain more leadership experience. Leadership experience is an important component in the process of influencing teachers. "My leadership experience facilitates reading teachers and their feelings," stated one TRG head. The accumulated leadership experiences positively shaped leadership performance in leading teachers. Being situated in mid-level leadership positions, the TRG heads worked with several staff groupings, taking on the important role of mediators. They strove to maintain a balance between direction and collaboration when supporting the teachers.

As such, a principal (D1) stated, "the TRG heads' interpersonal skills are significant." A TRG head commented:

> We collaborate with the principals and the directors of the office for teaching affairs to develop teaching-research plans and routinize teacher development activities, and explain the plans to the teachers. On the other hand, the teachers and I implement the plans together. I forward the teachers'

views to the senior leadership teams and resolve problems that hinder the achievement of goals. Therefore, I inevitably need to possess strong communication skills.

Interpersonal skills were seen as integral parts of the leadership of the TRG heads. As a teacher acknowledged:

The TRG heads need to be good communicators so that they can share good ideas and teaching practices with the teachers, and provide feedback to them in the subject groups. In addition, the communication is two-sided. They also need to communicate with teachers about their feelings and listen to teachers' voices so that they can understand the teachers' difficulties, challenges, and developmental needs. If they demonstrate trustworthiness, we are willing to share more (C6).

In sum, effective interpersonal skills of the TRG heads promoted close affective ties between the TRG heads and teachers.

6.7.2 Relational and Organisational Conditions

6.7.2.1 School Conditions

School conditions shaped the TRG heads' practices of leading teaching and research. The TRG heads felt a little overwhelmed when leading teaching and research in average schools. A TRG head shared her experience:

There are many reasons for which parents and the students themselves do not get the grades they need, and this is also very demoralising for our teachers because we try very hard to teach, but it never shows. The student population is different from that of prestigious and large schools, which means that the efficiency is not the same, so it is a bit discouraging. So when you are discouraged in teaching, then you have even less motivation to make an attempt to teach and research, so I feel a little tired of trying to enhance teaching and research. I try to mobilise our teachers and enhance their capacity. I get a bit tired and a bit overwhelmed (D3).

The school conditions motivated the TRG heads to enhance teacher learning. The TRG heads did not set very high expectations for the teachers due to the students' performance and their backgrounds which are lower than high-performing schools. The TRG heads adapted their practices to the school context and tended to use directive leadership to advance teacher learning. A TRG head commented:

Our school is an average school. I need to play a traditional TRG head's role and establish clear rules to induce teachers to devise effective work processes (D2).

In this way, the school conditions mediated leadership roles and practices of the TRG heads.

6.7.2.2 Various Staff Groupings

The TRG heads shaped teacher learning outcomes and were shaped by the teachers as well.

A TRG head explained the teacher factor:

> In terms of the influencing factors, the influence of teachers comes to mind.
> Sometimes, when I encounter problems, I might not know where to start
> and how to resolve problems. I always communicate with other colleagues.
> Then I'll open up a little (C2).

One TRG head said, "Each professional colleague may become a resource for the TRG heads' learning." Experienced teachers in the group helped the TRG heads to work effectively. A TRG head commented:

> A certain teacher has had a big influence on me. She is one of the people I
> use to bounce things off before I go to the other teachers. She might tell me
> how to better approach the instructional improvement of the teachers (C4).

There was close collaboration between the TRG heads and the heads of the lesson preparation groups. They co-enacted the instructional leadership to create meaningful collaborative experiences to make sense of the complexity. They also organised the teaching-research activities at schools. The TRG heads saw collaboration with the heads of lesson preparation groups as an integral feature of their work foster teacher learning. A TRG head stated:

> Obviously, it makes it a bit easier for me personally. Anybody who would
> be in that position would have an immense influence on me. The heads of
> lesson preparation groups improve the performances of the teachers in their

grades and I can learn about teachers' confusion and the development needs of teachers in different grades from them. Moreover, when I want something done in different grades, I can go to them. I know it'll be done (C3).

The responses from the TRG heads on the question of what they felt enhanced their instructional leadership activities were similar. The principals showed respect for the professionalism of the TRG heads. The principals trusted and delegated leadership to the TRG heads to reinforce their leading role. The TRG heads noted that the principals' emphasis on their leading role shaped the way in which they worked with school leaders and teachers. The principals established high expectations of the TRG heads to positively promote teacher change and expected the teachers to turn to the TRG heads for support, as stated by a principal:

I trust them and help them to build prestige in the TRGs. I empower them and facilitate their work with the help of the senior leadership teams. There are formal and informal opportunities for teachers to put forth ideas for consideration. Moreover, I always emphasise in the teacher meetings that the TRG heads are flags and mirrors, what good TRG heads mean to how good the schools is, and so we need to listen to and cooperate with them (C1).

These strategies strengthened the extent to which the TRG heads internalise school goals as their personal goals. The TRG heads felt well-supported and had a sense of safety. The need for trusting relationships emerged as an important theme, showing that the TRG heads could not reach their full potential if it was not safe to take risks and learn from any

mistakes. They thought if they encountered any difficulties that could not be addressed, they could turn to the principals for help, as stated by a TRG head:

> I was appointed as the head of a TRG when I was younger. I was nervous at that time. I thought I did not stand out enough to take on such an important position. However, the principal encouraged me and believed in me. She said that if I needed any material or support, she would do her best to provide it for me (C2).

The importance of support from the principal for effective teacher leadership has been noted. The principal can have a direct effect on the TRG heads' level of involvement and commitment for school-based teacher learning.

6.7.3 External Forces

The following sections are dedicated to the external forces, including the districts in which the schools operate and the external experts who impacted the leadership journey of the TRG heads. The latter were frequently involved in out-of-school teaching-research activities organised by the district-level education bureaus and the teaching-research offices.

6.7.3.1 The District

The district's aims, structures, and initiatives cohered to create a work context for the TRG heads to lead teachers. The external developmental activities organised by the district influenced the TRG heads' priorities in developing teachers. A TRG head commented:

We have "*Mingzhubei* (Pearl Cup)" this semester. The Pearl Cup is a teaching competition for young teachers that takes place every two years in Haizhu District. It is one of the most extensive, high-profile, and influential teaching competitions in Haizhu District. Thus, this semester, I am paying particular attention and allocate more time to conducting the collective lesson preparation with the young teachers, observe their lessons, provide feedback, and support them to participate in the competition (D2).

The district's influence trickled down to the leadership practice of the TRG heads through district-sponsored professional activities. "We devise school-based teacher development planning based on the teacher development planning of the district," a TRG head stated. The priorities of the TRG heads regarding teacher development were thus led by the planning and priorities of the district.

6.7.3.2 External Experts

External expertise supported the work of the TRG heads in developing professional practice. "External experts, such as the teaching-research officers, acting as middle-level instructional leaders of the education system, helped us generate reforms internally. We promote teachers' change accordingly," stated a TRG head. Another TRG head (D3) described her experience of working with the teaching-research officer:

I engage in a professional relationship with the teaching-research officer. Although we cannot communicate face to face on a daily basis, we have adopted WeChat communication. If the teaching-research officer sees my needs and questions, she responds to them immediately (D3).

The teaching-research officers expanded the leadership of the TRG heads by collaborating, leading by example, passing on subject knowledge and teaching-research skills, and providing teaching resources, as stated by a TRG head:

> Collaboration with the teaching-research officer influences my ideas regarding the teaching profession and leadership, and enhances my teaching and research capacity. I identify her as modelling leadership and serving as a mentor to me. I hope I can one day become an influential person in the district, just like the teaching-research officer (C3).

The teaching-research officers contributed to the TRG heads positive attitudes towards work. The TRG heads drove teacher learning while closely collaborating with these external stakeholders who shaped the TRG heads' leadership outcomes.

6.8 Responses to Research Questions and Summary of the Chapter

The TRG heads in low-performing schools enacted the role as *zhongjian ren* (mediator), *hezuo zhe* (co-leader), *xianfeng* (precursor), *bangyang* (role model), *daoshi* (mentor), *liantiao* (chain) and *chuanyin zhe* (messenger). Four main strategies adopted by the TRG heads boosted professional learning, namely, offering a job-embedded structure for teacher learning, cultivating a culture of effort and joy for teachers, engaging teachers in action research, and connecting teachers to external expertise. In this chapter, I identify the major factors shaping instructional leadership from the middle. Professional context, relational and organizational conditions, and external forces were frequently mentioned by the participants. I will explain the interaction of these factors that account for middle leaders'

behaviour which may positively impact upon teachers' practice in the discussion. The next

chapter will present the findings of high-performing schools.

CHAPTER 7 THE GROUPS OF TRG HEADS IN HIGH-PERFORMING SCHOOLS

7.1 Scope of Chapter

In this chapter, I explore the leadership of TRG heads in high-performing schools; specifically, I evaluate their role in leading teacher learning and the factors that influence their leadership. In the first section, I explain the TRG heads' context, and in the subsequent sections, I give an in-depth description of the TRG heads in leading professional practice in high-performing schools.

7.2 The TRG Heads context

I sampled two high-performing schools (school E and school F). Six TRG heads in the two schools participated in the study. Huang, Zeng, and Zou work at school E, and Chen, Wu, and Zhang are employed at school F.

Both schools are located in the Yuexiu District. Yuexiu District is the commercial, political, and cultural centre of Guangdong and is renowned for its high-quality education. School E is a public school with over a hundred-year history. The school was established in 1864 and was recognised as an exemplary provincial school in 1994. School E is also a medium-sized school with 77 teachers, 35 teaching classes, and 1400 students.

School E serves as a role model for teaching and research in Guangdong province. A banyan tree on campus, nearly 300 years old, has witnessed the school's rich history of pioneering and innovative teaching reforms.

In 1990, school E was listed in the Dictionary of Chinese Education. In 1991, it was selected by the Provincial Department of Education as one of the 'famous schools of China' (elementary school volume). Since 1996, school E has undertaken and completed many national experimental projects, such as the Quality Personalisation education experiment, and in 2003, it was approved as a Model School of Scientific Research for Education. The school is well-known in China and has established exchange relations with schools in several countries and regions. School E aims to build a modern education model and achieve innovation in high quality personalised education to create expert principals, scholarly teachers, and high-quality students with an international perspective.

Huang, Zeng, and Zou are employed as the TRG heads in school E. Huang, the TRG head of Chinese subjects, had 29 years of teaching experience and was appointed a TRG head in 2010. She is a city-level backbone teacher. Zeng, the TRG head of mathematics, had 27 years of teaching experience and was appointed TRG head in 2016. She is a city-level backbone teacher. Zou, the TRG head of English subjects with 22 years of teaching experience, was appointed to the position in 2007.

School F is a public school established in 1921 and was recognised as an exemplary provincial school in 1994. Presently, school F is a medium-sized school with 63 teachers, 30 teaching classes, and 1100 students. The school has special class teachers (*teji jiaoshi*), national education system model workers, and teachers with diverse professional titles. The school is at the focal point of educational reform; it is also the pilot site of the moral education system project and the pilot of quality education in Guangzhou.

Chen, Wu, and Zhang work as TRG heads in school F. Chen, the TRG head of Chinese

subject, had 25 years of teaching experience and was appointed to the position of TRG head in 2006. Chen is a district-level backbone teacher. Wu, the TRG head of mathematics, had 25 years of teaching experience and was appointed as a TRG head in 2020 when the previous TRG head retired. Wu is also a district-level backbone teacher. Zhang, the TRG head of English subject with 30 years of teaching experience, was appointed TRG head in 2007.

7.3 Categories and Emergent Themes

I conducted interviews (5.5-hour-long in total) with a sample of principals, TRG heads, and teachers, six hours of observer-as-participant observations of teaching-research activities, and I collected 15 documents from the two schools. Using the NVivo 12 software, I descriptively coded the data relevant to the research questions and calculated how frequently different codes occurred to identify patterns and themes (Miles, Huberman, & Saldaña, 2020). Analysing code co-occurrences between structural codes and content codes provided a multifaceted understanding of how the role of the TRG heads is understood, enacted, and shaped. The multiple roles and practices of the TRG heads were frequently discussed by the participants, such as (a) TRG heads as *qiaoliang* (bridge); (b) TRG heads as *shifu* (peer mentors); (c) forging closeness and empowering teachers to underpin mutual learning; and (d) the influence of teachers and teacher leaders. I examined the convergence and divergence of conceptually similar codes and conflated multiple codes into one or split one code into multiple ones. The subsequent sections present the emergent themes I identified through the coding process. The summary section provides a naturalistic generalisation of what was discovered.

7.4 Role Construction of TRG Heads in Leading Teacher Learning

7.4.1 The TRG Heads as *qiaoliang* (bridges) and *shangchuan xiada* (reporting upward and transmitting downward)

The participants indicated that the TRG heads were the *qiaoliang* (bridge) between school leaders and teachers. In other words, they acted as channels of communication by forwarding information from school leaders to teachers. The TRG heads communicated the school leaders' decisions about instruction to teachers, explaining why certain choices had been made and motivating the teachers to implement the instructional changes in the classroom. A teacher described the role of the TRGs:

> The TRG heads are like the *nianheji* (glue). They pass on the school's ideas.
> They must understand them first and then pass them on to us, and we
> collectively apply the ideas and beliefs in our classroom teaching practices.
> At the same time, they explain the school's instructional plan to us and
> mentor us on how to implement it (E6).

In addition to translating institutional policies into teaching practice, the TRG heads gathered feedback from teachers and reported it to the school and peer leaders, both formally and informally. Feedback collection was done through teaching-research activities and informal dialogue with other teachers. A principal stated that the TRG heads functioned as an intermediary supporting teacher development in the top-down school leadership structure:

The TRG heads can help teachers see the direction that we are taking. They are in a better position than us principals to closely mentor teachers daily. Because of the multiple tasks we need to cope with, we may not have the opportunity to interact with teachers frequently. However, TRG heads have regular contact with teachers and can keep us informed about the development needs of the teachers (F1).

As part of their linkage roles, the TRG heads established connections between and across different tiers of the TRG – such as the district teaching-research office, senior leadership team, and lesson preparation groups– to support teacher learning. The TRG heads created developmental plans for their teaching team and aligned them to those of the district TRGs and schools. A TRG head commented:

I see my role as being able to show teachers the gap between the requirements of the school and our teachers' actual practice, helping teachers find ways to close the gap, and celebrating what we are doing well but also finding the one or two priority areas we need to work on further (E3).

The bridging role of the TRG heads promoted their role as *shangchuan xiada* (reporting upward and transmitting downward). The TRG heads encouraged a positive change in the teachers' instructional effectiveness through this two-way interaction. The TRG heads proactively understood the district teaching-research and school-wide expectations and then clarified and adjusted the information for the teachers based on the TRG heads' professional expertise. The needs and goals of teacher development and school-wide

demands was a central concern for the TRG heads. The TRG heads coordinated various professional activities to support teachers in translating the school-wide and team goals into their professional practice. A TRG head commented:

> I communicate the requirements of the teaching-research office and school to teachers and, crucially, rally the subject teachers. At the beginning of the school year, the district teaching-research office issues the teaching-research plan; I talk to teachers and develop a school-based teaching-research plan based on this proposal, the work of the school, and teachers' developmental needs. The teaching-research plan serves the teachers. I guide the teachers on how to conduct teaching and research because there are a lot of requirements for that. In addition, I try to make connections across different levels of teacher learning. I organise our teachers to participate in internal and external teaching-research activities and, thus, develop new skills and strategies in response to the education reform (E2).

A principal commented:

> The TRG heads are the right hand of our administration. We have many decisions to make, which are implemented through the TRG heads in a refined manner (E1).

A principal added:

The school outlines the overall teaching-research plan and holds working meetings with the TRG heads so as to obtain a clear understanding of the school-wide vision for learning. Then, they refine the school plan down to the teachers, divide the work, and maintain it. The TRG heads consult the director of teaching affairs, who also gives the TRG heads some advice on what activities to carry out. Additionally, the TRG heads create and align group-level teaching-research plans from prior knowledge, experiences, values, and beliefs. At the end of the school year, the TRG heads and the teachers take stock of their work and provide feedback and suggestions to us, which become the reference for our next round of school-wide planning. The TRG heads need to be emotionally intelligent, motivate teachers, and coordinate together (F1).

