

Chapter 13

Leading Teacher Learning in China: A Mixed Methods Study of Successful School Leadership

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How do school leaders contribute to school improvement? This question, stated in various forms, has occupied the attention of scholars for the past 60 years (Grobman and Hynes 1956; Hallinger and Heck 1998; Leithwood et al. 2010; Robinson 2006). During this period, the field of educational leadership and management made considerable progress in identifying “paths” through which school leaders influence student learning (e.g., Hallinger 2011; Hallinger and Heck 1998; Leithwood et al. 2010). For example, in 1998 Hallinger and Heck concluded, “More recently, researchers have... sought to understand not only if principals have effects on school outcomes, but more particularly the paths through which such effects are achieved” (p. 187). By understanding the nature of these “strategic paths,” scholars are able to point towards practical avenues of action of potential interest to both practitioners and policymakers.

The reorientation of scholarship towards exploring the linkages between leadership and student learning has yielded new directions for research and practice. One path that has emerged in recent years as a high value target is the path that links school-level leadership and teacher professional learning (Barth 1990; Hallinger et al. 2014; Knapp et al. 2010; Li et al. 2016; Saphier et al. 2006; Vanblaere and Devos 2016). For example, Robinson (2006) emphasized leadership behaviors such as supporting, organizing, coaching, and modeling teacher participation in professional learning.

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The relatively new global focus on *leadership and teacher learning* also has relevance for educational research, policy, and practice in mainland China. Major curriculum reforms adopted since the turn of the twenty-first century have mandated new system-wide goals that require China's teachers to experiment with new methods of teaching and learning (Dello-Iacovo 2009; Ding 2010; Qian and Walker 2013). Consequently, we have observed a new interest in how school leaders create conditions that support productive learning among *both* teachers and students in China's schools (Cravens 2008; Qian and Walker 2013; Tang et al. 2014; Walker et al. 2012; Walker and Qian 2015; Wang 2016; Zhang and Pang 2016).

In this chapter, we present findings from a mixed-methods study aimed at understanding how principals in mainland China influence the professional learning of their teachers. The study addressed two main research questions:

1. What is the relationship between learning-centered leadership, teacher trust, teacher agency, and teacher professional learning in Chinese schools?
2. How do successful principals influence teacher learning in China?

In the first stage of the study, we analyzed survey data collected from 1259 teachers in 38 primary and secondary schools in three Chinese provinces. These analyses addressed the first research question. In the second stage, we conducted qualitative case studies of two principals rated highly by their teachers during the quantitative phase of the research. Our findings extend prior research on leadership and learning conducted in both Western (e.g., Leithwood and Jantzi 2006; Slegers et al. 2014; Thoonen et al. 2012; Vanblaere and Devos 2016; Wahlstrom and Louis 2008; Youngs and King 2002) and East Asian societies (Chen et al. 2016; Hallinger and Lu 2014; Li et al. 2016; Qian and Walker 2013; Qian et al. 2016; Wang 2016; Zhang and Pang 2016).

13.1 Theoretical Perspective

The lineage of learning-centered leadership can be traced back to earlier conceptions of instructional leadership and transformational leadership (Cravens 2008; Hallinger 2011; Hallinger and Murphy 1986; Leithwood et al. 2010). Whereas instructional leadership emphasizes the role school leaders play in fostering student learning, transformational leadership gave priority to the means by which leaders built broader capacity for learning and change in schools (Hallinger 2011; Leithwood et al. 2010). Thus, a distinctive feature of learning-centered leadership is capacity building to promote the learning of all members of the school community (Barth 1990; Leithwood et al. 2010; Saphier et al. 2006).

In the study, we defined learning-centered leadership as “a process whereby school leaders engage in intentional efforts to guide, direct, support, and participate in teacher learning with the goal of increasing their professional knowledge, and ultimately promote student learning and school effectiveness” (Cravens 2008; Knapp et al. 2010; Saphier et al. 2006). We examined four dimensions of learning-

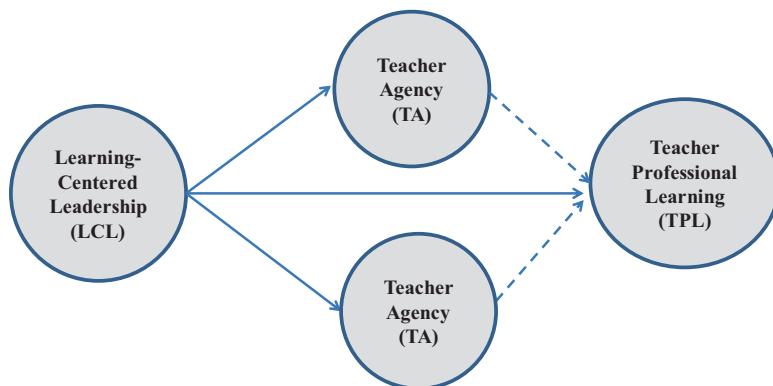


Fig. 13.1 Hypothesized model of leadership and teacher learning in Chinese schools

centered leadership. These included building a vision of learning, managing the learning program, providing learning support, and modeling. Support for each of these dimensions can be found in the literature on leadership and learning (e.g., Barth 1990; Bryk and Schneider 2002; Day 2009; Frost 2006; Hallinger 2011; Hallinger and Heck 2002; Knapp et al. 2010; Leithwood et al. 2010; Li et al. 2016; Printy et al. 2009; Robinson et al. 2008).

The conceptual model that guided the study proposes that learning-centered leadership has both direct and indirect effects on teacher learning (see Fig. 13.1). More specifically, we propose that teacher trust and agency represent “internal paths” through which principals influence the professional learning of teachers. If the model were supported empirically, it would mean that some leadership practices (e.g., setting goals, providing feedback, modeling) contribute directly to the professional learning of teachers, while other practices “create conditions” that motivate and support the professional learning of teachers (e.g., supporting collaboration, delegating authority to middle-level, and teacher leaders). As suggested above, this research is part of a broader global effort aimed at understanding the means by which leaders contribute to school improvement.

In the study, we conceptualized teacher professional learning as a form of “workplace learning” as opposed to “pre-service teacher preparation.” The workplace learning of teachers often takes place in “formal settings” such as professional development workshops, teaching research groups, and mentoring programs (Timperley 2011). However, teachers also learn through informal interactions that occur during the course of peer teaching, collaborative planning, shared assessment, and informal mentoring (Lai et al. 2016; Little 2012). Whether intended or not, the culture of the school shapes teacher attitudes towards the need for learning, the value of collegial exchange, and the costs and benefits of experimentation with new methods (Barth 1990; Lai et al. 2016; Little 2012; Rosenholtz 1989; Saphier et al. 2006). Fundamental issues for both system- and school-level leaders concern how to motivate and support teachers, not only to engage in continued learning, but to do so with both enthusiasm and the intent to put new knowledge into practice (Barth

1990; in de Wal et al. 2014; Lai et al. 2016; Li et al. 2016; Saphier et al. 2006; Thoonen et al. 2012).

