

Research Article:

## **How To Enhance Teachers' School Renewal Leadership: Efforts and Effects**

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### **ABSTRACT**

Teacher leadership has been found to be positively associated with student achievement, and the dimensions of teacher leadership positively associated with teacher leadership have been identified. However, mechanisms to improve teacher leadership and the effects of these mechanisms are rarely studied. In this article, we report the efforts to develop teacher leadership in a multi-year, large-scale project titled, "High-Impact Leadership for School Renewal", and the effects of these efforts. Repeated measure analysis was conducted to assess the project's effect on teacher leadership using validated and published instruments. The results indicated that the project had large effects on enhancing teacher leadership, with Cohen's *d* effect size ranging from 0.85 to 1.16 for scales of Orientation to School Renewal and from 0.87 to 1.13 for scales of Learning-Centered School Leadership. Implications for school renewal are discussed.

**Keywords:** Teacher leadership, school leadership, school renewal, school reform, student achievement

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## INTRODUCTION

York-Barr and Duke (2004) describe teacher leadership as “the process by which teachers, individually or collectively, influence their colleagues, principals, and other members of school communities to improve teaching and learning practices with the aim of increased student learning and achievement” (p. 288). The rise of teacher leadership has come in three waves as described by Silva et al. (2000). The first wave of teacher leaders served as an extension of administration in formal positions as managers, as department heads, union representatives, etc., focusing on efficiency and effectiveness as opposed to changes in practice (Wasley, 1991; York-Barr & Duke, 2004). The second wave of teacher leaders advanced instructional expertise, with teachers serving as curriculum leaders, staff developers, and new teacher mentors (Silva et al., 2000). The current third wave of teacher leaders serve within and outside the classroom, where they are central to the process of “reculturing” schools or creating the conditions that support the instructional expertise emphasised in the second wave. The third wave honors the notion that practice often does not change without a culture that supports collaboration and continuous learning, and the role teachers play in the creation and maintenance of positive school cultures (Ash & Persall, 2000; Silva et al., 2000).

Embodied in the rise of teacher leadership is the promise that teacher leadership has an effect on student achievement and that teacher leaders play an important role in connecting school-level decisions and classroom-level practices (Heck & Hallinger, 2009; York-Barr & Duke, 2004). Teacher leadership has become especially important in school improvement in the current bifurcated educational system (Shen, Wu, et al., 2020), as developing teacher leadership to extend the teacher’s sphere of influence into school wide matters, bridging the fault line between the two tectonic plates of state-district school and the classroom. Additionally, the time is ripe for teacher leaders, as research has shown that they are able to effectively address the increased pressure for school improvement, especially improvement tied to student performance (Shen, 2020). MetLife Inc. (2013) noted that 51% of the 1,000 U.S. K-12 public school teachers surveyed held leadership roles in schools.

While the literature has outlined the potential inherent in teacher leadership and the rise of teacher leadership in U.S. K-12 public schools, we have yet to extensively explore the efforts and effects related to developing teacher leadership. This is due to the limited research of mechanisms to improve teacher leadership and their effects. Therefore, this article adds to the knowledge base by introducing findings from a multi-year, large-scale project entitled, “High-Impact Leadership for School Renewal,” showcasing a myriad of teacher leader mechanisms and their effects. We also highlight our challenges and learnings, as well as implications for research, policy, and practice.

## LITERATURE REVIEW

### **Two New Theoretical Advances for Justifying the Necessity and Feasibility of Teacher Leadership for School Improvement**

In the literature on educational leadership, teacher leadership has been discussed as a vehicle for school improvement for more than three decades (Shen, Wu, et al., 2020; York Bar & Duke, 2004). Our team’s comprehensive meta-analysis found the overall effect of

teacher leadership on student achievement ( $r = 0.19$ ) (Shen, Wu, et al., 2020). However, the current literature on teacher leadership seems to argue for the importance of teacher leadership from either a normative or an empirical perspective. However, there is a lack of deep theoretical foundation for the necessity and feasibility of teacher leadership.

### ***The theory of the bifurcated educational system***

Based on 15 years of empirical research (Shen & Ma, 2006; Shen et al., 2017; Xia et al., 2020), Shen (2020) proposed the theory of a bifurcated educational system. Using large data sets collected by the National Center for Education Statistics, U.S. Department of Education, Shen and his colleagues found that two parts comprise the U.S. educational system—one part is from the state to the district and to the school, and the other part is the classroom. Shen (2020) employed the metaphor from the geoscience, calling these two parts tectonic plates with a fault line between them (i.e., the one-way pressure from the state-district-school tectonic plate to the classroom tectonic plate as manifested in policies of curriculum standards, state-wide assessment of student achievement based on the curriculum standards, school accountability, teacher evaluation, etc.).

The difficulty, challenge and failure in educational change is, to a great extent, due to the fault line that ensures educational change initiatives stop at the classroom door. The theory of a bifurcated educational system provides a new theoretical foundation for arguing for the necessity of teacher leadership, given that the one-way pressure from systemic change cannot penetrate the classroom door, and teacher leadership is necessary to bridge the fault line. The bifurcation theory points to teachers' agency in improving our schools.