While the senior leadership team shaped the school policy and established guidelines, the TRG heads, who act as *zhongjianren* (intermediate layers), understood, and clarified the decisions to teachers. The TRG heads not only acted as *xiada* (transmitting downward) but also broke the planning into several pieces, generated new practices for the development of their teachers, distributed the responsibilities to teachers, and maintained normal operations. The TRG heads had regular formal or informal meetings with the director of the office for teaching affairs and the principal to ensure that communication was timely and relevant. The TRG heads provided feedback to leaders during the implementation process and offered suggestions during the next round of school-wide teaching-research planning and design. The TRG heads communicated the school goals, executed team planning, and shaped their coherence. This two-way interaction, in which the TRG heads'

interpretations shaped and were shaped by school-wide planning and teacher contexts, both reinforced existing sound practices and promoted teachers' positive change in instruction.

7.4.2 The TRG Heads as *gaige yinlingzhe* (lead innovators) and *xianxingzhe* (early adopters)

The TRG heads engaged teachers in school-based action research, which provided insights into effective instructional strategies. As lead innovators and early adopters, they translated new teaching philosophy into core action points for teachers and ensured that the material was accessible to them. They supervised teachers as the teachers transferred group-based inquiry outcomes into their classrooms. TRG heads also participated in multiple district- and provincial-level developmental activities. They collected the latest information on education reform to support teacher development at their schools. They were expected to act as *huochetou* (leaders) for trialling innovative instructional strategies and shared what worked. A TRG head commented:

> I feel that I play a role as *xianxingzhe* (early adopter). I try to do everything in advance. For example, in terms of the micro-lecture and the recording of TV class, I am the first to try to do it, and then I share my experience with the teachers after I have done it so that the teachers adopt it in a more effective way. There are some elderly teachers in our group; if you don't mentor them on how to do it, they will be afraid to do it, but after you help them, they will feel that they can do it and will be willing to apply these new teaching technologies (E3).

The TRG heads pursued new teaching and learning practices to improve the quality of instruction and conducted demonstrations to illustrate innovative teaching methods. One teacher reported that TRG heads "lit their fire" and fostered a love for learning and innovation via their leadership and support. The research-informed practice was also prioritised by the TRG heads. A TRG head commented:

> I favoured project-based learning and collaboration. I have two research projects at this stage. I work with teachers to complete the projects, including the literature review, data collection, and analysis. In addition, I encourage teachers to read and share. I always share my good resources and practices when conducting research projects with teachers. In the meantime, I collect high-quality research reports written by other experienced teachers for the teachers to learn from and to motivate them to build research projects collaboratively. Moreover, I encourage teachers to innovate teaching practices by applying the research outcomes (F2).

TRG heads led enquiry, disseminated knowledge, and created positive connections between teacher practices and student learning. They encouraged teachers to apply new teaching methods based on action research. Although teachers and TRG heads co-designed the curriculum and assessment at schools, the teachers and principals expected the TRG heads to provide leadership. For example, the teachers occasionally did not feel confident about their responses regarding reform, which created uncertainty. The interventions and directions provided by the TRG heads were therefore welcomed.

7.4.3 The TRG Heads as *daoshi* (peer mentors)

Most of the participants highlighted the TRG heads' role in coaching experienced teachers and mentoring new and young teachers. The TRG heads mentored new teachers and helped them learn and acclimatize, guiding them by setting expectations, demonstrating instructional strategies, and providing resources. A TRG head commented:

> I'm concerned with how new teachers are getting on; for example, the two teachers who came down to primary school from the secondary school this year, how are they settling in? I will sometimes go through the classrooms to observe how they are adapting, then also give some advice to them such as presenting some classroom videos to make it easier to get started or suggesting which teachers to listen to. I also send links of good examples of classroom teaching to them so that they can carry out a practice and hope to integrate quickly. These two teachers have just come down from high school to teach primary school, and there are many different teaching methods, some classroom management, and so on, that they need to adjust to (E4).

Another TRG head described her role as *daoshi* by explaining that one of her primary responsibilities was to "make sure new teachers are aware of what is expected, and I act as a resource for them." The TRG heads provided teachers with a package of support. A teacher described a typical example of the mentoring and demonstrating that the TRG heads conduct:

As a first-year teacher, I receive extra release time so that I can plan with our TRG head and engage in different seminars and teaching competitions. Our TRG head shares her experiences, instructional ideas, and resources with us. We normally prepare and refine lessons under her guidance and suggestions. She conducts formal lesson observations and informal walkthrough observations, provides feedback, and involves us as observers in her classroom. Additionally, she shares her experience in writing research proposals and conducting research and publishing. Our TRG head invites us together to apply and conduct the research projects. I'm very thankful for her mentoring. I found it very helpful (F7).

Teachers enjoyed learning experiences led by the TRG heads. A TRG head added the following:

One way to mentor teachers is in the classroom, which is our main forum. Classroom teaching is a very important task. We often conduct formal and informal lesson observations. We first open our classroom teaching for teachers to observe and then observe teachers on how they teach. Then, we provide feedback to help them manage and grasp the classroom and refine their teaching skills. Another [way to mentor teachers] is on how to manage the children. One of the teachers was a former teacher who worked in an adult school. Then, you know that teaching adults is different from teaching children. She observed my lessons. She was dumbfounded. She said that the method is completely different. The teaching method, every aspect of it, she

had to start all over again. So, it's hard for me to take this apprentice. Everything is taught from the beginning, hand in hand. Everything from the beginning to how to talk to the students and engage students in learning in the classroom. These are required teaching skills that you need to teach her because she doesn't have much experience with children (E6).

Mentoring and demonstrating were common practices of the TRG heads. Teachers expressed the importance of guiding the TRG heads in teacher learning at the beginning of their careers and in their later stages.

7.4.4 The TRG Heads as *zhishi luyouqi* (knowledge brokers) and *shoumenyuan* (gatekeepers)

The participants saw the TRG heads as knowledge brokers, that is, they saw part of the TRG heads' duty as connecting teachers to one another to exchange knowledge and expertise. The TRG heads played a role within, across, and beyond TRGs in supporting teacher learning. Apart from organising daily subject-based teaching-research activities, they coordinated cross-subject lesson observations and encouraged teachers to learn from the effective pedagogical skills of teachers in other subject groups. The TRG heads also fulfilled the role of *zhishi luyouqi* (knowledge broker). They used external teaching-research activities and training as their source of information and expertise, and then spread this wisdom among teachers. A TRG head said:

I engage in different professional groups and seek resources from external experts. I feel like my function is as a "WiFi router (*luyouqi*)". I have up-

to-date information to share and lead with. I hope I can bring what I learn externally to our teachers, turning an individual-level construct into a group-level construct (E4).

Broadening participation in external teaching-research activities and communication with the teaching-research officers and TRG heads from other schools was reported as a key leadership strategy designed to adjust existing teaching practices. Additionally, TRG heads participated in external professional learning activities provided by the district- and provincial-level teaching-research offices. They then shared the latest information on reform, good practices, and resources with the teachers. They kept the teachers posted on the latest educational reform. They also provided the teachers with information on external teaching competitions and encouraged them to participate in them. A teacher noted:

> Participating in external development activities is also a form of teacher learning and development. The head of the TRG forwards the information about teaching competitions to us and encourages us to participate in them. In this process, she also provides us with extra support, such as preparing the lessons with us and asking the teaching-research officer (if they are available) to look at my lesson plan and help me improve it (F8).

Additionally, the TRG heads functioned as gatekeepers to drive teacher learning. A TRG head stated:

> I think that my subject expertise and teaching experience give me the role of *shoumenyuan (gatekeeper)* in terms of driving teacher learning. For

example, there are some activities externally recommended to be carried out in the school; I can decide whether it is needed and suitable for us to carry out, and I still have the right to decide in this regard. Whether some external activities and training are suitable for our teachers or not, I can make a selection, give advice, and so on (E4).

The TRG heads acted as gatekeepers to ensure meaningful teacher learning through the most suitable learning resources; as stated by the a TRG head (F2), "I believe that teaching competitions can improve teacher learning in multiple ways. But teachers are very busy with classroom teaching. We need to play the filter role for different teaching competitions and select the appropriate ones for teachers at different career stages."

7.5 Role Enactment of TRG Heads in Leading Teacher Learning

7.5.1 Facilitating Learning in Teachers' Roles: "Work as Context for Ongoing Teacher Learning"

The TRG heads who participated in this study collaborated with the director of the office for teaching affairs and the principal to lead teacher learning. For example, senior leadership teams and the TRG heads collaborated to develop teaching models that aligned with the school context and student characteristics. Subsequently, the TRG heads presented the teaching models through collective lesson preparation, observation, and post-lesson discussions. One TRG head shared her experience:

We have established a teaching model that emphasizes independence,

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We have established a teaching model that emphasizes independence,

collaboration, innovation, and development. This model is designed to be promoted by the entire school and across all subjects. As our subject is the central subject of the school, we have taken the lead in implementing this teaching model. We ensure that the unique characteristics of our subject are integrated into the overall teaching model. I find the work as context for ongoing teacher learning (E4).

During the implementation of the model within the group, I made the following observations:

This TRG head models the desired practices and engages in discussions with teachers. Specifically, she invites teachers to observe her lessons and collaboratively establishes standards and clarifies expectations when implementing the teaching model.

In the apprenticeship model, the TRG heads served as mentors, but they also matched young teachers with senior teachers based on their understanding of them to provide extra support during this process.

Through the informants' narratives, the TRG heads had a deep understanding of the professional learning needs of teachers, as they were teachers themselves and worked closely with their peers. This positioned them well to observe and support teachers throughout their professional development journey, as stated by a TRG head:

The evaluation of a teacher should be based on the whole process of their

teaching work, not just on the results of their teaching. I think I have observed the process a little bit more than other school leaders. Because I work with teachers directly, I see very clearly what the teacher has done in the whole process. How did they do it? What is their classroom like? Maybe I know a little bit more than they do (E3).

The TRG heads prompted the teachers' reflections and encouraged them to share their confusion and the aspects they felt they needed to improve on. The TRG heads understood their needs based on their sharing, daily observations, and research. They tended to capitalise on the TRGs and teaching-research activities to address teachers' needs. The TRG heads' coordination contributed to the quality of teacher learning. A TRG head emphasised their coordination role by commenting:

As a TRG head, I communicate with teachers very often and see what their requirements are. Subsequently, I adapt our teaching-research activities to their requirements to shape their learning motivation (F4).

The TRG heads ensured teachers felt part of and had ownership of the TRGs. The TRG heads created and sustained professional dialogue for teacher learning in addition to the teaching-research structure, as stated by a TRG head (F3): "I encourage teachers to visit other classrooms, I always stop by and talk in the hallways with teachers or discuss new ideas in the office with teachers."

7.5.2 Forging Closeness and Empowering Teachers to Underpin Mutual Learning: "The School, for Me, is Home"

The TRG heads placed great importance on fostering harmonious relationships and providing personal care for teachers. They acted as kind parents in that they showed genuine concern for the teachers' job-related and personal well-being. A TRG head paid special attention to this. She commented:

> We are all facing a considerable amount of pressure. It's important to care for teachers psychologically to get them to adapt. As the head of a TRG, I believe it is my responsibility to genuinely care for the teachers and offer assistance in specific areas where they may require help. The school, for me, is home. My role entails caring for every teacher. I go down to their office and understand their work. I pay close attention to their psychological balance and emotional burdens (F4).

The compassionate leadership approach demonstrated by the head had a positive impact on the job satisfaction and commitment of the teachers. The care and concern shown by the head motivated the teachers to strive for better performance. This nurturing environment created by the head's leadership style fostered a sense of dedication and loyalty among the teachers, leading to enhanced job satisfaction and a higher level of commitment to their work.

This benevolent leadership style had a positive impact on the job satisfaction and commitment of the teachers and motivated teachers to perform better. One teacher

expressed her appreciation for this.

> I am immensely grateful for the head of the TRG. She demonstrated a deep understanding of my situation as a new teacher and a young parent. Not only did she support me in enhancing my pedagogical skills, but she also showed genuine care for my personal life. She alleviated some of my classroom instruction responsibilities and limited my workload to provide me with ample space to learn and grow. Her concern for my well-being motivates me to work harder and strive not to disappoint her (E7).

The TRG heads employed a paternalistic leadership style that fostered a sense of trust among the teachers. They cultivated a familial atmosphere within the TRG and encouraged teachers to care for, assist, and trust one another in order to establish a more conducive learning environment. The heads were seen as trustworthy leaders who exemplified honesty, transparency, and dependability. They provided numerous opportunities for interaction with the teachers and consistently aligned their words with their actions.

The TRG heads fostered collaborative ways of working. I observed that the TRG heads oversaw the participation and listened to the teacher's voice and ensured teachers felt part of the TRGs. A TRG head responded:

> As a TRG head, I think that I need to notice the teaching-research atmosphere. Some teachers have become *gugan jiaoshi* (backbone teachers), and they improved their capacity. I hope that they can lead other teachers to grow and the whole team can develop together. I am more concerned about

the teaching-research atmosphere; I hope to encourage everyone to speak enthusiastically and then actively express themselves. There does not exist jealousy or anxiety in our team. We promote each other so that we can progress inside this atmosphere (E4).

One teacher added:

Everyone is very active and enthusiastic in giving their opinions and expressing their views. So, I think all the teachers in our TRGs now can positively and actively give their opinions to others, that is, to help them promote their classroom improvement (E6).

This collaborative environment empowered teachers to use their expertise for learning support. The TRG heads encouraged the leadership capacity of teachers in the groups, which promoted collective efficacy.

7.5.3 Engaging Teachers in School-based Action Research and Trialling New Instructional Approach: "The First Person to Try Tomato"

The TRG heads used research projects to shape teacher learning outcomes. As a teacher (F7) stated, "Our TRG head invited me to join her research projects, and I have worked on different research projects with her over the last five years. When I began to build regular monitoring and reflection into my classes, they began to improve noticeably. As my teaching skills improved, so did my action research. As my action research was refined, so were my teaching skills." The TRG heads designed and conducted research projects with

teachers. The TRG heads learned how to conduct action research and simultaneously provided practical guidance for teachers. A TRG head commented:

> When I apply for some research projects, I encourage our teachers to join me in applying together. Our previous TRG head also did so; she attended research-informed teaching practice. Thus, she paid closer attention to the application of the research projects, and she invited me to join in. During this process, I learned a lot and found it very helpful to grow my knowledge and improve my teaching practices. Now that I am the TRG head, I hope to use this strategy to motivate our teachers and help build their teaching capacity. I'll also keep learning during the research process. I am grateful to our teachers who can respond (F3).

A teacher added:

> Our TRG head encourages us to apply the research projects with her. She invited teachers to design the research projects together. We develop the research topics during our teaching-research activities. These topics are formulated from our confusions about teaching. We identify and deepen our discussion into a research project. Then, we conduct the research project together, and our TRG head plays the role of mentoring and modelling. She introduces her research experience to us, provides guidance, and pilots the research-informed teaching strategies after we finish the research projects (F8).

The TRG heads collaborated with teachers to enhance professional practice through action research. They created a culture of collaborative inquiry, summarised by a TRG head as "No teacher left behind;" she further commented:

> Some old-aged teachers may be reluctant to participate in the research projects. What I need to do is communicate with them to get to know their thoughts or challenges, and then I try my best to help and motivate them accordingly. I hope that we can develop together (F4).

The TRG heads ensured that the research resources were coordinated and adequately resourced. They worked with the principal to organise the workshops surrounding how to launch the research. A TRG head (F3) stated that "the school and our TRG invite professors from university to come and share with us how to carry out research projects and how to write papers." Additionally, the TRG heads organise theoretical studies to promote teachers' sense of doing research. One teacher commented:

> There are theoretical studies in our TRG apart from the practical aspects. Theoretical learning is related to finding some literature to help with the research topics we are working on (E6).