A growing literature highlights the role that principals, middle-level, and teacher leaders play in fostering teacher learning and school improvement (Cravens 2008; Goldring et al. 2009; Heck and Hallinger 2014; Knapp et al. 2010; Saphier et al. 2006; Slegers et al. 2014; Vanblaere and Devos 2016). Learning-centered leadership is enacted through practices that support both teacher development and student learning (Barth 1990; Cravens 2008; Hallinger 2011; Saphier et al. 2006). It should be noted, however, that this role orientation does not describe the traditional role practice of principals in either China (Cravens 2008; Walker et al. 2012; Walker and Qian 2015) or in many other countries (Lee and Hallinger 2012). China's school principals have generally focused more time and attention on managerial and political roles than on instructional leadership (Bush et al. 1998; Cravens 2008; Lee and Hallinger 2012; Tang et al. 2014; Walker et al. 2012; Walker and Qian 2015). Thus, the study sought to offer insight into how successful leaders foster productive learning cultures in Chinese schools.

Scholars have proposed trust as a condition that enables the efforts of school leaders to gain faculty cooperation for efforts to improve their schools (e.g., Bryk and Schneider 2002; Slegers et al. 2014). Studies have documented the positive impact of teacher trust on teacher motivation (Li et al. 2016; Thomsen et al. 2015; Thoonen et al. 2012), willingness to engage in professional learning (Darling-Hammond and Richardson 2009; Hallinger and Lu 2014; Li et al. 2016; Tschannen-Moran 2009; Vanblaere and Devos 2016), school improvement (Bryk and Schneider 2002; Leithwood and Jantzi 2006), and readiness for change (Leithwood and Jantzi 2006). In this study we defined trust as teachers' willingness to be open with and rely on the competence, integrity, and good will of leaders and other faculty members.

A key task in any school improvement process lies in transferring "ownership" of change from leaders to teachers. Recognition of this imperative has highlighted the role of "teacher agency" (Barth 1990; Frost 2006; Saphier et al. 2006; Shen 2015). Teacher agency has cognitive, emotional, and behavioral dimensions reflected in attitudes of self-efficacy, optimism, and constructive engagement (Frost 2006; Shen 2015). Lai et al. (2016) proposed that teacher agency bears a direct relationship to professional learning. However, Hökkä (2012) found that a strong sense of agency does not promote school development if the social context does not provide opportunities for teacher collaboration. This highlights the importance of what Rosenholtz (1989) referred to as "workplace norms" in shaping teacher attitudes towards collaboration and learning. Frost (2006) concluded that human agency provides a "bridge" between the actions of school leaders and teacher learning.

13.2 Method

This study employed a sequential exploratory research design (Creswell 2012) to explore learning-centered leadership in rural Chinese schools. This mixed methods research design followed three main stages: collection and analysis of qualitative data in selected schools, quantitative analysis of survey data, and interpretation (Creswell 2012). Although case studies were collected in a variety of schools, the qualitative portion of this chapter focuses on leadership and teacher learning in two urban schools.

School Sample: Quantitative The study was conducted in three provinces in mainland China, which represent different levels of educational development: Shanghai, Ningxia, and Haining. Data collection occurred between May and October, 2015, during the latter stages of the study. After obtaining the permission of principals and teachers, surveys were distributed in faculty meetings in 38 public schools; these consisted of both primary and secondary schools.

Participation in the study was voluntary, and the main sample is best described as a purposeful convenience sample. The sample was purposeful in the sense that the selection of schools incorporated several key variables including region and school level. The characteristics of the teacher sample were generally representative of the population of China's teachers in terms of gender, rank, and experience (see Ding 2010; Liu et al. 2016b).

School Sample: Qualitative Consistent with a sequential exploratory research design, the qualitative portion of the study took place before and then concurrently with the quantitative data collection. The qualitative phase of the study took place over a period of 3 years, starting in late 2012. Our goal for this portion of the study was to identify and then examine, in depth, school leaders working in a variety of different school contexts.

In this chapter, we focus on two “successful learning-centered leaders” working in urban schools. This characterization is supported by teacher ratings of their principals on four main constructs; this is reflected in Fig. 13.1 and Table 13.1, where the teacher ratings of principals from Wu Tong and Yang Ming Schools are compared with the full set of principals participating in our study.

As indicated in Fig. 13.2, the mean scores of the two principals appeared substantially higher than the grand mean of all principals on the four main constructs. Notably, these differences also carried over to dimensions of learning-centered leadership (see Table 13.1). In order to verify this perceived difference, we conducted independent samples t-tests on the main variable of interest, learning-centered leadership. The t-tests (not tabled) revealed that the ratings of the selected principals were significantly higher than the full sample of principals in terms of learning-centered leadership ($p < 0.001$). This result provided the rationale for referring to these principals as “successful learning-centered leaders” and focusing on understanding their patterns of practice in the qualitative portion of the study.

Table 13.1 Comparison of teacher perceptions of the case study and full sample of principals

	Mean	SD	Min	Max
Wu Tong School				
Learning-centered leadership	4.38	0.31	3.84	5.00
Builds a learning vision	4.43	0.39	3.33	5.00
Provides learning support	4.52	0.33	3.75	5.00
Manages learning program	4.34	0.40	3.50	5.00
Modeling	4.35	0.47	3.75	5.00
Teacher trust	4.50	0.44	3.12	5.00
Teacher agency	4.30	0.38	3.38	5.00
Teacher professional learning	4.36	0.33	3.80	5.00
Yang Ming School				
Learning-centered leadership	4.86	0.49	3.04	5.00
Builds a learning vision	4.86	0.66	2.00	5.00
Provides learning support	4.88	0.38	3.75	5.00
Manages learning program	4.75	0.57	3.00	5.00
Modeling	4.89	0.46	3.20	5.00
Teacher trust	4.88	0.37	4.00	5.00
Teacher agency	4.86	0.28	3.92	5.00
Teacher professional learning	4.89	0.31	3.76	5.00
All principals				
Learning-centered leadership	4.04	0.61	1.84	5.00
Builds a learning vision	4.04	0.68	1.00	5.00
Provides learning support	4.14	0.60	1.38	5.00
Manages learning program	4.00	0.67	1.50	5.00
Modeling	4.06	0.70	1.00	5.00
Teacher trust	4.25	0.59	1.88	5.00
Teacher agency	4.04	0.56	1.42	5.00
Teacher professional learning	4.06	0.56	1.80	5.00

Variables and Measures We began with English language forms of several different instruments designed to measure our variables. In order to apply them in China, we used a sequence of translation and content validation procedures aimed at ensuring accuracy of translation, succinctness of expression, ease of understanding, and cultural adequacy (see Liu et al. 2016a).

In operationalizing our measurement scales, we borrowed and/or adapted items from instruments developed by various international scholars. Our measurement instrument consisted of 91 items distributed over the four main variables. Although the four main constructs were each comprised of several dimensions, in this chapter our quantitative analysis is limited to the composite variables (i.e., Leadership, Trust, Agency, Teacher Learning). All four scales employed a five-point Likert-type scale whereby a higher score signifies a stronger presence of the construct.

Data Collection The questionnaire was submitted to 1700 teachers from whom we obtained 1259 valid questionnaires representing a response rate of almost 80%.

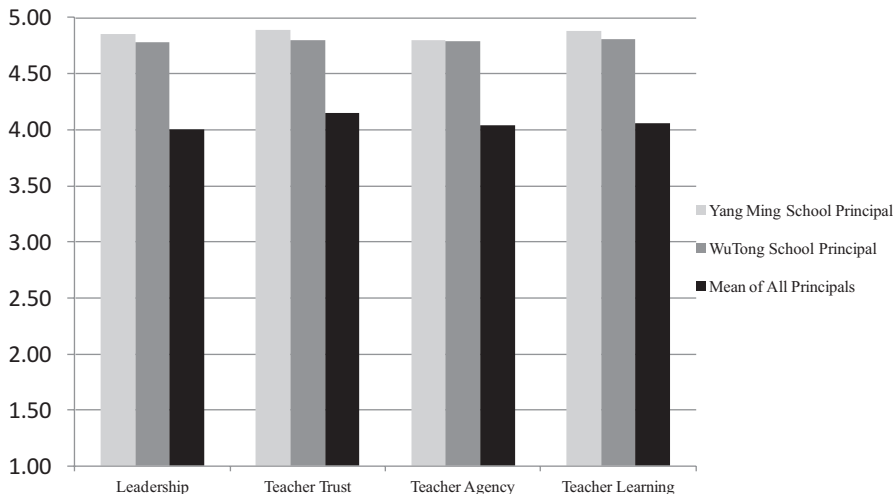


Fig. 13.2 Comparison of mean teacher ratings of selected principals on the four constructs

Demographic information was collected on gender, teaching experience, school level, professional rank, location, and education background. Although the sample characteristics varied from school to school (e.g., rural vs. urban), the overall teacher sample was broadly similar to the national teacher population (Ding 2010).

Qualitative data were collected during quarterly, 1-week visits to the schools between 2013 and 2015. During each visit, in-depth interviews were conducted with the school's principal and a variety of teachers; these semi-structured interviews were conducted on a one-to-one basis with nearly all the middle-level leaders and teachers at each school.

Qualitative data were collected using three methods. First, we conducted in-depth interviews with school leaders and a sample of teachers from each of the schools. Formal interviews were recorded and transcribed. Second, on-site observations were conducted several times in each of the schools over a 3-year period. Observations were conducted during staff meetings, teacher "research group" activities, lesson competitions, joint lesson planning sessions, teacher mentoring (*Shi Tu Dai Jiao*), and model lessons given using different pedagogies (*Tong Ke Yi Gou*). Finally we analyzed a range of documents including memos, activity schedules, workshop programs, school news, and teaching materials.

Data Analysis As noted at the outset of this section, data analysis proceeded in two stages. These are described below.

Quantitative Data Analysis We assessed the measurement model implied in Fig. 13.1 through a three-step process. First, we calculated Cronbach's alpha coefficients to evaluate the internal consistency of the main variables and subscales (Hair et al. 2013). The alpha coefficients exceeded the minimum desired level of 0.70 for all of the measured variables.

In the second step we used confirmatory factor analysis (CFA) to estimate factor loadings for subscales and average variance extracted (AVE) for the four main variables. Analysis of the second-order factor model further confirmed that the average variance extracted (AVE) for the four main variables exceeded the standard of 0.50. Moreover, the data-to-model fit was excellent for all four main variables (Hair et al. 2013).

- Learning-Centered Leadership ($\chi^2/df = 3.074$; RMSEA = 0.041 [< 0.08], CFI = 0.963 [> 0.90], and SRMR = 0.029 [$< .08$]);
- Teacher Trust ($\chi^2/df = 3.030$; RMSEA = 0.040 [< 0.08], CFI = 0.976 [> 0.90], and SRMR = 0.024 [$< .08$]);
- Teacher Agency ($\chi^2/df = 3.631$; RMSEA = 0.046 [< 0.08], CFI = 0.949 [> 0.90], and SRMR = 0.038 [< 0.08]);
- Teacher Professional Learning ($\chi^2/df = 3.606$; RMSEA = 0.045 [< 0.08], CFI = 0.945 [> 0.90], and SRMR = 0.041 [< 0.08]).

Finally, we tested data fit for the full model. All of the model-fit indices were deemed acceptable (i.e., $\chi^2/df = 2.428$; RMSEA = 0.034 [< 0.08], CFI = 0.927 [> 0.90], and SRMR = 0.038 [< 0.08]). Thus, we concluded that the measurement model met desired standards of reliability and validity.

We employed structural equation modeling (SEM) with Mplus Version 7.0 (Muthén and Muthén 1998–2012) to analyze the structural parameters within the measurement model. An advantage of SEM over earlier multi-step procedures used for mediation analysis lies in its ability to measure relationships among mediating constructs in a single analytical model (Hayes 2009). Mplus enables examination of the significance of indirect effects of multiple mediators (Preacher and Hayes 2008). It should be noted that in this chapter we limit the depth of description of the quantitative results in order to retain space for the case study analyses. More thorough analyses can be found in other papers (e.g., Liu et al. 2016a; Hallinger et al. 2016).

Qualitative Data Analysis The qualitative data were first analyzed and compiled into case studies of the selected schools. Then data collected from the schools were synthesized to surface cross-school trends. In this chapter we have limited data presentation to the case study briefs.

13.3 Does Principal Leadership Influence Teacher Professional Learning?

Quantitative analyses sought to determine whether our conceptual model of leadership and learning provided a valid description of these dynamics in the Chinese context. SEM enables researchers to determine which “paths” between variables in a proposed model are significant and which ones are not. The partial mediation model proposed in Fig. 13.1 yielded an acceptable fit to the data on our stated

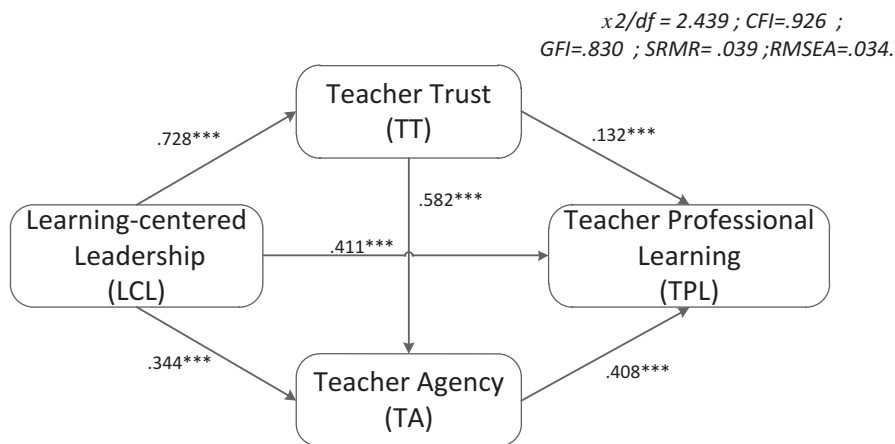


Fig. 13.3 Structural equation mode of principal leadership and teacher learning

parameters, and a significantly better fit than the full mediation model. The chi-square for the change with 3 degrees of freedom was 181.437 ($p < 0.01$).