The TRG heads reported that teachers' views on theory began to shift as they became more experienced with their own practice. They promoted traditional strategies, solely relying on sharing anecdotes of including research to facilitate teachers' decisional capital. A TRG head commented:

> I am increasingly turning my attention to action research after teachers can handle their own teaching. Research projects are considered an effective

way to support teachers in rethinking and improving their practice collectively and deeply. I don't want teachers just to share their experiences but dive more deeply into teaching and learning through the research projects (E2).

The TRG heads identified potential adjustments in teaching strategies, and they piloted the innovative teaching strategies ahead of teachers, as stated by a TRG head (E3): "I am the first person to try tomato. I pilot the new instructional strategies informed by the research and share my experience and opinions." Thus, the TRG heads modelled innovative practices and encouraged teachers' innovative behaviour.

7.5.4 Drawing on External Assistance to Develop Teachers: "Bring the Outside in"

The TRG heads actively learned from external resources and shared them with teachers. They participated in cross-school teaching-research activities and received district- and provincial-level training. They brought back informative learning materials and shared proven teaching practices with the teachers. A TRG head highlighted the importance of external learning:

In addition to school-based learning, it is necessary to participate in external training and district-level teaching-research activities to learn from other schools and gain insights into the latest education reforms. By bringing the outside in, I can share what I have learned with my peers, fostering a culture

of collective improvement (F4).

My analysis indicated that the TRG heads participated in networks beyond their schools, which allowed them to discover and share new information with the teachers in their groups. This involvement also enabled them to keep the teachers informed about the latest trends in education reform. In addition, the TRG heads pursued professional learning opportunities for teachers beyond their own schools. They also organized and coordinated in-service training sessions, seminars, and workshops for the teachers in their groups.

The TRG heads encouraged teachers to participate in networks with other teachers outside of their schools. They ensured that teachers were informed about teaching competitions and expected their participation. During these competitions, the TRG heads worked closely with the teachers, assisting in lesson preparation and providing additional support whenever necessary. The TRG heads drew on additional expertise and external assistance to foster teachers' decisional capital and agency. They invited the teaching-research officer to comment on the teachers' lessons and collectively improve them. A teacher described her experience preparing for the teaching competition as follows:

> Our head of the TRG invited the retired teaching-research officer to observe my lesson. I remember we dedicated nearly a month to preparing the lesson for the teaching competition before presenting it to the teaching-research officer. The teaching-research officer and I engaged in a post-lesson discussion that lasted the entire afternoon. The valuable suggestions provided by the officer encouraged me to engage in more reflection. In the end, I was awarded the first prize in the teaching competition. I really

benefited from this process (F6).

As a source of expertise and information, A TRG head (E4) stated that "we were positioned at the front line to interact with the teaching-research officer, [so] TRG heads from other schools and other *gugan jiaoshi* (backbone teachers) had access and first-hand information. We needed to act as a filter to pick out those appropriate things for teacher learning." In other words, the TRG heads screened what the external experts suggested in advance. The TRG heads contributed their ideas about whether the external activities were necessary and appropriate for implementation in the teaching groups and promoted teacher learning and development. The TRG heads were able to perform a screening based on their professional autonomy. They aligned the external resources with the context of the teachers and tried to integrate them with teachers' teaching and learning.

7.6 Summary of the Role Construction and Enactment of the TRG Heads

There were four main ways that the TRG heads enacted their roles as *qiaoliang* (bridge), *shangchuan xiada* (reporting upward and transmitting downward)*, gaige yinlingzhe* (lead innovator), *xianxingzhe* (early adopter), *daoshi* (peer mentor), *zhishi luyouqi* (knowledge broker), and *shoumenyuan* (gatekeeper). The four core practices were facilitating learning in teachers' roles; forging closeness and empowering teachers to underpin mutual learning; engaging teachers in school-based action research and trialling new instructional approaches; and drawing on external assistance to develop teachers. The following sections present the findings of the influencing factors and how these factors shape their leadership for teacher learning.

7.7 Influential Factors and Their Impacts on TRG Heads' Leadership for Teacher Learning

Studies have found that middle leadership in schools is shaped by professional, relational, organisational, and external conditions. This section explores how these different contexts influence and shape the nature and enactment of the TRG heads' leadership for teacher learning and illustrates how these factors shape their leadership in high-performing Chinese schools.

7.7.1 Professional Context

7.7.1.1 Subject Matter Expertise and Teaching Experience

The TRG heads reported that they first focused on their own learning and teaching and later moved into leadership where they collaborated and influenced their peers and other stakeholders on a wider scale. Teaching experience helped the TRG heads understand teachers and their developmental needs easily, as a TRG head stated:

> I can understand teachers' challenges and difficulties because I have been at that career stage. I help them by working with them to resolve their teaching problems. For example, novice teachers sometimes cannot handle the classroom very well. I, thus, summarised the tips for classroom management and shared them with them to enhance their teaching efficacy at the beginning of their teaching careers (F2).

As the TRG heads gained more teaching and related professional experience, their leadership changed in terms of depth and quality, as stated by a TRG head:

I used to feel overwhelmed, but I slowly got much better. I felt anxious

when I was younger because there were some older teachers in the TRGs.

They had their own ideas and were not very willing to follow me sometimes.

My subject leadership improved with my increasing years of teaching and

participation in several developmental activities. I feel confident now about

supporting teachers and taking the lead to adjust teaching practices. I now

know how to work with older teachers. I provide leadership opportunities

for them and reinforce their exemplary behaviours (E2).

One teacher explained the important influences of the TRG heads' teaching experience and

expertise on their leadership for teacher learning: "We see a TRG head as a responsible

person able to influence peers when the TRG heads have rich teaching experience and

expertise."

7.7.1.2 Leadership Experience and Interpersonal Skills

The strong content, pedagogical expertise and teaching experience of the TRG heads are

consistently exposed in the study. In addition to subject matter expertise and teaching

experience, the participants made frequent references to their leadership experience and

emphasised the source of their experience, namely, the jobs they previously held which

positively influenced their current positions. In relation to this, a TRG head stated:

I was in this position in a medium-sized school previously. There were

related tasks I was doing, such as developing a plan for teaching-research

activities, carrying out collective lesson preparation with novice teachers,

observing teachers' lessons, conducting research projects with teachers, and

so on. I think these things served me well in getting started here (F3).

Furthermore, the TRG heads found that effective interpersonal skills fostered a trusting and sharing relationship (like among siblings) with and among teachers, which positively impacted the culture within the subject groups. A TRG head put it:

I am 35 years old and still young in comparison to the other teachers in the

subject groups, in terms of both age and teaching experience. Rather than

imposing mandates on the teachers, I always ask for their ideas and let them

feel valued. In addition, I tend to develop their leadership in the group. I

may not tell the teachers what to do directly. I tend to exert a positive

influence on them by modelling. If they ask for advice, I share it with them

without reservation. I believe that what I have done facilitates a trusting and

collaborative work environment among the teachers (F4).

The TRG heads were encouraging and adept at developing and maintaining relationships with teachers and school leaders. They gained the teachers' trust by interacting in an optimistic manner. They established tailored developmental goals and expectations for teachers they worked with to facilitate desirable practices, as stated by a TRG head and a teacher:

Goals are central drivers of teacher learning activities. I set different

developmental goals for teachers at their different career stages to

encourage them to make progress. I mainly set up new teachers with the

goal of being able to complete the teaching tasks on time and encourage them to participate in a range of professional training and teaching competitions. In terms of the older and experienced teachers, their primary goals should be to develop teacher leadership capacity. When I must attend to personal issues, there are other teachers to assume my responsibilities. Teachers are encouraged to work toward individual goals and to focus on their own specific needs. In addition to the goals, I also suggest practices that help them accomplish their individual goals (F3).

I have been a Chinese teacher for 30 years. I'm already a bit burnt out. The head of the TRGs takes time to sit down and talk to me to set my professional growth goal and walks me through the self-reflection process to increase my motivation (E6).

7.7.2 Relational and Organisational Influences

7.7.2.1 School Conditions

One TRG head (F4) said, "Our leadership for teacher learning is shaped by the school conditions, such as the academic reputation, of the schools." The TRG heads demanded great work from their teachers. This is illustrated by a TRG head:

I have high expectations of our teachers and talk to them about what I expect of them. Most of them are experienced teachers, and I believe teachers' efforts can make a difference in schools and even have a positive impact on teaching and learning in the district (E2).

In high-performing schools, setting high expectations for teachers was a common strategy for developing teachers. Specifically, the TRG heads placed individualised expectations on teachers to help them achieve their best rather than simply meeting external accountability measures. On a personal level, they believed every teacher could be a backbone teacher. On the collective level, they tended to establish influential TRGs in their schools and in the community. The high expectations of the TRG heads were demonstrated and reinforced in the teachers' daily work: they suggested that teachers enact multiple roles, including being co-learners, co-developers, and co-organisers. In addition, with the high expectations and sufficient support from the TRG heads, the teachers said that they felt confident about conducting both internal and external lesson demonstrations. Their expectations also motivated teachers to pursue pedagogical improvement consciously and continuously.

The TRG heads tended to distribute and support leadership from teachers and encouraged them to co-organise teaching-research activities. Simultaneously, the TRG heads paid special attention to developing leadership in peers, as demonstrated by a TRG head:

> Although I don't participate in the training provided for the backbone teachers and so on, there are backbone teachers in the TRGs who go out to study, and I often let them come back and share some of what they have learned. I tend to cultivate a mutual help atmosphere. Each teacher has a specific direction. For example, some of them are suitable for theory-based learning and have higher theoretical levels, and their growth process is in that direction. I normally organize them to participate in the training provided by the government and [let them] come back to lead us to learn

more about new things (E4).

The TRG heads claimed that most of the teachers were experienced. The TRG heads were concerned with empowerment and emphasised their role as co-learners rather than leaders. In addition, the TRG heads thought effective leadership was layered and had multiple focuses, such as adjusting existing teaching practices, engaging teachers in school-based action research, and maintaining a positive work environment. Teachers have differing strong points and can, thus, be co-leaders in certain aspects. Specifically, the TRG heads distributed extra responsibilities to the backbone and experienced teachers while motivating middle- and older-aged teachers. The TRG heads also demonstrated concern for teachers transferred from secondary to primary schools.

7.7.2.2 Various Staff Groupings

The TRG heads supported and were supported by teachers and teacher leaders. As such, the TRG heads worked closely with the teachers to achieve teaching excellence. Thus, there were reciprocal influences between teachers and the TRG heads. The latter influenced teacher development and were influenced by teachers. A TRG head commented:

> Teachers can reduce my burden if they participate in the teaching-research activities as co-organisers. Teachers' support and active participation in the teaching-research activities, promote collective development, and make my work easier because I have huge demands on my time. Teachers share group responsibilities, and we work together to achieve our goals. If the teachers are not willing to be involved, my work might not go smoothly, and the

teachers might not be fully developed (F3).

A TRG head (E3) also mentioned an experienced teacher who impacted her through his work: "He has led by example. He has had a lot of influence in this school. When I see his work and cooperation, I am encouraged. I feel that I need to work harder to deserve the title of TRG head."

Additionally, the personal and professional relationships between teachers and the TRG heads were consistent themes that emerged from the data. Harmonious relationships among teachers facilitated the work of the TRG heads. The TRG heads reported that they needed to feel that the teachers were involved. The teachers participated in collective lesson preparation, lesson observation, and post-lesson discussions organised by the TRG heads, and they provided feedback to the TRG heads. In turn, the TRG heads modified and enriched the teaching-research themes considering the teachers' developmental needs. A TRG head (F2) referred to it as follows: "The mentoring roles can be professionally and personally rewarding when we witness professional growth in the other person." The teachers also created an environment of respect and rapport in their groups by sharing effective practices and resources and listening to and helping each other. The positive atmosphere contributed to the constructive attitude towards the work of the TRG heads.

In addition to teachers and teacher leaders, principals' support and efficient feedback were among the influencing factors suggested by the participants that facilitated the leadership of the TRG heads. As mentioned by a TRG head (E3), "Immediate feedback from the principal leads to the generation of a grateful culture."

A principal (E1) said, 'The TRG head needs a number of skills to promote positive teacher change, which may result in a capacity gap." The principals facilitated the professional learning of the TRG heads and developed their human and social capital. The principal emphasised the continual learning of the TRG heads throughout their careers, as stated by a TRG head (F3): "My principal believes that my own ongoing professional learning is a central part of effective mentoring." Regarding teacher development activities, the principal provided direction for the TRG heads and regularly participated in and helped organise teaching-research activities. A TRG head (E2) said, "The principal gives us a lot of advice. She observes teachers' lessons and conducts post-lesson discussions with us. This is a practical support that I can feel." The principals also supported the work of the TRG heads by clarifying. The following is a description of an observation of a teaching-research activity:

> There was a time when the TRG head did not state a position clearly, and as a result, others in the group, did not understand what was said. The principal said something like, "Miss Zou, it sounds as though you are afraid that if we are too lenient about how we grade homework, students just won't do it. Would that be an accurate summary of your thoughts?"

The principal reinforced the TRG heads' leading role. A TRG head commented:

> My roles and responsibilities are clear. I am satisfied with my principal's recognition of the value of my role. My principal understands the teaching practices that I share (F2).

The interview transcripts demonstrated the positive relational structure and support of different groups of staff, including teachers, teacher leaders, and principals that contributed to the effectiveness of TRG heads in leading teacher learning.

7.7.3 External forces

7.7.3.1 The District

The following sections describe the external forces, including the districts in which the schools are operated and the external experts, that impacted the leadership journey of the TRG heads. The heads were frequently involved in out-of-school teaching-research activities organised by the district-level education bureaus and the teaching-research offices.

A TRG head (E3) said, "The district-level education bureaus and teaching-research offices explored new possibilities and launched initiatives for enhancing teachers' teaching and research capacity and provided pedagogical support. These external enablers shape my work to build teacher capacity." Initiative implementation was a condition for the TRG heads to aid in peers becoming better teachers. The TRG heads used the policy initiatives to lead change and innovation so that teachers saw it as necessary collective work and did not resist. A TRG head commented:

> Our school-wide and group-level teaching-research activities need to respond to the district teaching-research planning. I use this planning to coordinate our teachers' developmental activities. Additionally, the district education bureau and teaching-research office provide teachers with

sufficient external developmental opportunities, such as cross-school lesson observations. I felt it easier to lead teachers with the district's support and direction (F2).

The district provided the TRG heads with direction and resources, and TRG heads considered the district's support and guidance as having an important impact on their leadership in promoting teacher learning; as stated by a TRG head (E4), "I have the confidence to lead teachers because we have gained coherent support and a range of developmental opportunities from the school and district. The district teaching-research officers address my concerns and provide me specific guidance when I align my team vision to the district teaching-research planning. Although we cannot meet face to face daily, we communicate through WeChat. Sometimes when I cannot address our teachers' questions and concerns, I also consult the teaching-research officer." The multiple and coherent district support at the group level can improve the leadership of TRG heads. The TRG heads drew on external assistance to support their vision for teacher change and improved teacher performance.

7.7.3.2 Out-of-school Partners and Experts

An additional factor emerged as the participants described their interactions with external partners and experts, such as teaching-research officers and the hosts of master teacher studios. The TRGs were subject-based and supported by the teaching-research officers. The TRG heads worked side by side with district-level teaching-research officers in leading teacher learning. Their collective efforts combined to foster teacher learning and improve instructional strategies. The teaching-research officers provided external support and

teaching resources to the TRG heads. They also recognised the needs of TRGs and responded to them. They visited the schools to work with the TRG heads to observe teachers' lessons, conduct lesson demonstrations, and assist in lesson studies. Teaching-research officers also mentored the TRG heads to improve their teaching and research capacity. A TRG head described her experience in professional growth:

> I have been a member of the district-level teaching-research group, and I
> must give open lessons every semester. The TRGs often prepare the lessons
> and give me sufficient feedback. That's how I grew under the guidance of
> the teaching-research officer (E3).