The standardized parameter estimates shown in Fig. 13.3 provide indications of significance and effect sizes associated with the partial mediation model. These data support several conclusions. Learning-Centered Leadership had moderate direct effects on Teacher Professional Learning ($\beta = 0.411$, $p < .001$), Teacher Trust ($\beta = .728$, $p < .001$), and Teacher Agency ($\beta = 0.344$, $p < .001$). Teacher Agency had a moderate direct effect on Teacher Professional Learning ($\beta = 0.408$, $p < .001$). The direct effects of Teacher Trust on Teacher Professional Learning, however, were somewhat smaller ($\beta = 0.132$, $p < .001$). Thus, our analysis indicated that a portion of leadership effects on teacher learning did operate through trust and agency.

Affirmation of the partial mediated model leads to two practical conclusions. First, it points towards productive learning-centered leadership practices that principals can employ to directly support the workplace learning of their teachers (see Liu et al. 2016a for more detail). Second, the partial mediation model highlights two paths (i.e., Teacher Trust and Agency) that can serve as “intermediate targets” for principal action (see Liu et al. 2016b for more detail). Simply stated, the model suggests that principals who foster teacher trust and agency can gain greater teacher engagement in professional learning.

13.4 How Do Successful Principals Influence Teacher Learning in China?

Although the quantitative analysis offered a broad picture of the relationship of leadership and teacher learning, it offered fewer insights into how these dynamics play out in the working lives of Chinese principals and teachers. In this section, we

present case studies of two principals who demonstrated successful learning-centered leadership in the Chinese context.

Wu Tong Primary School Wu Tong Primary School is situated in Shanghai, the leading economic city of mainland China. Wu Tong Primary School was considered a model school in the early 1990s. However, as its neighborhood began to decline towards the turn of the millennium, so did student performance. Consequently, many of the better teachers abandoned the school, and a cycle of continuing deterioration in school quality set in. This was the situation when Ms. Zhou became the principal of Wu Tong Primary School in 2010. Over the years, the school's reputation had suffered, and Principal Zhou faced a school that was searching for a new beginning. In 2012, the Shanghai municipal government launched the New High Quality School Project (NHQS). The purpose of the NHQS was to improve schools with weak student performance. Wu Tong Primary School was selected in the first batch of schools to participate in the NHQS project.

Consistent with the main trend of China's post-2000 education reforms, a fundamental goal of NHQS was to motivate schools to move away from a test-taking orientation and towards more holistic approaches to education. After 5 years of effort, Wu Tong Primary School moved from the bottom quartile to a rank of 7th out of 25 primary schools in the district. As a result, Principal Zhou was encouraged by the Shanghai Education Authority to establish a "distinguished principal's workshop" to help principals working in other low-performing schools. This formally recognized her success in building a learning community in her school and strengthening student performance.

We can see a broad pattern of learning-centered leadership in the graph presented in Fig. 13.4. Principal Zhou was rated highly across all four dimensions of learning-centered leadership. Moreover, her scores on all four dimensions were substantially higher than those of the full group of 38 principals who participated in this study. We will continue the case study by examining each of these four leadership dimensions, drawing upon our qualitative data.

Builds a Learning Vision Upon joining the NHQS project, Ms. Zhou proposed a new vision for the school:

When we entered the NHQS project, it was the right time to propose a new school vision. Like the proverb says: 'strike while the iron is hot.' Our vision was to become a school with academic excellence for students, superb teaching, where all students have opportunities to reach their personal best within five years. (Principal Zhou, May 8, 2015)

The concept behind this vision was to create a learning community in the school, a culture in which learning was valued for everyone. More specifically, to achieve the vision Principal Zhou believed it would be essential to stimulate the learning and development of her teachers. Therefore, she encouraged teachers to attend to their own professional learning both as a means of improving teaching quality and instilling students with the desire to reach their potential. This vision provided a basis for focusing school resources on specific areas, guiding teacher activities, and evaluating school effectiveness (Hallinger and Heck 2002). It made teachers feel that there

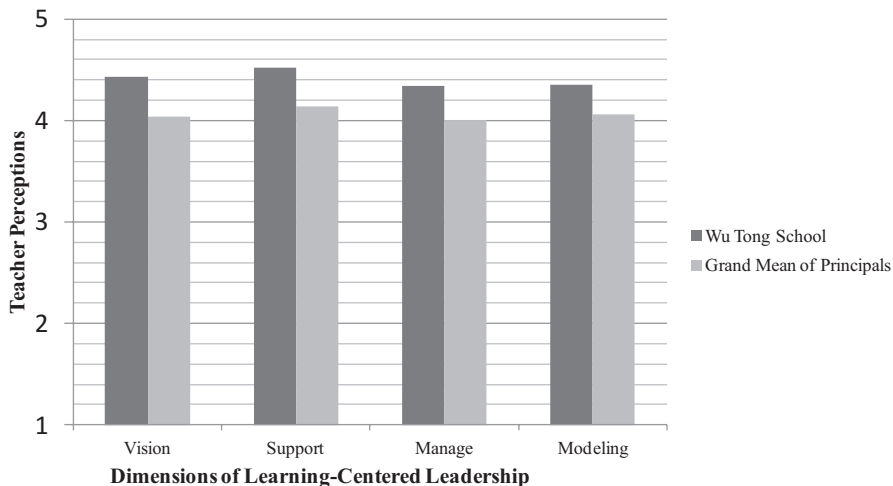


Fig. 13.4 Comparison of Wu Tong School principal with all principals on dimensions of learning-centred leadership

was a collective effort aimed at something meaningful. As observed by one of her teachers: “Our principal not only proposed a vision for change, but also means to achieve it. The vision gave us a common focus and a foundation for building trust both among teachers and with the school’s leadership” (Teacher Liu, May 22, 2015). A second teacher stated:

The morale at our school had been low for years. It is no exaggeration to say that the New High Quality School Project was like a lifesaver for our school at that time. It was a great motivation to the teachers. In our eyes, it was an opportunity to stop the decline that we all could see and move towards a more positive future. Our new vision and the project in general created a stronger sense of collective responsibility to work hard for the development of our school. (Teacher Ren, May 8, 2015)

For many teachers, it is easy to take a vision as a slogan or as a fuzzy image of the future. Therefore, in order to realize her vision, Principal Zhou proposed a series of medium- and long-term goals and strategies. One teacher recalled: “Principal Zhou emphasized the importance of breaking the vision into manageable goals. This made our teachers feel that the vision was achievable. It was our collective effort in daily life that was necessary to make it happen” (Teacher Ou, May 8, 2015). In seeking to motivate her staff, Ms. Zhou appealed to both personal and professional concerns; these encompassed factors associated with both transformational (e.g., capacity development and intrinsic motivation) and transactional leadership (e.g., higher qualifications and reward). She articulated her approach quite clearly:

I often told my teachers that the New High Quality School Project would have two important outcomes. First, it would contribute to the development of our school, and second to their own professional and career development as teachers. By learning and gaining new skills through the project they would become more proficient and able to achieve greater

impact on students. This would also enable them to get higher economic reward and social prestige. (Principal Zhou, 13 May, 2015)