The TRG heads identified the frequent professional conversations with the hosts of master teacher studios as a significant support mechanism for their leadership in developing teachers. A TRG head further elaborated:

> The hosts of master teacher studios are those teachers who 'walk ahead',
> teachers who are genuinely committed to deep change in themselves and in
> their studios and schools. The host of our master studios continued her work
> by finding spaces and vehicles for her to co-participate in change as a means
> of encouraging and supporting change in us. She leads by innovating our
> teaching practice so as to improve our leadership capacity (F2).

The TRG heads in the master teacher studios imparted expertise and passed new ideas to the schools. The hosts of master teacher studios provided a professional, supportive climate for the TRG heads to try out new ideas that might assist teachers. A principal responded,

"While our TRG heads bring considerable expertise and benefit from out-of-school collaboration, the presence of an outside "knowledge other" can help generate new ways of thinking into practice." Connections with wider professional learning networks compensated for school contexts that were not conducive to the leadership of the TRG heads.

7.8 Responses to Research Questions and Summary of the Chapter

The TRG heads in low-performing schools enacted the role as *qiaoliang* (bridge), *shangchuan xiada* (reporting upward and transmitting downward), *gaige yinlingzhe* (lead innovator), *xianxingzhe* (early adopter), *daoshi* (peer mentor), *zhishi luyouqi* (knowledge broker), and *shoumenyuan* (gatekeeper). Four core practices of the TRG heads include: facilitating learning in teachers' roles, forging closeness and empowering teachers to underpin mutual learning, engaging teachers in school-based action research and trialling new instructional approach, and drawing on external assistance to develop teachers. Professional context, relational and organizational conditions, external forces shaped the leadership of the TRG heads in promoting teacher learning. The next chapter will conduct cross-school analyses and conceptualize instruction-oriented middle leadership for teacher learning, and how these factors may interact to influence middle-level instructional leadership.

CHAPTER 8 FINDINGS AND DISCUSSION: CONCEPTUALIZAITON OF INSTRUCTION-ORIENTED MIDDLE LEADERSHIP FOR TEACHER LEARNING

8.1 Scope of Chapter

In chapters 5 to 7, I presented the main findings relevant to answering the research questions. The results were related to the roles and practices of the heads of TRGs (as examples of middle leaders) as instructional leaders responsible for promoting teacher learning and the factors that influenced their leadership. In this chapter, I organise the main findings into a more conceptualised interpretation to offer an initial account of what the findings tell us about the core practices and inherent features of instruction-oriented middle leadership in a Chinese educational context.

This chapter has five sections. In the first section, I compare the TRG heads' practices in leading teacher learning at the low-, average-, schools and high-performing schools. I propose a descriptive model of instructional leadership enacted from the middle to drive teacher learning based on the similarities across schools.

I elaborate on the proposed model across four processes in the second section and rethink what it means for TRG heads to be instructional leaders by means of a comparison with the instructional leadership exercised by principals in the third section.

In the fourth section, I revisit the influences on the TRG heads in leading teacher learning. I present the findings regarding the TRG heads' potential antecedents of instructional leadership. I provide a broader picture of how these factors might interact to shape their instructional leadership. This focus helps to capture the TRG heads' core dynamics accounting for their complex instructional leadership. This discussion is supported by interview and observation data that helps to shed light on why the participant TRG heads enacted instructional leadership.

In the final section, with an empirical footing in the forgoing analysis, I identify and elaborate on five research propositions about instruction-oriented middle leadership in China aimed at capturing the contributions made by the study. As such, these explanations venture deeper into the nature and impact of middle leadership and its ties to instructional leadership practices in a Chinese educational context.

8.2 Understanding Middle-level Drivers of Teacher Learning: Commonalities and Differences Concerning Leadership Enactment

While middle-level roles serve an important purpose in schools and in broader contexts (Hargreaves, & Shirley, 2020; Harris & Jones, 2017; Lipscombe, Tindall-Ford, & Lamanna, 2023), this study sheds light specifically on middle-level instructional leaders. The overarching research aim of the study was to understand how the roles of the TRG heads are understood, enacted, and shaped. In the previous three chapters, I presented the findings related to the research questions regarding the leadership of the TRG heads at low-, average-, and high-performing schools. At the six schools sampled, I identified certain themes which, although common to all the schools, were shaped differently. Table 8.1 provides a general picture of what I have synthesised.

Table 8.1. Commonalities concerning the enactment of leadership of the TRG heads to lead teacher learning

Research questions	Case-oriented analysis: Differences			Variable-oriented analysis: Commonalities
	Findings of low-performing schools	**Findings of average schools**	**Findings of high-performing schools**	
1. How is the TRG heads' role related to teacher learning constructed?	*chengshang qixia* (intermediary)	*zhongjian ren* (mediator)	*qiaoliang* (bridge)	Hub
		hezuo zhe (co-leader)	*shangchuan xiada* (reporting upward and transmitting downward)	
	yinling zhe (forerunner)	*xianfeng* (precursor)	*gaige yinlingzhe* (lead innovator)	Forerunner
	bangyang (role model)	*bangyang* (role model)	*xianxingzhe* (early adopter)	Role model
	daoshi (peer mentor)	*daoshi* (peer mentor)	*daoshi* (peer mentor)	Peer mentor
	Source of Information	*'liantiao'* (chain)	*zhishi luyouqi* (knowledge broker)	Knowledge broker
		chuanyin zhe (messenger)	*shoumenyuan* (gatekeepers)	
2. How do TRG heads lead teacher learning?	**Routinising Dialogic Space** a. Collaborating and co-leading with the directors of the office for teaching affairs b. Playing the part of pioneers and becoming a potentially illuminating example for teachers c. Working with teachers to help them translate improvement needs into specific actions d. Creating structured opportunities for teachers to work and learn together e. Promoting the apprenticeship model	**Offering job-embedded structure for teacher learning** a. Co-organising the teaching-research activities with principals and directors of office for teaching affairs b. Modelling good practices and playing a leading role as a backbone to help teachers c. Working with teachers and turning their needs into positive change d. Offering job-embedded time and putting a structure in place that	**Facilitating learning in teachers' roles** a. Co-developing teaching models b. Modelling and conducting collective lesson preparation, observation, and post-lesson discussions c. Understanding and addressing the professional learning needs of teachers d. Creating and sustaining professional dialogue for	**Nurturing practice-embedded professional learning** a. Collaborating with school leaders to lead teacher learning b. Leading by example and modelling good teaching practice c. Working with teachers to help teachers translate improvement needs into specific actions

	routinely enables teachers to learn with and from one another e. Promoting the apprenticeship model	teacher learning in addition to the teaching-research structure e. Brokering and facilitating the apprenticeship model f. Setting high expectation and sufficient support	d. Routinising teaching-research activities and encouraging and ensuring participation e. Brokering and facilitating the apprenticeship model
Promoting a culture of sharing, collaboration, support and participation a. Maintaining supportive relationships with and among teachers and building trust b. Uniting the team of teachers with their personalities and creating a relaxed and harmonious atmosphere c. Fostering a sharing, collaborative, supportive, and participative culture d. Delegating responsibilities to teachers in accordance with their wishes to promote collective responsibility and professional collaboration e. Encouraging teachers to actively and collectively participate in teaching-research activities	**Cultivating a culture of effort and joy for teachers** a. Building trust and friendship with teachers b. Being professional partners and providing suggestions and feedback whenever teachers needed c. Understanding the teachers' differing career stages and providing support d. Fostering cross-subject collaboration and creating collaborative opportunities for the teachers e. Encouraging knowledge sharing	**Forging closeness and empowering teachers to underpin mutual learning** a. Emphasising harmonious and sharing relationships and personal care for teachers b. Using paternalistic leadership style to build trust c. Displaying genuine concern for the teachers' job-related and personal well-being d. Fostering collaborative ways of working e. Encouraging teachers to share	**Optimising conditions for teacher engagement** a. Building good working relationships and fostering trust b. Creating a caring and supportive learning culture c. Promoting collective responsibilities and professional collaboration d. Fostering knowledge sharing
Integrating research as part of professional practice a. Designing and managing research projects with the teachers b. Working with teachers on action research and applying the research results to teaching c. Encouraging research-based dialogue and cultivating a research atmosphere to enhance the teachers' research awareness and capacity	**Engaging teachers in action research** a. Facilitating teachers' action research by working with them as a team to transform teaching problems into research projects b. Emphasising the need to adopt evidence-based instructional improvement strategies c. Encouraging teachers to share their experiences of conducting research and to collaborate, help, and learn from each other	**Engaging teachers in school-based action research and trialling new instructional approach** a. Designing and conducting the research projects with teachers b. Modelling innovative practices and encouraging teachers' innovative behaviour	**Leading teachers' research-informed practice** a. Designing and managing research projects with teachers b. Encouraging teachers to use research to improve teaching and learning c. Leading deep conversations and cultivating a research atmosphere

	d. Enriching and expanding teachers' theoretical knowledge e. Guiding teachers to read professional and education news and promoting teachers' reflection	d. Keeping abreast of teachers' research development needs and resolving their difficulties with the research e. Delivering personalised research support and offering guidance for teachers on research projects	c. Creating a culture of collaborative inquiry and rethinking practice collectively and deeply d. Organising theoretical studies to promote teachers' sense of doing research e. Providing practical guidance for teachers f. Coordinating research sources	d. Enhancing the teachers' research awareness and capacity e. Offering guidance for teachers on research-based practice
	Widening teachers' resource base a. Participating in cross-school teaching and research and sharing useful resources and teaching practices with teachers b. Introducing new approaches and extending resource bases to widen the teachers' learning environment c. Providing external channels for the teachers to grow d. Organising teachers to attend training sessions e. Providing encouragement and extra support for the teachers' participation in external competitions f. Inviting experts to conduct lesson demonstrations and seminars at their schools	**Connecting teachers to external expertise** a. Keeping in touch with the teaching-research officers to facilitate teaching improvement and teacher development b. Maintaining good working relationships with the teaching-research officers c. Using external enablers to improve teacher learning d. Seeking external professional learning opportunities for the teachers e. Engaging and supporting teachers in professional networks outside their schools to strengthen the teachers' content and pedagogical knowledge f. Aligning teacher practice with external demands and facilitating teachers' positive change	**Drawing on external assistance to develop teachers** a. Learning from external resources and sharing them with teachers b. Keeping teachers posted on the latest trends in education reform c. Seeking professional learning opportunities for teachers outside their schools d. Coordinating teachers in-service training sessions e. Providing teachers with information about teaching competitions and expecting them to participate	**Drawing on external resources to develop teachers** a. Engaging in external resources and sharing with teachers to broaden the resource base for teachers b. Seeking external professional learning opportunities for teachers c. Facilitating teachers' participation in networked professional learning d. Establishing the connections and balancing the ties between teacher learning and external demands and resources

In addition to the discovery of the commonalities across schools, the presentation of the findings revealed the variations in leadership among the TRG heads. Those at the low-performing schools allocated more time to administrative-related tasks and relatively less time to pedagogical practices than the TRG heads at the high-performing schools as high-performing schools provided clear leadership organisation, a corresponding leadership role and sufficient professional learning opportunities. This finding echoes Farchi and Tubin's (2019) finding that middle leaders devoted much time to pedagogical practices in effective schools while those in less effective schools spent more time on administrative tasks.

One explanation may be that the differences are due to the organizational structure and size of the schools (Gurr & Drysdale, 2013; Harris et al., 2019; Southworth, 2004). Since the high-performing schools were normally large schools with plentiful admin staff while less effective schools were comparatively small with insufficient human resources. The high-performing schools had leadership at multiple hierarchical levels, including the positions of the heads of lesson preparation groups. However, less effective schools tended not to have such positions. Thus, the TRG heads needed extra administrative practice to clarify their role and coordinate their tasks when compared with the TRG heads of high-performing schools which had their positions and clear roles for lesson preparation groups, often with two TRG heads in one TRG.

The findings revealed that although the TRG heads drew upon the same range of leadership strategies, they prioritised within these strategies. The TRG heads blended their strategies to fit the school context. This finding aligns with the previous findings (Farchi &Tubin, 2019; Heng & Marsh, 2009; Tapala, Van Niekerk, & Mentz, 2021), which suggest that school middle leadership demonstrated responsiveness to their working contexts. The TRG heads in the low-performing schools prioritised the following: improving professional learning structures of

teachers to create more supportive conditions for teacher learning; enhancing the teachers' research awareness and capacity; using external resources and sharing them with teachers to broaden their resource base. The TRG heads in average schools prioritise the following: seeking external professional learning opportunities for teachers; establishing the connections and balancing the ties between teacher learning and external demands and resources. The TRG heads in high-performing schools prioritised the following: facilitating teachers' participation in networked professional learning to empower teachers and thus to develop a wider distribution of leadership responsibilities; leading deep conversations and cultivating a research atmosphere. In addition to the school context, the within-school analysis indicated that the differences may have also been because of the TRG heads' knowledge and their different "toolbox." Further study is needed to explore how the different TRG heads (such as the length of leadership position) prioritised their strategies for leading teacher learning from their "toolbox."

The study found that the TRG heads at the high-performing schools had higher expectations of their teachers than those at the average and low-performing schools. Because of the school context and the students' low motivation, the TRG heads at the low-performing schools felt less confident about fostering learning and teaching. Thus, they had relatively lower expectations of the teachers than those at the high-performing schools. This echoes the finding of Gurr (2019) suggesting that the expectations for teachers were constrained by a lack of resources and environmental issues. At the high-performing schools, setting high expectations for the teachers was a common strategy to develop teachers. The TRG heads in the high-performing schools demonstrated high and individualised expectations of the teachers, and focused on helping the latter to achieve their best rather than simply on meeting the needs of external accountability.

In addition, the TRG heads in high-performing schools tended to use a wide distribution of leadership styles while the TRG heads at the low-performing and average schools provided a higher degree of leadership than those at the high-performing schools. The TRG heads at the low performing schools tended to rely on a unitary directive leadership style and set up clear, specific, and measurable teaching goals based on the school's mission and vision, translated these goals into teaching practice, and monitored whether the teachers achieved the goals. They were concerned about whether the teachers could complete their teaching tasks on time, rather than about teacher empowerment. The efforts of the TRG heads were directed, not at any great changes, but rather at maintaining the teacher groups' status quo and then, incrementally, trying to improve teacher practices. The leadership of the TRG heads was less effective in the eyes of the teachers at the low-performing schools.

In addition to relational and organizational influences, the data were suggestive of the professional context and external forces in an attempt to understand varied patterns of middle-level instructional leadership. Teaching experience and experience as a middle leader, subject expertise and interpersonal skills were crucial for middle leaders' success in developing teachers.　This finding resonates with the results of Ho, Bryant, and Walker (2022), Irvine and Brundrett (2019), and De Nobile (2018), demonstrating that experienced middle leaders influenced teachers to take an active role in professional learning. Middle leaders with little prior experience tended to seek support from senior leaders and experienced colleagues. The finding emphasised the importance of principal leadership and support as well as peer support for effective middle leadership.

Priorities and resources of the districts influenced how middle leaders shaped the teacher learning process, which enriches the understanding of how the external forces shape middle leadership for teacher learning (e.g., Hammersley-Fletcher, 2002). I found that professional,

relational, organizational, and external forces were not separate influences. They interacted and exerted influence on middle leadership. I relate professional, relational, organizational, and external factors to produce a fuller picture in section 8.4.

Based on Table 8.1, I posit a four-domain model, showing four areas where the TRG heads can have a substantial impact on teacher learning and how they exert the impact.

The model comprises various development strategies to enhance teachers' teaching and research capacity. It involves four core dimensions, with sets of sub-dimensions (see figure 8.1). The TRG heads had a wide range of strategies to lead teacher learning. Many were inherited from the past, while some were acquired recently.