Provides Learning Support To make schools more productive learning places for teachers, Principal Zhou advocated reducing bureaucracy and decentralizing decision-making. She also made an effort to create a norm to “appreciate education” for all learners. This was aimed at encouraging teachers to take initiative and responsibility for their own learning (i.e., agency). In terms of practical actions, Principal Zhou provided teachers with access to learning resources and timely feedback on their efforts to use new skills in their classrooms. Teachers interpreted Principal Zhou’s efforts as strong expressions of support and consideration: “Our principal protects teachers’ learning time by minimizing bureaucratic routines. As the facilitator of teacher learning, [Principal Zhou] provides time and resources that we need to learn” (Teacher Ou, May 8, 2015). Another teacher stated: “Bureaucratic routines which take up teachers’ time are very common in schools. But our principal emphasizes the need for having a relaxed environment and favorable conditions for teacher and student learning” (Teacher Tian, May 22, 2015). A third commented:

When I look back, I can say that our school’s culture has changed during these past years. We feel no sense of distance with the principal or Teaching Research Group leaders. We use their first names and feel that we are co-workers. Everybody in our schools is polite and respectful. Principal Zhou’s door is open to all teachers. We feel like a kind of ‘extended-family’ atmosphere in our school. (Teacher Ren, June 5, 2015)

These remarks suggest less social distance and hierarchy at Wu Tong School than is typical in many Chinese schools (Tang et al. 2014; Walker et al. 2012). Principal Zhou’s efforts in terms of building a learning community were constructed as a result of having an informal and harmonious relationship with her teachers. She encouraged a working style that deemphasized social hierarchy among the teachers as well as with the school’s administrators. Teachers indicated that her leadership style made a difference in their efforts to learn and develop, and also contributed to the vibrancy at Wu Tong School. One of the younger teachers recalled the following incident:

Two years ago, Principal Zhou observed my class and left a note for me which I kept to this day. She said, ‘I appreciated your teaching style today with your class. In my eyes, you have great potential as a teacher. I believe that you will have great professional influence in our city in the next few years if you continue to work hard.’ (Teacher Ren, May 28, 2015)

Notably, Principal Zhou’s efforts to support educators were not limited to the younger teachers. As in many other societies, Chinese principals face the challenge of motivating mid- and late-career teachers. One of the senior teachers at Wu Tong Primary School described how Principal Zhou’s efforts to build a learning community impacted her motivation and commitment:

Our principal designed a career development plan for teachers in different stages in our careers. Although I will retire in five years, Principal Zhou still regarded me highly and gave me respect. For example, last year, I was named a ‘Senior Teacher’ with responsibilities to coach less-experienced colleagues. Being given this title and responsibility made me feel obliged to renew my own thinking so I could effectively guide the younger teachers.

This was a responsibility and opportunity that I never had before. (Teacher Ou, June 5, 2015)

The examples above suggest that Principal Zhou used her vision of “appreciating education” to enact a strategy that strengthened teachers’ motivation as both educators and learners. Notably, by meeting the different needs of different teachers, she promoted trust and agency. This created an environment in which teachers felt it was both safe and valued to engage in experimentation, reflection, and risk taking. In the principal’s own words:

To feel the experience of success is very important for all teachers, especially those who may have felt less successful in the past. We have tried to offer many different opportunities for teachers to develop, for example by distributing professional literature, encouraging collaboration, showing model lessons, and launching many kinds of teaching skills competition in our school. Every semester, nearly all teachers will participate in these collegial contests. These competitions not only urge them to learn new things, but promote sharing of successful experience that strengthens their self-belief and their teaching practice. (Principal Zhou, May 22, 2015)

Manages the Learning Program Principal Zhou acknowledged a need to offer more assertive leadership when she arrived at Wu Tong due to the school’s unimpressive performance in the recent past. Thus, for example, she initiated the “appreciate education” vision without significant teacher input. However, she also realized that making the vision come to life in her school would require a transfer of ownership of the vision from herself to the teachers:

We must encourage teachers and provide them with emotional support. But that is not enough. We also need to make them believe that devoting time to their own learning will really benefit their teaching and help students. So we try to help them form the habit of learning. (Principal Zhou, May 22, 2015)

In Principal Zhou’s eyes, a key to successful achievement of the vision was empowering teachers and giving them ownership of their collective efforts in terms of school development. So although she used her authority to propose the new vision, Principal Zhou also sought to involve teachers in determining how to make the vision come to life in the school. This combination of “top-down” and “bottom-up” strategies built trust and yielded a new level of teacher engagement in the school:

Different from other schools, all the teacher-learning projects in our school are designed from the ‘bottom up’ by first-line teachers. At the end of the semester, our Teaching Research Group leader will conduct a needs analysis and submit learning plans. Then, school leaders check them. I feel that we are given voice and choice in our professional learning. (Teacher Ren, May 22, 2015)

Nearly all of our learning activities in our school are organized by Teaching Research Groups. We have the right to decide what to learn, how to learn, and when to learn. So all of us have a responsibility for managing our learning as teachers. Our leaders the role of supporters and supervisors. They are very accessible to teachers. (Teacher Ou, June 5, 2015)

In order to make the learning activities more effective, Principal Zhou proposed many strategies: “Guidance from master teachers is important for the growth of beginning teachers. In order to motivate master teachers, we relate the senior teachers’ professional promotion to the professional development of younger teachers” (Principal Zhou, May 22, 2015). A teacher stated: “The content of school-based training is quite rich. For example, teaching skills, educational technology, educational philosophy, and up-to-date pedagogical theories. In fact, for most of teachers, they would like to engage in professional learning, if it is well organized” (Teacher Ou, June 5, 2015).

Modeling In a paper where we analyzed the effects of learning-centered leadership in terms of the four dimensions, we were surprised to find that modeling was not a significant practice employed by our sample of Chinese principals (Liu et al. 2016a). However, as suggested in Fig. 13.4 and Table 13.1, Principal Zhou was a “positive outlier” on this dimension of learning-centered leadership. This suggests that teachers perceived her as employing modeling in her leadership practice more frequently than is typical among Chinese school leaders. This feature of her leadership also came through quite vividly in the interviews. If leaders convey their priorities through their actions, then Principal Zhou’s were unmistakably focused on the quality of teaching and learning:

She is a workaholic in my eyes. She is the first to arrive and the last one to leave school every day. As a special-class teacher in chemistry herself, Principal Zhou often observes classes and gives us feedback. We often joke that if Principal Zhou is not in the classroom, she must be on the way to the classroom. (Teacher Ren, May 22, 2015)

Modeling is inspirational, as it articulates and reinforces the core values of a leader. Principal Zhou’s passion for learning and commitment to personal professional development were conveyed to other leaders as well as to her teachers: “I have been the assistant principal for three years and I have seen the tremendous changes in our school. Principal Zhou is dynamic, enterprising, open to change and supportive of others who are trying to change” (Teacher Zhao, June 5, 2015). A second teacher commented: “Our principal often participates in our formal or informal discussion of teaching problems. As a special-grade teacher, she is often seen by staff as a source of instructional advice” (Teacher Ren, May 22, 2015).