Figure 8.1 A descriptive model of instructional leadership for teacher learning enacted by mid-level leaders in China

Nurturing 'practice-embedded' professional learning

1. Collaborating with school leaders to lead teacher learning
2. Leading by example and modelling good teaching practice
3. Working with teachers to help teachers translate improvement needs into specific actions
4. Routinising teaching-research activities and encouraging and ensuring participation
5. Brokering and facilitating the apprenticeship model

Optimising conditions for teacher engagement

1. Building good working relationships and fostering trust
2. Creating a caring and supportive learning culture
3. Promoting collective responsibilities and professional collaboration
4. Fostering knowledge sharing

Hub
Forerunner
Role model
Peer mentor
Knowledge broker

Leading teachers' research-informed practice

1. Designing and managing research projects with teachers
2. Encouraging teachers to use research to improve teaching and learning
3. Leading deep conversations and cultivating a research atmosphere
4. Enhancing the teachers' research awareness and capacity
5. Offering guidance for teachers on research-based practice

Drawing on external resources to develop teachers

1. Engaging in external resources and sharing with teachers to broaden the resource base for teachers
2. Seeking external professional learning opportunities for teachers
3. Facilitating teachers' participation in networked professional learning
4. Establishing the connections between teacher professional learning and external demands and resources

8.3 Deepening the Middle-level Instructional Leadership: Institutionalising, Intermediating, Innovating, and Integrating

A model developed in the section above provides a useful point of departure for middle leaders who wish to reflect upon their instructional leadership. This model includes four conceptual foundations of instructional leadership for teacher learning. These dimensions are further categorised across four processes.

8.3.1 Institutionalising: Nurturing 'Practice-embedded' Professional Learning

Five dimensions, namely, collaborating with school leaders to lead teacher learning; leading by example and modelling good teaching practice; working with teachers to help them translate improvement needs into specific actions; routinising teaching-research activities and encouraging and ensuring participation; and brokering and facilitating the apprenticeship model, comprise the dimension "nurturing job-embedded teacher learning." These sub-dimensions concern the role of the TRG heads regarding ensuring teachers' engagement with routinised learning.

I observed in the institutionalising process that the TRG heads tended to use bureaucratic leadership to promote teachers' engagement and constant learning by sustaining habitual organisational routines of teacher learning. The TRG heads organised and promoted daily teacher development activities within the TRGs and lesson preparation groups, ensuring that the teachers engaged in these activities and provided the necessary support and resourcing. This result is consistent with the findings of other studies (Bryant, Wong, & Adames, 2020; Edwards-Groves, Grootenboer, Hardy, & Rönnerman, 2019; Song, 2012), which suggests that middle leadership exerts an influence on teacher learning through a team process. However,

the Chinese TRG heads differ from middle leaders in Western contexts in their ways of fostering team-based teacher learning and development because they emphasise, reinforce, and rely on the institutional aspects of teacher learning (i.e., a school-based teaching-research system) to foster situations in which mutual learning is promoted.

Consistent with studies beyond China, the TRG heads used their agency (esee Dinham, 2007; Koh, Gurr, Drysdale, & Ang, 2011; Ogina, 2017) to initiate change. They modelled and provided the teachers with ways to adjust their teaching practice. They had a range of opportunities for developing and embedding teachers' pedagogical skills within their schools. Their lesson observation of teachers, such as "push door" lessons, were welcomed by the teachers. The interviews, observations, and documents show that the principals empowered the TRG heads to co-lead teacher learning. The TRG heads were expected to contribute their views when various instructional decisions were made. They optimised and processed organisational teacher learning routines with school leaders by addressing the professional learning needs of the teachers and ensuring the alignment of the development activities with the schools' direction. This relational positioning of the middle leader has been highlighted both in this study and in other studies (Brown et al., 2000; Bryant, 2019; Grootenboer, Edwards-Groves, & Rönnerman, 2014).

8.3.2 Intermediating: Optimising Conditions for Teacher Engagement

The focus of the second dimension, optimising conditions for teacher engagement, concerns preserving the sub-culture of team trust and collaboration, which conforms to the notion of instruction leaders being viewed as culture builders (Hallinger, 2005; Shaked, 2021). This dimension incorporates four leadership functions: building good working relationships and fostering trust; creating a caring and supportive learning culture; promoting collective responsibilities and professional collaboration; and fostering knowledge sharing.

I observed in the intermediating process that the TRG heads used collective responsibility to create a learning environment that was group-oriented. They protected and preserved communicative spaces for sustainable professional dialogue. Similar to the middle leaders in Western contexts, the TRG heads developed a climate of enabling teacher collaboration, knowledge sharing and relational trust (Edwards-Groves et al., 2016) as a basis for teacher learning.

The TRG heads paid attention to both work-related (advice networks) and personal relationships (personal-conversation networks) and they affected both types of relationship, as suggested by Bryant, Wong, and Adames (2020). The TRG heads found ways to inject fun and celebrate shared accomplishments in the groups, while maintaining their responsibilities. The TRG heads placed immense emphasis on working in a pleasurable atmosphere and on fostering harmonious relationships among the teachers. The TRG heads worked hard to create a sense of family in their groups. They demonstrated paternalistic attitudes towards the other teachers ("I think about you; I will take care of you; I am always your source of support") and used benevolent leadership to create trusting relationships. They also reinforced school routines to catalyse professional learning. In addition, "the old guide the young" mentoring system at the schools fostered a close personal bond between the TRG heads and their peers. The TRG heads reduced the status gap between themselves and the other teachers and regarded themselves as co-learners.

8.3.3 Innovating: Leading Teachers' Research-informed Practice

The third dimension engaging teachers in school-based action research includes five functions: designing and managing research projects with teachers; encouraging teachers to use research to improve teaching and learning; leading deep conversations and cultivating a research atmosphere; enhancing the teachers' research awareness and capacity; and offering guidance

for teachers on research-based practice. These strategies shed light on how the roles and responsibilities of the TRG heads were enacted to encourage the teachers to develop enquiring habits of mind. I observed in the innovating process that the TRG heads acted as forerunners to keep the teachers posted on pedagogical and research developments and to help them become agents of change. The TRG heads used research projects as beneficial professional learning tools for the teachers.

Consistent with the argument of previous researchers (e.g., Edwards-Groves, Grootenboer & Rönnerman, 2016; Heng, & Marsh, 2009), who have suggested that middle leaders take an active role in transforming teaching, the TRG heads appeared to be intelligence resources regarding leading action-research programmes to share knowledge and improve practices in schools. They sustained the teachers' growth and renewal through action research. This finding suggests that the TRG heads have the capacity to serve as experts and lead their peers to reflect on their practices to connect theory, research, and practice in schools. The TRG heads led the teachers' research-oriented professional learning, which resonates with previous studies (Koh, Gurr, Drysdale, & Ang, 2011; Talbert, 2010). The TRG heads created professional learning conversations between the school leaders and teachers through action research projects to promote communities of continuous inquiry and improvement. They were identified as key participants in motivating research projects and advancing effective instructional change.

8.3.4 Integrating: Drawing on External Resources to Develop Teachers

The fourth dimension, mobilising external resources to develop teachers, comprises the following sub-dimensions: engaging in external resources and sharing with teachers to broaden their resource base; seeking external professional learning opportunities for teachers; facilitating teachers' participation in networked professional learning; and establishing the connections and balancing the ties between teacher learning and external demands and

resources. These strategies demonstrate how middle leaders supported boundary spanning and knowledge sourcing from external sources. These resources integrated teachers' knowledge and advanced their learning. The TRG heads spoke of their boundary-crossing experience as "going out" (participating in district-level teaching-research activities or meeting external experts such as teaching-research officers) and "bringing back in" (either bringing network ideas back to the school or continuing network discussions in their schools). Moreover, the TRG heads balanced ties between going out and bringing back in.

I observed in the integrating process that the TRG heads engaged across internal and external boundaries to connect the teacher teams with the external teaching-research system and activities, and optimised conditions for developing school-based learning activities. The TRG heads helped teachers understand how teachers were being positioned through the involvement of intra-school and inter-school professional learning activities. These results align with the findings of Bryant and Rao (2019), Dinham (2007) and Somech and Naamneh (2019) showing that middle leaders, based on their mediating positions, enact a boundary-spanning role to set priorities and allocate resources to teachers.

The findings of this study shed increased light on how the TRG heads collaboratively work with school leaders, external experts, and system leaders to promote teacher learning. The TRG heads reached out to professional associations (e.g., teaching-research offices and master teacher studios) and relevant teacher experts (e.g., teaching-research officers and hosts of master teacher studios) to enhance their modelling and invited them to work with their teachers to stimulate the latter's engagement in collaborative learning. The TRG heads worked with and through various groups and relationships inside and outside the school to influence a change in the norms, pedagogical beliefs, and practices of teacher groups. They built communities of professional learning and finessed the boundaries between external initiatives and school

direction to shape teacher learning.

8.3.5 Comparison with Principal Instructional Leadership

This section identifies conceptual similarities and differences between the middle-level instructional leadership and the principals' instructional leadership in terms of teacher learning by exploring the teacher development dimensions of these models. The focus on teachers and their professional learning is common to both principals and middle-level instructional leaders and forms the core category for both positions. Both the leadership from middle leaders and the leadership from principal have a primary focus on promoting relationships, structures and climate that shape and enhance the practice of teachers (Hallinger, 2011; Hallinger & Murphy, 1985; Walker & Qian, 2022).

Various conceptual differences were identified. The principal instructional leadership models concern more directive and top-down influence on teachers with an emphasis on aligning teachers practice with the goals set up at the top of the school (Hallinger, 2005, 2007; Walker & Qian, 2022). During this process, principals provided school climate, relational, structural, and material conditions for teachers (Hallinger, 2011; Hallinger & Murphy, 1985; Walker & Qian, 2022). This influence is normally tangential to teacher learning because this influence is mediated by school-level processes and conditions (Hallinger, 2011).

The findings of this study demonstrate that middle-level instructional leadership tends to exert a lateral influence on teacher development. This may be due to middle leaders' proximity, both hierarchically and physically, to teachers (Edwards-Groves, et al., 2019). Capacity building of the teacher team was a major attribute of the middle-level instructional leaders as was strategy, the latter being more subject-based than the strategy used by principals which tended to be more generic and school-wide in scope and focus. Regarding the relationships, principals, who have a more clearly defined role beyond the school, put more focus on maintaining external

relationships to promote teacher development while the middle-level is more within-school focused.

8.4 Layers of 'The Context' of Middle Leadership and Their Interrelated Influences

The school middle leadership both influenced and was influenced by a complex web of interrelationships and contexts (e.g., Busher & Harris, 1999; Moshe, 1999; Hoult, 2002; Hirsh & Bergmo-Prvulovic, 2019). The findings of this study extend our understanding of the influences on middle leadership by highlighting the interrelated and cross-level influences. In the previous chapters, I considered data provided by the participants that suggested factors that impacted the instructional leadership of the TRG heads. There were multiple potential antecedents within and beyond schools, such as individual professionalism, principal leadership, teacher- and school-level factors and teams working beyond schools, that may have individually and collectively influenced the way the TRG heads enacted their leadership. These factors reflected multi-level influences which included macro, organisational, and personal factors.

The influences from multiple domains formed the modus operandi of the TRG heads in advancing teacher learning. In this section, close attention is paid to the macro-meso-micro factors and their impact on the leadership enactment of the TRG heads. This focus helped capture the core dynamics of TRG heads and further reveal why their leadership is enacted in certain ways. Figure 8.2 shows the relationship between the leadership roles, enactment, and related influences. Figure 8.3 demonstrates how these influences interact to impact middle leadership for teacher learning.

Figure 8.2. The relationship between leadership roles, enactment and related influences

Role →
1. Hub
2. Forerunner
3. Role model
4. Peer mentor
5. Knowledge broker

Relational and organizational influences

Four core practices

Professional context
1. Subject matter expertise and teaching experience
2. Leadership experience and interpersonal skills

1. School conditions
2. Various staff groupings

External forces
1. The district
2. External experts

Patterns of leadership enactments
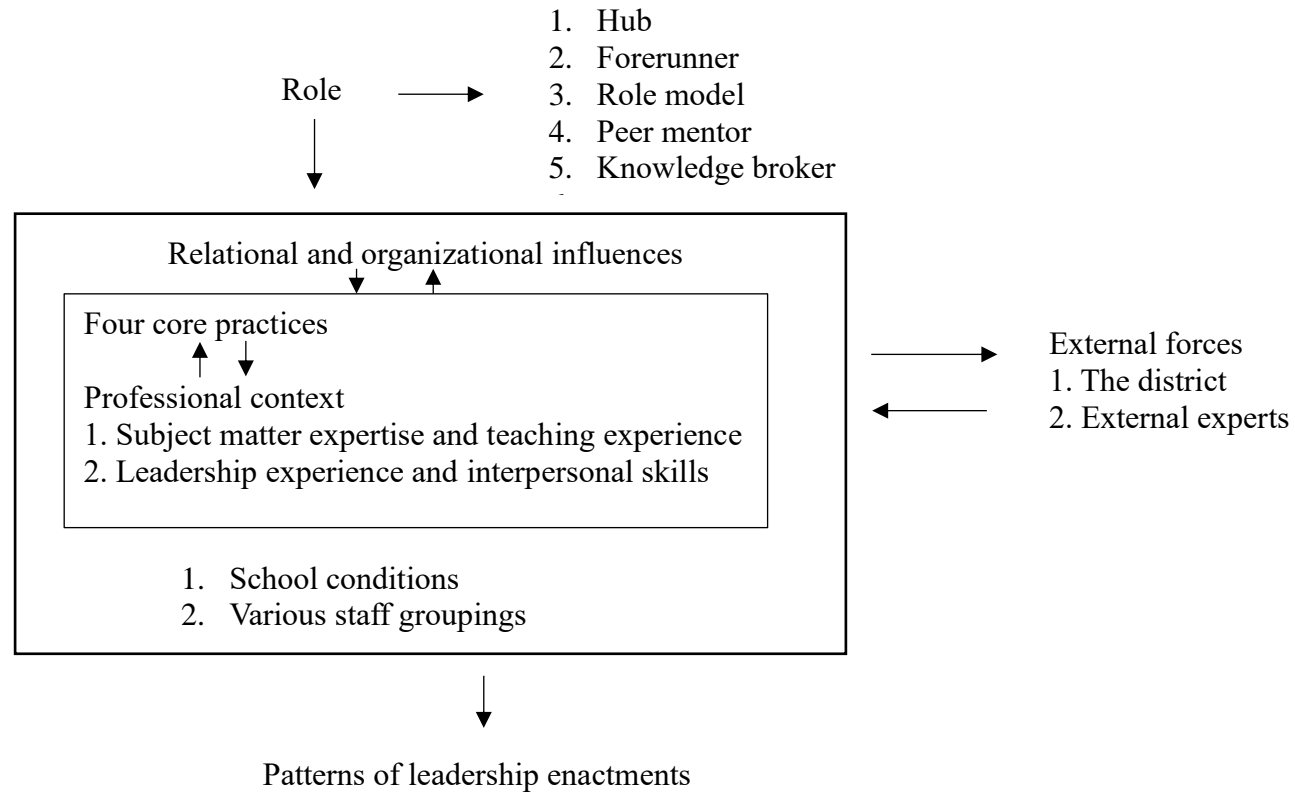
Figure 8.3. Multi-level and interrelated influences
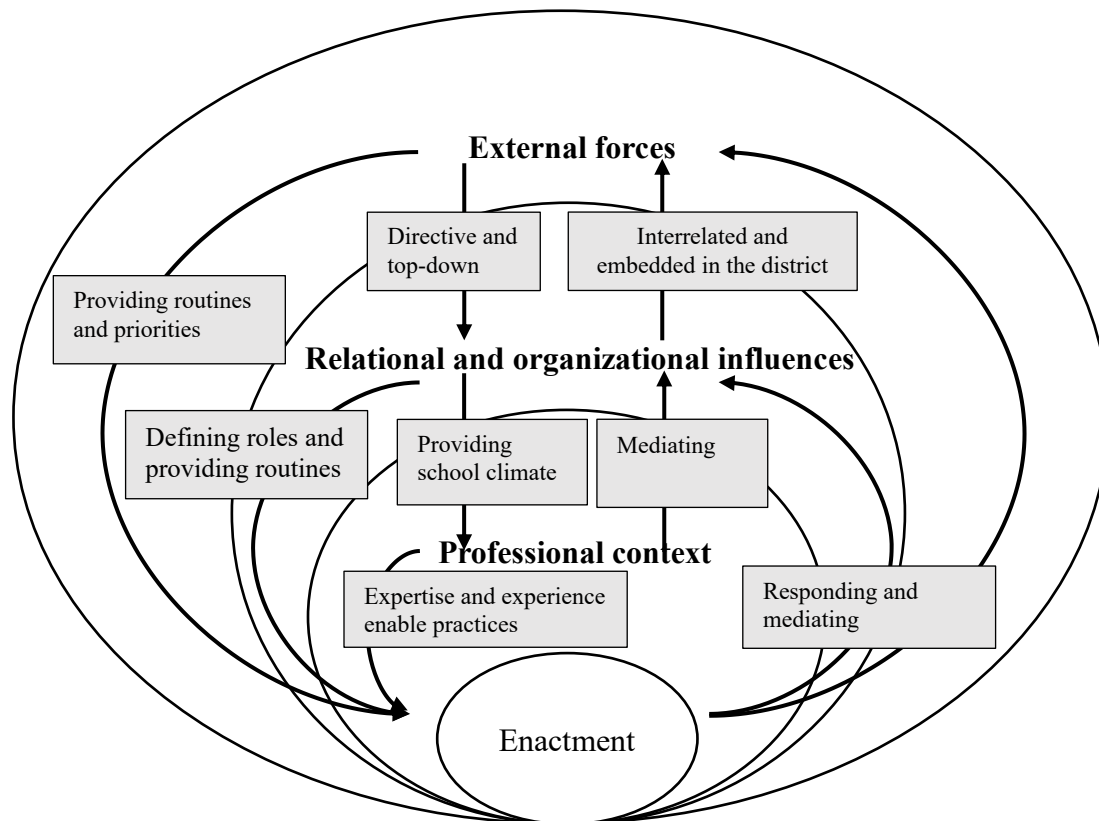
The brokering role of the TRG heads highlights the multi-level influences which are intertwined and influence each other, both within and across levels (Ainsworth, Costa, Davies & Hammersley-Fletcher, 2022; Busher, Hammersley-Fletcher, & Turner, 2007). External forces, such as external experts and professional associations, had an impact, not only on the leadership enactment of the TRG heads, but also on their individual professionalism and the school-wide context, which were interrelated and embedded in the district contexts. Schools contexts mediated external demands and resources. External scenarios created a general teaching-research environment and routines for schools and TRG heads' practice, but the external forces were not fully responsible for shaping the TRG heads' leadership enactment. The school-wide context and various staff groupings

interacting with middle leaders, which formed the conditions and norms, also influenced the interaction patterns between the teachers and the TRG heads. Thus, the leadership practices of the TRG heads were under the influence of the "colour blending board," which is a complex interplay of personal agency, inner school influences and out-of-school partners.

External scenarios and school context exist alongside exerting influence on middle leadership enactment. The present study's findings are consistent with previous findings suggesting that external forces exert directive influence on middle leadership (James & Hopkins, 2003; Tay, et al., 2020; Shaked, & Schechter, 2019) while schools define middle leaders' role (Tapala, Van Niekerk, & Mentz, 2021). External forces and school conditions may influence the choice of strategies selected from the middle leaders' toolbox to shape teacher learning outcomes. The TRG heads' boundary practices shaped the school and the external context through their involvement in the school-based and district teaching-research activities and through their translation and implementation of teaching-research agendas and planning. This finding extends the understanding of how middle leaders are responsive to and exert intermediary influence on school context and the wider community to lead teacher learning.

The middle leaders made sense of their leadership role in response to the dynamic interactions between internal goals and needs, and external reform demands (see Javadi, Bush, & Ng, 2017; Shaked & Schechter, 2019). The middle leaders who were good teachers with teaching experience won the confidence of their team (Paranosic & Riveros, 2017). While the TRG heads exerted and relied on experience as their main knowledge source to lead teacher learning (Irvine & Brundrett, 2019), the schools provided them with

professional status and authority that put them in a position to improve teacher learning. District teaching-research offices and education bureaus developed shared agendas. The school districts varied, resulting in a variety of contexts, with the schools having differing concerns and priorities. These external forces used a top-down approach to exert directive influence on the school middle leadership. The TRG heads drew on directions and priorities from the district teaching-research offices and education bureaus to plan their teacher developmental activities. Together with the school-wide context, personal agency influenced the way in which the TRG heads organised collegial interactions within specific groups of teachers and implemented the agendas.

In addition, school-wide contexts empowered the TRG heads, provided organisational routines and influenced leadership routines and relational structures. Connections with a wider professional learning network, such as district-teaching-research activities and master teacher studios, compensated for the school contexts which were not conducive to the instructional leadership practices of the TRG heads. Subject matter expertise, teaching experience, leadership experience and skills, and integrated external and internal support encouraged the leadership of the TRG heads in the challenging school context.

8.5 In Search of the Middle Influence: Emerging Propositions

The following propositions are derived from the findings to capture the major insights of the study. They may be useful not only in terms of understanding the role of middle-level instructional leaders in promoting teacher learning, but also in cross-societal discourse.

8.5.1 Co-learning, Participation, and Brokering are Integral to Middle Leadership

The multiple perspectives and observational case studies of middle leadership in the six schools demonstrate that co-learning, participation and brokering are understood as the very essence of middle leadership. The data indicates that the TRG heads engaged their role as co-learners and participants, which resonates with the findings of Lipscombe, Tindall-Ford and Grootenboer (2020). The TRG heads practised participative instructional leadership to lead teacher learning. Thus, as suggested by Hallinger (2005), effective instructional leaders are always visible. The TRG heads fulfilled their instructional leadership tasks (e.g., routinising teaching-research activities and encouraging and ensuring participation, facilitating apprenticeship models, supervising and motivating lesson preparation groups and grade groups, actively learning from external resources and sharing with teachers), while engaging in group activities as participants to model instructional practices and inquiry skills and dispositions, and to foster mutual discussion within the groups. As co-learners, the TRG heads sharpened their modelling role by participating in several professional associations and learning from teacher experts and researchers.

The TRG heads regarded their role as participants and learners, rather than leaders, in the activities to support changes in the teachers' knowledge, practices, and beliefs. During the teaching-research processes and practices, the TRG heads, believing that the teachers had the potential to solve the problems that they identified, were co-learning agents, while they facilitated the engagement of teachers in the learning processes. The TRG heads positioned themselves as co-learners and built shoulder-to-shoulder relationships with the teachers to

co-construct knowledge and improve teaching in their schools.

In addition, the data enrich the understanding of middle leaders' brokerage practice within and beyond the school to support teacher learning in a hierarchical educational context. Middle leadership is structurally and relationally exercised between top-level educational leaders and teachers (Grootenboer, Edwards-Groves, & Rönnerman, 2014). The TRG heads maintained relationships not only with themselves and the teachers they are leading, but also between themselves and their own leaders, as well as between themselves and their co-middle leaders. They mutually reinforced agendas and activities and coordinated teachers' actions (see Tang, Bryant, & Walker, 2022). The findings of this study are consistent with those of previous research that suggests the brokerage of middle leaders is essential for leading teachers (Bryant, Wong, & Adames, 2020; Koh, Gurr, Drysdale, & Ang, 2011).

8.5.2 Middle Leaders Engage in Multiple Spheres to Lead Teacher Learning

Middle leaders engaged in one or more spheres (see Dinham, 2007) and acted as hubs to connect different levels of teacher learning. The TRG heads worked in the subject groups, schools, and a wider professional network (Bryant & Rao, 2019; Gurr & Drysdale, 2013) and helped the communities at different levels to understand each other's perspectives (Busher, Hammersley-Fletcher, & Turner, 2007). These findings extend our understanding of the scope and focus of the middle-level instructional leaders' efforts in teacher development. The TRG heads worked in one or more spheres. They shared ideas with the teachers and coached or mentored teachers individually or in teams. They supported teachers through an apprenticeship model which was based on a *shifu-tudi* (mentor–mentee)

relationship. The TRG heads optimised the conditions of the TRGs and routinised activities for the teachers' on-the-job learning. They engaged in systematic teaching-research activities to develop their expertise and reinforced their modelling role.

Middle leaders put an emphasis on drawing together a range of individuals and agencies to make the best resources available to teachers (Dinham, 2007). The results of this study found that the TRG heads pulled in resources from the principals, districts, and other external resources, such as teacher experts, to support their work within all of the spheres. These spheres involved subject-based groups, cross-subject groups, school-wide teacher groups, and external professional associations and groups.

The TRG heads worked in groups with other formal or informal leaders, but they may not have been leaders themselves. This pipeline experience enriched their practice and expanded the advice-seeking networks of teachers, and the way the teachers exchanged information. The TRG heads engaged in boundary-spanning work and moved back and forth among their various spheres of influence, from individual work to more collaborative and public work, to mobilise resources and support teachers. Meanwhile, the TRG heads engaged the teachers in shaping professional expertise in various spheres, including in their subject groups, cross-subject groups, school-wide activities and external teaching-research activities. The middle leaders had contact with several sources of influence (Bush, 2023) and helped establish the connections between several levels of teacher learning (Zhang, Wong & Wang, 2022).

8.5.3 Paternalistic Attitudes towards Teachers and the Use of Benevolent and Servant Leadership are Seen as Appropriate Middle Leadership

The findings highlight the TRG heads' contribution as instructional leaders in teacher learning. The TRG heads combined the paternalistic, benevolent, and servant leadership with instructional leadership to lead teacher learning. This finding enriches the understanding of previous studies on how middle leaders build relational trust as a key resource for establishing professional learning communities (Cheng, Chou, Wu, Huang, & Farh, 2004; Edwards-Groves, Grootenboer, & Ronnerman, 2016). The middle leaders in China demonstrated care and concern for both teaching practice and the teachers' personal well-being. They built a family-like culture in the teacher groups to create trust with and among teachers. The TRG heads enacted a parent-like role in the teacher groups towards the teachers to foster their sense of belonging and trust. The TRG heads promoted interpersonal harmony to establish *guanxi* (connections). The teachers were like brothers and sisters in the groups. They developed warm feelings and gratitude for the TRG heads, thus forming a relational bond and a reciprocal relationship to continue the positive cycle.

Simultaneously, the TRG heads manifested benevolence and servant leadership (Ghosh, 2015; Shaw & Liao, 2021; Wang & Cheng, 2010; Wu, Qiu, Dooley, & Ma, 2020). They liked to listen to the teachers' needs and were able to be empathetic. They expressed individualised care and promoted individuals' professional learning in their groups. The TRG heads preferred to serve the teachers rather than lead them. They attached importance to maintaining good relationships among the teachers, paid attention to the teachers' difficulties, and provided timely assistance to develop positive work attitudes. The teachers reported that they felt attached to the groups and teaching profession due to the strong

support and care provided by the TRG heads. The findings showed that this approach of combing the paternalistic, benevolent, and servant leadership with instructional leadership was appropriate for moving teachers forward.

8.5.4 Successful Middle Leadership can be Seen in the Challenging School Contexts

The findings of Farchi and Tubin (2019), Gurr (2019), Leithwood (2016) and Peacock (2014) indicate that the school context (e.g., school structure, culture and climate, and school resources) may influence middle leaders' enactment of instruction leadership in a particular way. Similarly, the findings reveal the role of the school's performance in shaping the leadership of the TRG heads while showing that successful middle leadership is also evident in challenging school contexts.

In this study, two successful TRG heads were found in low-performing schools. The individual professionalism of the TRG heads played a significant role in their leading of teacher learning. These two TRG heads were experienced and effective teachers with a number of teaching rewards and showed that successful middle leaders have good a depth and breadth of pedagogical and subject knowledge with a good understanding of teaching (see Dinham, 2007). Their years of middle leadership and teaching experience provide a foundation for advising teachers (see Heng, & Marsh, 2009; Ho, Bryant & Walker, 2022; Irvine, & Brundrett, 2019). These two TRG heads found spaces in which to exert their agency, although there were many constraints on them, such as the small sizes of groups and the insufficient professional training provided, while dealing with negligent students. The two TRG heads were able to generate positive change in teacher development. The

TRG heads used goals to encourage and motivate the teachers. They believed that the teachers had untapped potential for growth and development.

Simultaneously, the TRG heads maintained supportive relationships with and among the teachers (Zhang, Wong, & Wang, 2022) and maintained good relationships with school leaders and external experts (e.g., teaching-research officers and hosts of master teacher studio) to cope with tensions and problems related to their particular circumstances. The findings revealed the positive relational structure and support of different groups of staff, including teachers, peer leaders, and principals that contributed to the effectiveness of the TRG heads in leading teacher learning.

The study indicates that principals empower and reinforce middle leaders' leading role in teacher learning and put structures in place to strengthen middle leaders' leading role. The findings show that support from principals is important for middle leaders to promote team performance (see Bryant & Walker, 2022; Dinham, 2007). Peer leaders and teachers' engagement also shows middle-level effectiveness and is consistent with teachers' attitudes and relationships influencing middle leaders' enactment (James, & Hopkins, 2003; Leithwood, 2016). Moreover, external experts professionalize middle leadership by enhancing subject expertise and working with middle leaders. This finding extends the understanding of how external forces support middle leadership in teacher learning.

The teachers reported being strongly committed to the schools due to the support they received from the TRG heads and the positive climate the TRG heads created. There were three discernible supporting conditions contributing to the success of the TRG heads: individual professionalism, strong and supportive principal-driven success, and having

various groupings of staff engagement and understanding with external experts' involvement and professional collaboration.

8.5.5 Layered Instructional Leadership Advances Teacher Learning

Studies have shown that middle leaders are asked to take on addition instructional leadership responsibilities that were traditionally considered the domain of the principals (Brown, Rutherford, & Boyly, 2000; Bush, 2023; Dinham, 2007; Harris, 2005). The present study, thus, reconsidered the role of middle leaders and middle leadership by conceptualizing their role as instructional leadership. Instruction-oriented middle leadership has been recognized as the primary source of expertise to improve teaching and learning (Leithwood, 2016).

The core dimensions of instructional leadership and the middle leadership model derived from the literature (see Chapter 3) share certain characteristics. Principals need to collaborate with instruction-oriented middle leaders, such as subject leaders, to facilitate teaching and learning in schools where specialist subject knowledge is required to underpin instructional effectiveness (Bush, 2015). According to the narratives of the TRG heads, the instructional leadership tasks were not carried out independently but in close and hierarchical relationships with the teaching-research officer, the principal, and the director of the office of teaching affairs. Instruction-oriented middle leadership is a potential source of instructional leadership (Bush, 2023; Printy & Marks, 2010). However, instruction-oriented middle leaders and principals contribute to instructional leadership in different ways.

Consistent with the view that successful school leadership is layered (Day, Gu, & Sammons, 2016), the findings revealed that the layering of middle leaders' work often happens in parallel with other leadership practices, especially when middle leaders enact leadership with the full support of and in collaboration with the principal (Bush, 2003) and peer leaders (e.g., heads of lesson preparation groups) and teachers. Promoting teacher learning is the most influential instructional leadership practice (Blasé & Blasé, 1998; Walker & Qian, 2022). Principals establish structures and processes of professional learning (Hallinger, Gümüş, & Bellibaş, 2020; Walker & Qian, 2022). Middle leaders engage in mediating the processes of professional learning. They contribute to instructional leadership when they interact productively with teachers, observe teachers and are observed by them, and seek to improve their professional practice.

The results of the study echo previous findings, demonstrating that the principal and the middle leaders become partners in supporting, co-leading, and enabling professional practices through instructional leadership (Bush, 2015; Bassett, 2016). They also extend the understanding of how middle leaders and other school leaders and even wider networks and experts (such as the teaching-research officers) interact in instructional leadership. Layered instructional leadership crafts the coherence and stability of teacher learning at the school, department and individual levels and helps establish internal and external professional learning of teachers.