The portrait of Principal Zhou as a learning-centered leader reprises themes that abound in the broader literature on instructional (Hallinger and Murphy 1986), transformational (Leithwood and Jantzi 2006), and shared (Heck and Hallinger 2014) leadership. Moreover, her clarity of values and vision, resourcefulness, knowledge of teaching and learning, delegation of responsibilities for instructional leadership, and focus on creating conditions that support teacher learning (e.g., trust and agency) distinguish her leadership practice from that of the broader set of principals in our sample.

Yang Ming School Yang Ming Middle School was established in 1865 in the Southern city of Guangzhou. The school was recognized by the Ministry of Education as a model school during the current era of Chinese curriculum reform.

Yang Ming School has 250 teachers, 80% of whom hold Master degrees. It is a well-resourced school, both in terms of facilities and human resources.

The school has long adhered to a philosophy of “elite education.” Its students generally score very well on National College Entrance Exam, and over 95% of graduates enter “key universities” in China. Students at Yang Ming have won many awards in regional, national, and international science and technology competitions. Yang Ming School attaches great importance to meeting the needs of students with different interests and helping them reach their potential. Thus, Yang Ming has a very diverse curriculum.

The current principal at Yang Ming, Mr. Dou, has worked as a teacher, Vice Principal and Principal at the school for 25 years. “It is no exaggeration to say that I have contributed all my youth and strength to the school and witnessed the development of school. This is the first, but also the last school in which I have worked” (Principal Dou, Sept 5, 2014). Principal Dou was rated highly across all four dimensions of learning centered leadership, and scored consistently higher than the grand mean of principals participating in the study (see Fig. 13.5).

One of the notable innovations implemented in recent years at Yang Ming School was the flipped classroom.¹ This reform, initiated by front-line teachers, required significant change in teaching and learning practices supported by sustained professional learning. We will use this reform as a focus for our discussion of leadership and teacher learning at Yang Ming School.

Builds a Learning Vision As suggested above, the Yang Ming’s school vision was characterized by values of excellence, innovation, and diversity. Qualitative data suggested that teachers and administrators were guided by a vibrant, shared vision of learning for students as well as teachers. In the principal’s view, Yang Ming School’s vision is a source of inspiration for teachers:

Our school vision is stable and does not change with fads. When I entered the school twenty years ago, our principal proposed that our goal was to cultivate the elites. Many years have passed, but our school vision is like the power of the spirit moving from generation to generation. Though it is rarely mentioned explicitly, the spirit of excellence has been infused into our faith and our practice as leaders and teachers. (Principal Dou, Sept 5, 2014)

The connection between an inspirational vision and the daily practice of school staff was reinforced in the responses of teachers during our interviews. As one of the famous key schools in our province, we are proud of our students. All of our teachers strive to make excellence a habit... Our vision [of excellence, innovation, and diversity] is not just a slogan; instead it is embedded in the day-to-day actions of teachers. (Teacher Cai, January 5, 2015)

But what is “excellence”? In a society where learning is often dominated by exam results, Yang Ming School took a broader view of “learning”:

¹The flipped classroom is a pedagogical model in which the typical lecture and homework elements of a course are reversed. Short video lectures are viewed by students at home before the class session, while in-class time is devoted to exercises, projects, or discussions. (<https://net.edu-cause.edu/ir/library/pdf/eli7081.pdf>).

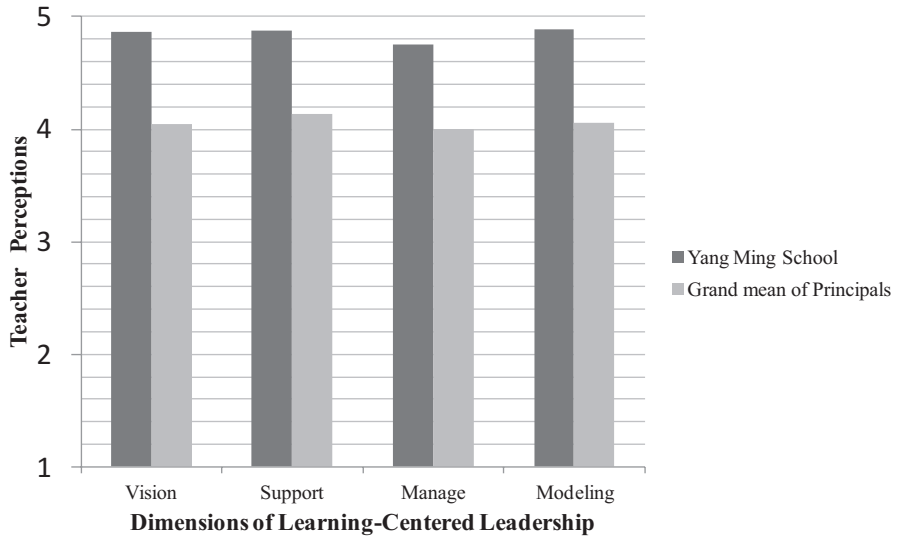


Fig. 13.5 Comparison of Yang Ming School principal with all principals on dimensions of learning-centred leadership.

The vision in our school does not just refer to ‘academic focus,’ but also the future development of our students. Our school seeks to cultivate future world leaders, scholars, and entrepreneurs. This vision gives us a kind of moral power compared with schools that only focus on examination results. For example, our main motivation in adopting the flipped classroom was to develop students’ higher-order thinking. As teachers we have the responsibility to try different things that challenge our students and then to see what works. (Teacher Yang, Sept 4, 2014)

Our principal always says that we should take a long-term view of student development. The purposes of the flipped classroom are to promote individualized instruction among our teachers and autonomous learning among our students. These are consistent with our focus on the cultivation of diverse talents among both students and teachers. (Teacher Cai, January 5, 2015)

When examining the Yang Ming School’s historical record, one can conclude that it has reached and maintained a level of sustained high performance because of which its vision has become embedded in the practice of leaders and teachers. In this context, the principal’s role appears to include articulating and reinforcing prevailing values, rather than introducing new ones. We observed that the principal, although widely respected among his staff, led from the background rather than front and center. With this in mind, we found that teachers were less concerned with “who” to follow than with how to achieve the school’s vision of excellence, innovation, and diversity.

Provides Learning Support Disparities in reputation, financial resources, teaching facilities, and student resources are readily observed between “key schools” and “ordinary schools” in China. As a key school, Yang Ming School is associated with

higher-quality teaching staff, better facilities, more government investment, and higher-achieving students from more advantaged families. Teachers at Yang Ming School are, therefore, able to access rich learning resources to meet their professional needs. However, the availability of resources does not mean they are always used to bring about productive learning and change; this should be where leadership “makes a difference” (Frost 2006; Hallinger 2011; Knapp et al. 2010; Saphier et al. 2006).

Teachers were consistent in emphasizing the importance of dual forms of “support for our learning”: tangible support and “invisible support.” Examples of tangible support we observed included resources such as flexible time, funds for coursework, expert guidance, and local universities with up-to-date programs and facilities. Teachers noted their appreciation for these resources and their principal’s capacity to organize them efficiently:

Our principal has often emphasized that although the college entrance examination is important, it is *not the only important thing for our students*. Most of them will apply for entrance into foreign universities or sit for the independent entrance exams for famous universities in China. So we look at preparation of their broader qualifications as the core education provided by our school. So, our principal provides the resources we need to meet these needs and always encourages us to try something new in our classrooms. (Teacher Yang, Sept 4, 2014)

However, the effective use of tangible resources only appeared to come into full bloom when combined with “invisible” forms of support such as encouragement, feedback, and personalized assistance. “Invisible support” was a means of “activating” the potential of tangible resources. We observed that this type of support increased teachers’ trust, sense of agency, and collective efficacy.