8.6 Chapter Summary

This chapter contains a discussion of the proposed model and how the potential factors intertwined to influence the TRG heads in leading teacher learning. Five emerging

propositions were derived from the findings: Co-learning, participation, and brokering are integral to middle leadership; middle leaders engage in multiple spheres to lead teacher learning; paternalistic attitudes towards teachers and benevolence and servant leadership are seen as appropriate middle leadership; successful middle leadership appears in challenging school contexts; and layered instructional leadership advances teacher learning. The next chapter concludes with the implications of the study.

CHAPTER 9 CONCLUSION AND IMPLICATIONS

9.1 Scope of Chapter

In this final chapter, I explain the major contribution of the study by briefly revisiting the research process and major research findings. I also discuss how the findings relate to the knowledge base of instruction-oriented middle leadership, the limitations of the study, and possible future research in this area.

9.2 An Overview of the Research Process

This study is concerned with how to promote teacher learning while focusing on school leaders with instructional support functions at the middle level. The purpose of the study is to understand how the TRG heads enact instructional leadership and what drives them to enact in particular and different ways in leading teacher learning. The overarching question posed is: How is the instructional leadership role of TRG heads understood, exercised, and shaped?

The study was triggered by the conceptual and pragmatic gap identified in the understanding of instruction-oriented middle leadership in China. Middle leaders' contribution to school leadership has expanded with their increasing involvement for improving teaching and the learning process (Bryant, 2019; Day, Sammons, Hopkins, Leithwood, & Kington, 2008; Leithwood, Harris, & Hopkins, 2020). They increasingly enact the role of teacher motivators, coaches, and mentors to enhance student learning outcomes (Dinham, 2007). The role of middle leaders ranges from managing tasks to supervising teachers within and beyond their traditional sphere of influence (Day & Grice, 2019). In China, as middle-level leaders, the TRG heads (an example of a middle leader) may face more complex situations due to the rising expectations of their role in leading teacher learning and the shifting context brought by wave after wave of reform. There is a need to define the expanded role of the TRG heads to enhance

their enactment. However, little empirical evidence has explored the leadership of the TRG heads in China. The study thus aims to contribute to what remains a largely unsophisticated knowledge base.

I first reviewed school middle leadership literature to catalogue the state of the art and the knowledge of middle leaders. Both empirical evidence and theoretical perspectives were considered. A review of the research indicated middle leaders play a primary role in leading teacher learning but there was insufficient empirical evidence on areas where the middle leaders have the opportunity to substantially impact teacher learning and how they exert the impact.

To fill this conceptual gap, this study explores how middle leaders exert influence over other teachers and spheres of influence to understand the teacher development dimension of instructional leadership enacted by middle leaders. I then reviewed the theory of instructional leadership and summarised the core dimensions of instructional leadership from Hallinger and Murphy's instructional leadership model, a synthesised model of leadership for learning and Walker and Qian's instructional leadership model in China. Middle leadership dimensions reflect these key categories of instructional leadership (see table 3.3). Therefore, it is possible that instructional leadership exists not just in principals but at the middle-leader level as well. Because the study was conducted in the Chinese context, Walker and Qian's (2022) Chinese instructional leadership model became an important part of the analytical framework, guiding the study. The focus of this study thus examines specific leadership practices of middle-level instructional leaders, specifically TRG heads who work directly with teachers and engage teachers in professional learning to make sense of instructional leadership in understanding and developing teachers at the middle-level leadership positions in China.

Informed by the research purposes and research questions, a qualitative multiple-case study was considered the most appropriate for this research. Stratified purposeful sampling was used in order to select participants from primary schools of different types and ranks.

Interviews, participant observation, and documents formed the chief data collection method. Miles and Huberman's (1994) framework was used for data analysis involving data reduction, data display, and drawing conclusions. The coding process involved several levels of analysis, ranging from the descriptive to the inferential. Regarding cross-case analysis, the case-oriented and variable-oriented approaches were integrated. The case-oriented method makes it possible to understand differences across cases and the variable-oriented approach enables one to look for themes cut across cases (Miles & Huberman, 1994).

Through the data analysis, four major categories of instructional leadership practices enacted by the TRG heads emerged. I also found the influencing factors and their intertwined influences on the leadership of the TRG heads. These constituted the major findings of the study.

9.3 Summary of the Major Findings of the Research

The investigation into instruction-oriented middle leadership in China was guided by the following set of questions:

1. How is the TRG head's role as a leader of teacher learning constructed?
2. How does the TRG head lead teacher learning?
3. What conditions influence the TRG head's leadership and how do these conditions interplay together?
4. How can the findings enable international scholars and practitioners to learn from the Chinese experiences?

I coded and analysed the data and presented the major research findings related to the instructional leadership role and practices of the TRG heads in advancing teacher learning, as shown in table 9.1. A descriptive model of middle leadership for teacher learning indicates that

the "hows" occur across roles. The model comprises various development strategies that are adopted by the TRG heads to enhance teachers' teaching and research capacity involving four core dimensions: nurturing practice-embedded professional learning, optimising conditions for teacher engagement, leading teachers' research-informed practice, and drawing on external resources to develop teachers, with 18 specific practices.

Table 9.1 Instructional leadership role and practices of the TRG heads in leading teacher learning

Role construction (interrelated roles)	Domains of practice	Specific leadership practices
	Nurturing practice-embedded professional learning	1. Collaborating with school leaders to lead teacher learning 2. Leading by example and modelling good teaching practice 3. Working with teachers to help them translate improvement needs into specific actions 4. Routinising teaching-research activities and encouraging and ensuring participation 5. Brokering and facilitating the apprenticeship model
Hub Peer mentor Role model Forerunner Knowledge broker	Optimising conditions for teacher engagement	1. Building good working relationships and fostering trust 2. Creating a caring and supportive learning culture 3. Promoting collective responsibilities and professional collaboration 4. Fostering knowledge sharing
	Leading teachers' research-informed practice	1. Designing and managing research projects with teachers 2. Encouraging teachers to use research to improve teaching and learning 3. Leading deep conversations and cultivating a research atmosphere 4. Enhancing the teachers' research awareness and capacity 5. Offering guidance for teachers on research-based practice
	Drawing on external resources to develop teachers	1. Engaging in external resources and sharing with teachers to broaden the resource base for teachers 2. Seeking external professional learning opportunities for teachers 3. Facilitating teachers' participation in networked professional learning 4. Establishing the connections and balancing the ties between teacher learning and external demands and resources

Table 9.2. Professional context, relational and organizational, and external forces contributing to divergences across the TRG heads

Factors	Sub-dimensions	Major influences
Professional context	Subject matter expertise and teaching experience	The subject matter expertise and teaching experience of the TRG heads reinforce the middle-level instructional leaders' modelling role and maximise their influence on teachers because of their limited authority.
	Leadership experience and interpersonal skills	The leadership experience of the TRG heads informs and refines their understanding of middle leadership in advancing teacher learning. Findings revealed that interpersonal skills influence the interaction patterns between the TRG heads and teachers. These skills help the TRG heads foster a trusting and sharing relationship (like brothers and sisters) with and among teachers, which has a positive impact on the culture within the subject groups.
Relational and organizational influences	School conditions	I observed differences in the TRG heads in schools with different school size and leadership structure allocating different amounts of time to teaching and administrative tasks. For example, although the TRG heads drew upon the same range of leadership strategies, they prioritised within these strategies across varying school contexts.
	Various staff groupings	The TRG heads worked closely with and through the teachers and school leaders to achieve teaching excellence, and thus were influenced by these various staff groupings; e.g., strong and supportive principalship positively influenced the TRG heads' commitment to investing in the professional growth of teachers; and the teachers created a climate of respect and rapport in the groups by sharing effective practices and resources and listening to and helping each other. This positive atmosphere contributed to the positive attitude towards the work of the TRG heads.
External forces	The district	The district created a general teaching-research environment, routines, and directions for the TRG heads' practice; e.g., the district's directions and priorities in teacher learning shaped the priorities of the work of the TRG heads in building teacher capacity.
	External experts	The external experts facilitated the TRG heads' expertise; e.g., the teaching-research officers enhanced the leadership of the TRG heads by using collaborative working patterns, leading by example, passing on subject knowledge and teaching-research skills, and providing teaching resources to the TRG heads.

The brokerage role of the TRG heads highlights the multi-level factors which are intertwined with each other, both within and across schools. I identified the key factors that influenced the leadership of TRG heads in driving teacher learning. Six interconnected influences of middle leadership for teacher learning were identified: subject matter expertise and teaching experience; leadership experience and interpersonal skills; school conditions; various staff

groupings; the district; and external experts. Different levels of these factors individually and collectively influenced the TRG heads in leading teacher learning creating interpretations on why the TRG heads adopted certain roles and developed and applied certain specific strategies. The teaching and learning context varied in different school districts, resulting in a variety of contexts, with the schools having differing concerns and priorities. External forces shaped middle leadership in schools by using a top-down approach and exerting directive influence. Schools provided organisational routines, influenced leadership routines and relational structures, defined the TRG heads' role and empowered the TRG heads with authority that put the TRG heads in a position to improve teacher learning. Both external scenarios and school context influenced middle leadership enactment. The TRG heads responded to and internalized external expectations and developed teacher developmental activities drawing on the directions and priorities from the district teaching-research offices and education bureaus. The TRG heads acted on the demands of the district and school and teachers' needs, while aligning teachers' practice with the demands of the district and school.

I weaved the major research findings into more contextualised interpretations to offer an initial account of what the data revealed about inherent features of instruction-oriented middle leadership in the Chinese educational context. The instructional leadership of middle leaders was conceptualized in terms of four core dimensions of leadership practices and a four-layered process of the enactment. A set of five propositions was further suggested that attempted to succinctly capture the major features of the role of the instruction-oriented middle leadership in China:

> **Proposition 1**: Co-learning, participation, and brokering are integral to middle leadership
> **Proposition 2**: Middle leaders engage in multiple spheres to lead teacher learning
> **Proposition 3**: Paternalistic attitudes to teachers and the use of benevolent and servant leadership are seen as appropriate middle leadership
> **Proposition 4**: Successful middle leadership can be seen in challenging school contexts

Proposition 5: Layered instructional leadership advances teacher learning

As such these may venture deeper into the nature and impact of middle leaders in teacher development in Chinese educational context.

Table 9.3 provides an overview of the study of the middle-level instructional leaders in leading teacher learning; however, further research is necessary to substantiate these findings. Despite this, the findings hold important implications for knowledge base, future research, and practice of middle-level instructional leadership in China. The following sections describe the significance and limitation of the study, and the implications.

Table 9.3. Overview of the study of the TRG heads

Research questions	Former literature	Research niches	Intellectual contribution
1. How is the TRG head's role as a leader of teacher learning constructed? 2. How does the TRG heads lead teacher learning?	The building of teachers' capacity cannot be seen as only part of the middle leaders' role, but rather be understood as the very essence of their leadership. The opportunity to have an influence and to lead teachers was prioritized by middle leaders. The research concerned the potential and major influence of middle leaders on understanding and developing teachers. Their influence often relates to maintaining the teachers' focus on continuing with their learning and improving their practices, establishing structures for teacher learning, and empowering teachers' leadership potential.	- Understanding of the breadth, depth, and nature of middle leadership for teacher learning has yet to be fully grasped. The nature of this role, domains of influence, how they encourage teacher growth and professionalism, how they prioritize their strategies, how they find support to foster teacher learning is still under-explored. - Rely on self-report.	- Extend the conventional notion of instructional leadership. Specifically, re-conceptualize and provide a concrete explanation of instructional leadership enacted from the middle-level position, develop a descriptive model of middle-level instructional leadership for teacher learning, suggest four areas where the middle leaders have the opportunity to impact teachers and how they impact them. - Identify four processes middle leaders contribute to teacher learning. - Include different stakeholders' perspectives on middle leaders' influence on teacher learning.
3. What conditions influence the TRG head's leadership and how do these conditions interplay together?	Empirical evidence suggested multiple (e.g., expertise and professional learning, leadership approaches of school) and different-level (professional context, school and relational influences and external forces) factors that act on middle leadership	- A lack of attention has been paid to the dynamic, interactional nature of different context types and levels on school middle leadership for teacher learning. - A lack of factors that are specific for the process of promoting teacher development by middle leadership.	- Extend the understanding of how the influencing factors individually and collectively influence middle leadership for teacher learning. - Provide a more rounded and in-depth exploration of leadership-context relationship.
4. How can the findings enable international scholars and practitioners to learn from the Chinese experiences?	-	- Although China has accumulated a great deal of middle-level professional practices in leading teacher learning over the past few decades, it remains largely hidden from international audiences.	- Synthesize a repertoire of basic leadership strategies for driving teacher learning. - Clarify levels of leaders and levels of impact.

9.4 Contribution and Limitation of the Study

9.4.1 Contribution of the Study

This study comprises an examination of how middle-level instructional leaders, principals, and teachers make sense of the middle-level instructional leaders' role in teacher development in schools and the way in which middle-level instructional leaders locate their leadership strategies and conditions that affect the middle-level instructional leaders' work. This topic is important at both the theoretical and practical levels.

At the theoretical level, such a study can increase the current knowledge base in two domains: teacher learning and middle-level instructional leadership. This study offers empirical evidence providing an overview of middle leadership for teacher learning and how and why the leadership is enacted to boost teacher learning. It develops regionally focused knowledge in instruction-oriented middle leadership in a non-Western country, namely China, where research on middle-level instructional leadership and practice has yet to be conducted and appears to be largely missing in the international literature.

The findings enhance understandings of Chinese middle leaders' sphere of influence at schools and facilitate cross-societal discourse. Because the process of how they support teacher learning through instructional leadership is still under-explored, this study pays particular attention to complex interactions between instruction-oriented middle leaders, teachers, and variables affecting the leadership process. The teacher development function of middle leaders has been largely understood from their own perception. It is unknown, however, how principals and teachers perceive their leadership for capacity building among teachers. The study offers the possibility of going beyond self-report as the main way of capturing the impact of middle

leaders on teacher learning to include different perspectives. The mediating variables discovered later can be tested through quantitative forms of research.

The study illuminates a joint and shared understanding of how instructional leadership is exercised at the mid-level leadership position to influence teacher learning. I developed a descriptive Chinese model that frames a core set of middle-level instructional leadership practices to expand the conventional notion of instructional leadership which has often emphasized the principal's leadership role. The model further explains how middle leaders support teacher learning in a hierarchical educational context and provides a useful starting point when studying middle leadership for teacher learning. The model extends the theorisation of instructional leadership by investigating its use in middle leaders to drive teacher learning. More additional empirical research is necessary to provide insights into its validity and applicability. Further, the study provides insights about how conditions shape the TRG heads' enactment of instructional leadership for driving teacher learning.

On a practical level, the perspectives of the TRG heads constitute valuable and potent insights into the teacher learning system in schools. This may provide an in-depth understanding of how instruction-oriented middle leaders can contribute to teacher development and improve student learning. The results of the study can serve as a basis for exploring effective middle leadership practices internationally and facilitating the intersection of instructional leadership and middle leadership research. The model proposed in the study can also help middle leaders reflect on their existing leadership practices. The leadership practices categorizing which middle leaders advance teacher learning could be useful for those in similar contexts by providing them with a reference when supporting teacher learning. The three categories of mediating variables help to reshape middle leadership with different stakeholders and conditions at different levels.

9.4.2 Limitation of the Study

My findings should be interpreted in light of its limitations. First, the research findings have limited generalisability. I selected a sample of TRG heads who represent one defined population. Thus, the results can be generalised to that particular population, but not beyond it. Even within the defined population, there are most likely TRG heads for whom generalisations do not hold. Moreover, the choice of the research site also limits the generalisation of the study. Guangzhou, the capital of Guangdong province, was selected due to its advanced economy and education. Guangzhou was labelled one of the smart education demonstration areas in China in 2019 for its innovations in education. Guangzhou is also a pilot area for the national curriculum reform: schools in Guangzhou are required to pilot teaching improvement methods ahead of schools in most parts of China (Qian, Walker, & Li, 2017). Other regions can learn from the experience from the Guangzhou case.

Secondly, few studies have investigated the process of how middle leaders as source of instructional leadership extert impact on teacher learning; thus, it is difficult to draw implications from previous research. Accordingly, this study is an exploratory inquiry into the Chinese instructional leadership practice of middle leaders to lead teacher learning. Because the focus is on instruction-oriented leadership, the study does not extend to those holding middle-level leadership positions related to pastoral care or non-teaching roles.

9.5 Implications of the Study

9.5.1 Implications for Policy and Practice

The middle-level is a key part of schools and education systems worldwide (Hargreaves & Shirley, 2020). Middle-level instructional leaders working directly with teachers are an increasingly important link between top-level leaders and teachers within-and across-schools

helping to cultivate and embed successful professional practices (Gurr, 2019). The research on the TRG heads, a typical middle-level leadership position, contains valuable and potent insights into instruction-oriented middle leadership for teacher learning which can facilitate an understanding of how middle leaders spread their wisdom across classrooms and promote teacher learning. The results of the present research may serve as a basis for sharing effective middle leadership practices internationally strengthening the link between instructional leadership and middle leadership research. The leadership practices presented in the findings may also be useful for those in similar contexts by providing them with a reference when supporting teacher learning while helping them reshape teacher development strategies.

The instructional leadership of the TRG heads needs to be enacted with the full support and in collaboration with other school leaders (e.g., principals, the directors of office for teaching affairs, and heads of lesson preparation groups). This study revealed the instructional leadership activities of middle leaders at both individual and collective levels (see Bennett et al., 2007; Heng & Marsh, 2009). The TRG heads engaged in multiple spheres (e.g., subject-based TRGs, cross-subject TRGs, external teaching-research activities, and professional associations) to support teacher learning.

The brokering role of the TRG heads was highlighted in the study. TRGs, lesson preparation groups and the teaching-research system provide structural and recurrent support for the TRG heads to lead teachers as co-learners and participants. Since the findings emphasize the multi-level nature and four-fold process of the instructional leadership practices of middle leaders, the middle leaders' traditional supervisory role needs to be redesigned and the school structure and policies need to be re-considered to support their instructional leadership. At the same time, their subject knowledge and leadership skills need to stay up to date.

9.5.2 Implications for Theory and Research

I recommend reorienting middle-level roles towards instructional leadership. The concept of instructional leadership has moved beyond a simple description of a principal's role to understanding it as multi-level, multidimensional, and highly interactive practices that may need to expand to include the practices of other sources of school leadership (Hallinger et al., 2018; Harris, 2003; Marks & Printy, 2003; Nguyen et al., 2020). Middle leaders are regarded as an under-utilised source of instructional leadership (Leithwood, 2016). This study findings reveal that there is a need to define the concept of instructional leadership more broadly to include the middle-level leadership position. The findings enhance the understanding of Chinese middle-level instructional leaders' sphere of influence at schools, namely, areas where the middle-level instructional leaders have the opportunity to exert influence on teachers and provide a foundation for cross-societal discourse around instruction-oriented middle leadership. It adds to the understanding of how instructional leadership at the middle level influences teacher learning.

This study frames the leadership of the TRG heads in leading teacher learning under the conception of instructional leadership. Under this perspective, the leadership of the TRG heads is categorised into a four-dimension conceptual model describing the Chinese context in which middle leaders engage in instructional leadership to advance teacher learning. In this model, I build on the understanding of the core dimension of instructional leadership and relate it to Walker and Qian's (2022) conceptualization of Chinese instructional leadership by expanding the parts of their framework that disentangled how the teacher development dimension was enacted by instruction-oriented middle leaders. The proposed model expands the traditional sphere of influence of instructional leadership and describes the dynamics and multi-level nature of instructional leadership by my findings suggests that middle leaders, as teachers and

teacher experts, are well-situated to provide instructional leadership practices and, consequently, make improvements to professional learning. The findings reaffirm the potency of instructional leadership as an important role of middle leaders while showing it is not only the role of the principal (De Nobile, 2018; Dinham, 2007; Spillane and Diamond, 2007).

9.5.3 Implications for Future Research

This section suggests some possible areas for future research.

The descriptive model of this study provides a conceptual framework in middle leadership for teacher learning where little prior research has been conducted. It is based on an interpretation of qualitative data generated through semi-structured interviews, participant observations and documents. The conceptual model and the research propositions emerging from it call for more research for at least two reasons. First, this study adopts qualitative research to investigate the role TRG heads play in advancing teacher learning and proposes a model presenting the way middle leaders lead teacher learning which provides a starting point for understanding instruction-oriented middle leadership.

There is a need for large-scale quantitative studies across different societies to examine and develop the proposed model and capture more potential variables. The essence of instruction-oriented middle leadership can be further understood by exploring the extent to which middle leaders can provide sufficient strategies to develop teachers. The second reason concerns the changing Chinese educational context. Present reforms require school leadership to better support teaching and student outcomes. Further research in this area would be valuable not only for middle leaders themselves, but also for the schools and systems where they are employed. This study represents one of the few attempts to stretch beyond the instructional leadership grounded in Western theory to explore the indigenous Chinese understanding of

instructional leadership. More "in-situ" research is recommended to examine the role of middle-level instructional leaders to provide cross-societal discourse.

While conducting the study, several influential factors emerged from the data analysis showing how these factors individually and collectively influence middle leadership in developing teachers. Scholars should thus explore whether some factors exert a greater influence over middle leadership for teacher learning than others. Moreover, because several themes in addition to those noted earlier in the literature review were uncovered, these may constitute fertile ground for future research. The first theme concerns tracing change in teachers with the support of school middle leaders by using a longitudinal study. The second theme relates to further investigations of multi-layer instructional leadership by including other sources of leadership, within or across schools. Third, attention is paid to more detailed comparisons between instruction-oriented middle leadership in China and other educational contexts.

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APPENDIX A: INTERVIEW PROTOCOL

Interview Guide for TRG heads

1. Could you please describe your teaching experience?

2. How long have you been a TRG head?

3. Under what circumstances and how did you get promoted to the position of head of teaching research group?

4. Why do you choose to become a TRG head?

5. What is your role as a TRG head and what is your focus?

6. How do you understand your role in leading teacher learning?

7. What shaped your understanding of your role in leading teacher learning?

8. How much authority do you have when leading teacher learning?

9. What activities do you organise when leading teacher learning?

10. How do you prioritise your tasks?

11. How do you handle differing expectations (teaching-research officer, principal, teachers) of your role?

12. What are the factors that influence your enactment?

13. What changes have teachers undergone due to your supervision, if any?

14. What practices do you consider to be effective when you promote teacher learning?

15. What challenges do you experience when leading teacher learning?

16. How have you addressed these challenges so far?

17. Before concluding this interview, is there something about your work that we have not yet had a chance to discuss?

Interview Guide for Principals

1. Could you please describe your teaching experience?

2. How long have you been working at this school?

3. How did you see the role of a TRG head? What is their focus?

4. How did the TRG head lead teacher learning?

5. How did you work with TRG heads and mentor their work?

6. What practices do you consider to be effective when TRG heads lead teacher learning?

7. Before concluding this interview, is there something about TRG heads that we have not yet had a chance to discuss?

Interview Guide for Teachers

1. Could you please describe your teaching experience?

2. How long have you been working at this school?

3. How did you see the role of a TRG head? What is their focus?

4. How did the TRG head lead your professional learning?

5. What changes have you undergone due to the supervision of TRG head, if any?

6. What practices do you consider to be effective when TRG heads lead your professional learning?

7. Before concluding this interview, is there something about the work of TRG heads that we have not yet had a chance to discuss?

APPENDIX B: CHINESE VERSION OF INTERVIEW PROTOCOL

教研組長訪談問題

1. 您能介紹一下您以前的教學經驗嗎?

2. 您當教研組長多久了?

3. 您是在什麼情況下以及如何被提升為教研組長的?

4. 您為什麼選擇當教研組長?

5. 作為教研組組長，妳的角色是什麼？您的工作重心是？

6. 您如何理解您在教師發展中所扮演的角色與起到的作用？

7. 什麼塑造了您的理解?

8. 在促進教師專業發展方面，您有多大的權力？

9. 在促進教師發展的過程中，您會組織哪些活動？

10. 您是如何確定任務的優先順序的？

11. 您如何處理對您角色的不同期望(來自教研員、校長、教師等的期望)?

12. 在工作的過程中，影響您的因素有哪些？

13. 老師在您的帶領下有發生變化嗎？如果有，發生了什麼變化呢？

14. 當您在帶領教師進行專業學習與促進教師發展的過程中，您認為哪些實踐是有效的?

15. 在促進教師發展的過程中，您遇到了哪些挑戰?

16. 到目前為止，您是如何應對這些挑戰的？

17. 在結束這次訪談之前，關於您的工作還有什麼我們沒有討論的嗎?

校長訪談問題

1. 您能介紹一下您以前的教學經驗嗎?

2. 您在這所學校工作多久了?

3. 您如何看待教研組長的角色?他們的工作重心是?

4. 教研組長如何帶領教師專業學習與發展?

5. 您是如何與教研組長合作並指導他們的工作的?

6. 當教研組長帶領教師進行專業學習與促進教師發展的過程中,您認為哪些實踐是有效的?

7. 在結束這次訪談之前,關於教研組長的工作還有什麼我們沒有討論的嗎?

教師訪談問題

1. 您能介紹一下您以前的教學經驗嗎?

2. 您在這所學校工作多久了?

3. 您如何看待教研組長的角色?他們的工作重心是?

4. 教研組長如何帶領您們的專業學習與發展?

5. 在教研組組長的帶領下,您有發生變化嗎?如果有,發生了什麼變化呢?

6. 當教研組長帶領您們進行專業學習與促進您們發展的過程中,您認為哪些實踐是有效的?

7. 在結束這次訪談之前,關於教研組長的工作還有什麼我們沒有討論的嗎?

APPENDIX C: CONSENT FORM

<u>**Consent Form and Information Sheet for PARTICIPANTS**</u>

THE EDUCATION UNIVERSITY OF HONG KONG
Department of Education Policy and Leadership

CONSENT TO PARTICIPATE IN RESEARCH

I _____ hereby consent to participate in the captioned research supervised by Dr. Darren Bryant and conducted by Jianjing Tang, who are the staff of Department of Education Policy and Leadership and the student of Department of Education Policy and Leadership in The Education University of Hong Kong.

I understand that information obtained from this research may be used in future research and may be published. However, my right to privacy will be retained, i.e., my personal details will not be revealed.

The procedure as set out in the **<u>attached</u>** information sheet has been fully explained. I understand the benefits and risks involved. My participation in the project is voluntary.

I acknowledge that I have the right to question any part of the procedure and can withdraw at any time without negative consequences.

Name of participant	
Signature of participant	
Date	

香港教育大學
教育政策與領導學系

參與研究同意書

本人 ＿＿＿＿＿＿＿＿同意參加由白達仁博士負責監督,湯建靜執行的研究項目，他們是香港教育大學教育政策與領導學系的教員和學生。

本人理解此研究所獲得的資料可用於未來的研究和學術發表。然而本人有權保護自己的隱私，本人的個人資料將不能洩漏。

研究者已將所附資料的有關步驟向本人作了充分的解釋。本人理解可能會出現的風險。本人是自願參與這項研究。

本人理解我有權在研究過程中提出問題,並在任何時候決定退出研究，更不會因此而對研究工作產生的影響負有任何責任。

參加者姓名:

參加者簽名:

日期:

APPENDIX D: PARTICIPANTS INFORMATION

Participants' information

School	Name	Position	Years of experience	Years of leadership	Subject	School type
School A (Huadu District)	Wang	TRG head	26 years	23 years	English	Low-performing school
	Lin	TRG head	17 years	11 years	Maths	Low-performing school
	He	TRG head	11 years	3 years	Chinese	Low-performing school
	Li	Vice principal	34 years	6 years	-	Low-performing school
	Chen	Teacher	27 years	-	Maths	Low-performing school
	Wu	Teacher	20 years	-	English	Low-performing school
	Liang	Teacher	16 years	-	Chinese	Low-performing school
	Chen	Teacher	8 years	-	Chinese	Low-performing school
Shool B (Huadu District)	Bi	TRG head	33years	23 years	Chinese	Low-performing school
	Tang	TRG head	20 years	15 years	English	Low-performing school
	Lan	TRG head	5 years	3 years	Maths	Low-performing school
	Xu	Vice principal	33 years	6 years	-	Low-performing school
	Zhang	Teacher	25 years	-	Maths	Low-performing school
	Li	Teacher	23 years	-	English	Low-performing school
	Ma	Teacher	22 years	-	Chinese	Low-performing school
	Yu	Teacher	10 years	-	Chinese	Low-performing school
School C (Baiyun District)	Ye	TRG head	24 years	14 years	English	Average school
	Liu	TRG head	19 years	7 years	Maths	Average school
	Li	TRG head	15 years	3 years	Chinese	Average school
	Wu	Vice principal	33 years	9 years	-	Average school
	Wang	Teacher	24 years	-	Chinese	Average school
	Liu	Teacher	15 years	-	Chinese	Average school
	Deng	Teacher	13 years	-	English	Average school
	Xie	Teacher	11 years	-	Maths	Average school

School D (Haizhu District)	Luo	TRG head	25 years	21 years	Chinese	Average school
	Lu	TRG head	23 years	12 years	Maths	Average school
	Xu	TRG head	23 years	6 years	English	Average school
	Li	Vice principal	26 years	7 years	-	Average school
	Du	Teacher	23 years	-	Chinese	Average school
	Chen	Teacher	16 years	-	Chinese	Average school
	Zhang	Teacher	14 years	-	Chinese	Average school
	Chen	Teacher	10 years	-	Maths	Average school
School E (Yuexiu District)	Zou	TRG head	22 years	16 years	English	High-performing school
	Huang	TRG head	29 years	13 years	Chinese	High-performing school
	Zeng	TRG head	27 years	7 years	Maths	High-performing school
	Lin	Vice principal	33 years	15 years	-	High-performing school
	Liao	Teacher	25 years	-	English	High-performing school
	Huang	Teacher	23 years	-	Chinese	High-performing school
	Xie	Teacher	18 years	-	Chinese	High-performing school
	Li	Teacher	12 years	-	Maths	High-performing school
School F (Yuexiu District)	Zhang	TRG head	30 years	16 years	English	High-performing school
	Wu	TRG head	25 years	3 years	Maths	High-performing school
	Chen	TRG head	25 years	17 years	Chinese	High-performing school
	Yu	Vice principal	33 years	17 years	-	High-performing school
	Li	Teacher	33 years	-	Chinese	High-performing school
	Peng	Teacher	23 years	-	Chinese	High-performing school
	Liu	Teacher	22 years	-	Maths	High-performing school
	Ruan	Teacher	13 years	-	English	High-performing school

APPENDIX E: CODE BOOK

Participant		Code	Participant		Code
School xx	Principal	A1	School xx	Principal	B1
	TRG head (Chinese)	A2		TRG head (Chinese)	B2
	TRG head (Maths)	A3		TRG head (Maths)	B3
	TRG head (English)	A4		TRG head (English)	B4
	Teacher	A5		Teacher	B5
	Teacher	A6		Teacher	B6
	Teacher	A7		Teacher	B7
	Teacher	A8		Teacher	B8
School xx	Principal	C1	School xx	Principal	D1
	TRG head (Chinese)	C2		TRG head (Chinese)	D2
	TRG head (Maths)	C3		TRG head (Maths)	D3
	TRG head (English)	C4		TRG head (English)	D4
	Teacher	C5		Teacher	D5
	Teacher	C6		Teacher	D6
	Teacher	C7		Teacher	D7
	Teacher	C8		Teacher	D8
School xx	Principal	E1	School xx	Principal	F1
	TRG head (Chinese)	E2		TRG head (Chinese)	F2
	TRG head (Maths)	E3		TRG head (Maths)	F3
	TRG head (English)	E4		TRG head (English)	F4
	Teacher	E5		Teacher	F5
	Teacher	E6		Teacher	F6
	Teacher	E7		Teacher	F7
	Teacher	E8		Teacher	F8