Our school has rich learning resources. As long as your request is reasonable, school leaders will find a way to satisfy your need. However, in my mind, the biggest support we get from our school leaders is their understanding, encouragement, and open mind [about our ideas]. As sources of moral support, we value them the most. (Teacher Lin, Sept 5, 2014)

We felt heavy pressure when our teaching reforms did not achieve the desired result at first. Not only teachers, but also students were not used to the flipped classroom. Their test scores actually dropped during that period. I even considered disbanding our learning group at that time. However, our principal always comforted and supported me. He reminded all of us that ‘it is very normal to have setbacks during the period of change. If you keep your faith and persist, you will overcome; don’t despair.’ This gave us the strength to continue until we achieved success. (Teacher Yang, January 5, 2015)

I always insist that young people should not stick to old ideas and must have the courage to innovate. It does not matter if you succeed right away, but you should always try your best and follow what you believe in. (Principal Dou, Sept 5, 2014)

While these observations and assertions may appear “obvious,” it should be noted that they are not typical in the Chinese context. In China, leaders, teachers, and students are highly sensitive to “keeping face.” As teachers and as learners, staff behaviour is easily influenced by fear of failure or embarrassment. At a “key school” like Yang Ming the pressure for high performance can easily push leaders and

teachers into taking the safe road. Thus, we suggest that leaders play a potentially crucial role in this context by ensuring that tangible resources are used widely and creating a safe environment for teacher learning. The latter is enacted both through the provision of moral support and by creating norms that support risk-taking and innovation (Barth 1990; Saphier et al. 2006).

Manages the Learning Program As noted above, the flipped classroom initiative was instituted by front-line teachers, not by the principal or higher education authorities. Although its aims were highly consistent with China's top-down curriculum reforms, it was a voluntary endeavour. As such, there were no strict rules or regulations in place to ensure implementation or compliance. One teacher recalled:

I was the first person to initiate the flipped classroom learning. As a self-organized learning group, we never relied on negative management, such as roll call, supervision, and outcome assessment to determine our approach. We just wanted to create conditions so teachers would want to participate, to enjoy working together, and to benefit from it. (Teacher Yang, January 4, 2015)

Our learning group was launched from bottom to top. I have been part of the flipped classroom initiative for three years. Since we work together informally, we don't have the typical institutional restrictions or material rewards to motivate us to become engaged or to learn. Even so, learning with like-minded colleagues has been a wonderful experience for me. I think that for most of us, common interests and harmonious relationships have fuelled our work together. (Teacher Cai, January 5, 2015)

The reason that I have continued to work with the flipped classroom group is that we all benefit as teachers from learning together. Activities are effectively organized by the head of our group; time isn't wasted. We get timely guidance and effective feedback that has helped us in learning new practical skills. (Teacher Lin, January 5, 2015)

These excerpts suggest that positive, process-oriented management led by teacher leaders has contributed to trust, agency, and ultimately to an environment of productive teacher learning. Through timely, direct, and personalized feedback, teachers have benefitted from professional learning activities such as workshops and team meetings (Hwang et al. 2003). As an ordinary teacher, Teacher Yang led the flipped classroom group in Yang Ming School. Moreover, as a teacher engaged in implementing the innovation himself, he had a clearer idea of what teachers needed and what worked than did the principal. Thus, while the principal emerged as an important source of support, he led from the background and allowed a senior teacher to assume center stage for the flipped classroom initiative. This became a good example of distributed instructional leadership in the school.

Modeling As discussed earlier, the results of the broader quantitative analysis revealed only a limited use of modeling among principals in this study. Nonetheless, as indicated in the graph presented in Fig. 13.5, Principal Dou was rated highly on this dimension of learning-centered leadership. Modeling is grounded in the values of the leader (Barth 1990; Hallinger 2011; Leithwood and Jantzi 2006). This was evident with respect to Principal Dou:

I often emphasize to our teachers that we should be ‘educators’ first, instead of ‘the principal or teacher.’ If our identity is to be an educator, we will treat teaching as our career instead of as a job. This is what can give us meaning in our work. (Principal Dou, Sept 5, 2014)

Teachers were quite consistent in highlighting how Principal Dou’s educational values, passion, and work orientation carried over into the attitudes of teachers:

Principal Zhou is a special-class principal in Guangdong province. Two years ago he was recognized as a ‘National Model Worker.’ We all respect him very much. He has often said that people should never be too old to learn and we can see that in his own life and work as a teacher and principal. (Teacher Lin, January 5, 2015)

At the same time, it is the reality in China that principals have many administrative affairs to handle, and spend a considerable portion of their time outside of the school (Tang et al. 2014; Walker and Qian 2015; Zhang and Pang 2016). This shapes the role that principals play as “learning leaders,” especially in schools as large as Yang Ming. Therefore, teacher leaders hold a unique position in the professional support to ordinary teachers:

A principal with excellent morals and teaching skills is important. However, as an ordinary teacher, I actually have relatively few opportunities to interact with our principal directly. In fact, my own more active involvement in professional learning came about not because of our principal, but from Teacher Yang’s passion and engagement. (Teacher Li, January 5, 2015)

With this in mind, we observed that “leader modeling” was not limited to the role played by Principal Dou. With Principal Dou’s explicit support, there was no limitation on the roles that teachers could assume (e.g., head of a department, teaching team, or teaching research group) at Yang Ming. Perhaps more significant, however, was the support Principal Dou provided to ordinary teachers such as Teacher Yang in heading informal initiatives. The significance of this emerged in interviews where teachers discussed how they were touched by Teacher Yang’s passion as for learning:

Teacher Yang is an able man in our eyes. He is one of the few people I know who is committed to education. He has great passion about teaching reform. To be frank, I was quite skeptical about the flipped classroom at first. But Teacher Yang’s enthusiasm strongly influenced me to participate in and to persist even until now. He has set a good example for all of us. (Teacher Liu, August 27, 2014)

Based on the above-mentioned excerpts, we speculate that high power distance in social relations combine with a hierarchical administrative system to shape and even limit the role that Chinese principals play in “directly” influencing the professional learning of teachers (Hwang et al. 2003; Qian et al. 2016; Wang 2016). Nonetheless, as observed in the broader literature, principals retain an important role by reinforcing key values and delegating authority, implicitly or explicitly, to others (Qian et al. 2016; Walker et al. 2012; Zhang and Pang 2016). It may be that in the Chinese context teacher leaders have the potential to be even more influential than principals in shaping the norms and practices that contribute to collegial

exchange and learning (Qian et al. 2016; Wang 2016). Thus, the effect of modeling may be more clearly evidenced in the role of teacher leaders than principals.

13.5 Discussion

In this chapter we presented results from a mixed-methods study of principal leadership and teacher learning in China. As discussed earlier, concepts such as “learning-centered” and “instructional” leadership are still relatively new in the Chinese education context. With this in mind, the current study was undertaken to validate a model of leadership for teacher learning, as well as to surface distinctive practices that distinguish this role in mainland China. In this final section, we highlight the limitations of the study, situate our findings in a broader context, and suggest implications for research and practice.

Limitations of the Study We wish to highlight three main limitations of this study. First, the study was conducted in only three provinces of China. Although our school sample varied on several relevant criteria, China is a huge country with great variations in the conditions of schooling. Therefore, we acknowledge that our findings may not represent the practices of educational leadership throughout China.

Second, the current study did *not* include measures of student learning. Therefore, although learning-centered leadership was associated with teacher engagement in professional learning, we cannot confirm that these effects carry over to student learning. Thus, the current study does not “close the circle” when it comes to research on leadership, teacher learning, and student achievement.

Finally, we note that the current study employed cross-sectional research. “Snapshot” studies of school processes (e.g., leadership and teacher learning) that actually unfold over a period of time can neither fully capture nor confirm the “causal nature of relationships” among constructs (Hallinger and Heck 1998; Heck and Hallinger 2014). Therefore, although we refer to the “effects” of leadership on teacher learning, we are actually limited to describing the strength of association in these relationships.

Interpretation and Implications of the Findings Quantitative analysis supported our conceptual model of leadership and teacher learning (see Figs. 13.1 and 13.2) for this set of schools in China. More specifically, we found that teacher trust and agency partially mediated the positive effects of learning-centered leadership on teacher professional learning. This finding suggests that leadership and learning processes in China were broadly similar to descriptions published in the Western literature (e.g., Leithwood and Jantzi 2006; Slegers et al. 2014; Thoonen et al. 2012; Wahlstrom and Louis 2008; Youngs and King 2002). Since scholars believe that societal context influences the exercise of leadership, our proposed model, based largely on prior Western research, could not have been taken for granted (Hallinger and Leithwood 1996; Walker and Dimmock 2002).

In addition, the results of our mixed-methods analysis support Belchetz and Leithwood's (2007) assertion that a broadly similar set of effective school leadership practices are enacted in distinctive ways across different school contexts. In this study, for example, we noted that the Chinese socio-cultural context is characterized by much larger power distance (i.e., hierarchical relations) than is typically observed in the USA, Canada, UK, Netherlands, or Australia, where the bulk of published research in educational administration has been conducted (Walker and Dimmock 2002). The question about whether teacher trust and agency would be as influential in shaping teacher engagement in professional learning in China – where order-giving and order-taking based on status, rank, and seniority are “the norm” – was an open one (Tang et al. 2014; Walker et al. 2012). Nonetheless, as indicated, the quantitative analysis highlighted teacher trust and agency as relevant “strategic targets” for Chinese principals interested in fostering teacher learning and productive change in their schools. These broad trends were elaborated in the qualitative case studies, which described practices of two successful principals on the dimensions of learning-centered leadership (e.g., vision, modeling). The case studies elaborated how different patterns of leadership practice can shape teacher attitudes (i.e., trust and agency) and behavior (i.e., professional learning). The principals in both case studies engaged their role as “learning leaders” with passion, energy, focus, and activity. This carried over into teachers’ attitudes towards engaging in workplace learning, and indeed towards teachers’ collaborating for change in their schools.

Notably, although both principals were rated as “strong learning-centered leaders,” their leadership styles were refined to meet the needs of their particular school contexts. For example, Principal Zhou entered Wu Tong School at a time when there was a clear need for a revitalization – if not turnaround – in school performance. Principal Zhou employed a principal-directed approach to reform. This was reflected in her use of clearly defined goals, as well as visible active leadership of reforms that engaged teachers in learning. In contrast, Principal Dou had assumed the principalship of a school with a continuing history of success and a strong positive learning culture. Though perceived by teachers as a highly supportive leader, he worked in the background, delegating responsibility for leading reform activities to other leaders. Prior to Zhou’s tenure as principal, the school already possessed a shared vision and a strong learning culture with norms that supported teacher trust, agency, and learning. Zhou therefore saw his role as working with the existing strengths to foster the shared vision of excellence, innovation, and diversity.

Variations in the contexts of the two schools in the study may explain some of the differences in the learning-centered leadership strategies employed by the two “successful principals.” Indeed, the contrast in their learning-centered leadership styles reprises findings reported by scholars in the USA (e.g., Hallinger and Heck 2011; Hallinger and Murphy 1986) and the UK (e.g., Day 2009); these studies found that principals adapted their leadership styles to the needs of the schools in a strikingly similar fashion. Leadership during the “turnaround” phase emphasized clear measurable goals that provided a common direction for staff and fostered coherence in program development. After schools had achieved success, leaders relied on a

shared vision embedded in the culture of the school and distributed leadership to provide meaning, synergy, and direction for school development (see also Hallinger and Heck 2002). Although we only presented two cases in this chapter, they suggest a similar kind of variation in leadership style among these successful leaders.

A second broad finding of interest that emerged from the case studies concerned the means by which the two principals responded to the socio-cultural environment that prevails in China. More specifically, we observed that these principals found ways to enhance and reap the benefits of trust and teacher agency, even in a hierarchical environment where leaders and teachers were accustomed to giving and receiving orders. Both principals worked actively to overcome the potentially negative effects of this norm on teacher satisfaction and commitment. They found ways to navigate the prevailing culture even as they sought to manage the introduction of programs (e.g., flipped classroom) that embraced countervailing values (Walker and Hallinger 2007). This was evident, for example, in the use of modeling as a leadership practice by the principals. In analyses reported elsewhere (Liu et al. 2016a), we found that modeling was not verified as a significant leadership practice employed among the full set of 38 principals. Although modeling was still potentially significant in the Chinese context, it took on a different character; social norms and a strongly hierarchical bureaucratic education system created distance between principals and teachers. This appeared to reduce the frequency and strength of modeling among the principals as a group. Nonetheless, our case studies highlight the fact that modeling could still represent an influential practice in terms of stimulating teacher learning if the principal was both intentional in articulating his/her values and delegated authority to middle-level and teacher leaders.

In sum, the results suggest that the conceptual model proposed in this chapter can be employed by scholars to guide future research on learning-centered leadership in China (see also Chen et al. 2016; Qian et al. 2016; Wang 2016; Zhang and Pang 2016). The study presented in this chapter not only offers a clear definition of learning-centered leadership for the Chinese context, but also initial support for its efficacy in supporting at least one “high value path” that shapes school improvement. Moreover, our initial validation of the scales used in this study offers scholars in China robust tools for future research in China.

In terms of practical implications, the conceptual model and operational constructs described in this chapter could serve as heuristics for China’s policymakers and practitioners as they continue to develop a model of “learning-centered leadership with Chinese characteristics.” As noted, learning-centered leadership has both a short history in China and an uncertain relationship with the traditional role of the school principal. Our findings could, for example, shape the direction and content of principal preparation and professional development. Thus, we hope that the findings presented in this chapter will stimulate discussion and cause practitioners to reflect on the role that they can play in furthering teacher learning and school improvement.

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