### ***The theory of win-win situation between principal and teacher leadership***

The theory of a bifurcated educational system establishes the necessity for teacher leadership. The next question is whether teacher leadership is feasible. This leads to the philosophical debates, such as whether the relationship between principal leadership and teacher leadership is a zero-sum game or win-win situation. If one believes the relationship is a zero-sum game, then although teacher leadership is necessary, it is not feasible in practice. Rigorous empirical studies illustrate, however, that the relationship between principal leadership and teacher leadership is indeed a win-win (Shen & Xia, 2012; Xia & Shen, 2020), providing empirical evidence that zero-sum is more a myth than a reality, and that teacher leadership is feasible.

### **Various Dimensions of Teacher Leadership**

The Shen, Wu et al.'s (2020) meta-analysis of teacher leadership synthesised various frameworks of teacher leadership and clearly identifies seven distinct dimensions of teacher leadership:

1. Promoting shared mission, vision, and goals for student learning.
2. Coordinating and managing beyond the classroom.
3. Facilitating improvements in curriculum, instruction, and assessment.
4. Promoting teachers' professional development.
5. Engaging in policy and school decision making.
6. Improving outreach and collaboration with families and communities.
7. Fostering a collaborative school culture.

All seven align in some combination with the three distinct waves of teacher leadership identified by Silva et al. (2000)—the first wave: an extension of administration; the second wave: advancing instructional expertise; and/or the third wave: teachers “reculturing” schools creating the conditions for collaboration, continued learning, and a positive school culture.

Diving deeper into the seven dimensions of teacher leadership defined by Shen, Wu, et al. (2020), one notes the kinds of teacher leader behaviours that align with the various dimensions. For example, promoting shared mission, vision, and goals for student learning often involves creating a shared vision that brings coherence, noting the role of the teacher leader to unify individuals and coordinate efforts (Lambert, 2003); promoting shared school governance, emphasising the need to formalise processes and norms for all involved (Heck & Hallinger, 2010); and leading with vision (Teacher Leadership Institute, 2018).

### **The Effects of Teacher Leadership**

In 2004, York-Barr and Duke (2004) noted, “the literature is relatively rich with claims of the potential and desired effects of teacher leadership and relatively sparse with evidence of such effects, especially at the levels of classroom practice and student learning” (p. 282). In 2017, Wenner and Campbell raised similar concerns regarding the limitations of small qualitative case studies and the lack of quantitative studies (Wenner & Campbell, 2017). However, Shen, Wu et al. (2020) were able to identify the effects of teacher leadership by meta-analysing the results in the literature. The researchers were able to capture the effects of the seven identified categories of teacher leadership on student achievement, including the following:

The results manifested that, in general, each of the seven teacher leadership dimensions had a statistically significant and positive relationship with student achievement. Among all seven dimensions, the two dimensions of “facilitating improvements in curriculum, instruction, and assessment” ( $r = 0.21$ ) and “promoting teacher professional development” ( $r = 0.19$ ) seem to have the strongest relationships with student achievement.

In summary, the Shen, Wu, et al. (2020) findings not only assist us in categorising the work of teacher leaders and aligning this work into seven primary areas, but they also assist with identifying the kinds of teacher leadership work most beneficial to student achievement. As noted, the more engaged teacher leaders are with improving curriculum, instruction, and assessment, as well as teacher professional development, among other behaviours, the greater the yield for student achievement. As we identify the forms and effects of teacher leadership, we must also consider the challenges below, so those interested in pursuing teacher leadership have a clear vision of how to surmount the challenges in order to achieve positive effects.

### **Challenges in Developing a Teacher Leadership Model**

The challenges in developing a teacher leadership model often come with a school’s inability to meet the conditions for flourishing. Muijs and Henner (2007) identified several factors that contribute to teacher leadership flourishing, including establishing a culture of trust, building beneficial and multifaceted networks, deepening and expanding professional development, and providing the necessary time for the important preparation of teacher

leaders. Therefore, consideration of the complexities of these challenges and how they can be circumvented in teacher leadership work is crucial for those desiring to build successful teacher leadership models.

Collaboration is a pillar for teacher leadership work. The recognition and utilisation of teacher strengths within a school and across a district are crucial in building teacher capacity. However, teachers are less likely to collaborate if there is not a culture of trust that allows creativity and risk in their growth and learning. In addition, while collaboration is essential, the teacher networks needed for collaboration are not always common. School site-specific teams may develop, but cross-district networks and higher education networks are not as common. These, along with other networks that build teacher leader capacity, such as professional networks and grade-level and subject-area professional communities, optimise teacher leader preparation and success. Another consideration is the content of professional development for teacher leaders. Teacher leaders are often well-versed in their content, but they would benefit from professional development specific to their roles as leaders, as they transition from teaching adolescents to teaching adults, leading workshops, fostering collaboration, mentoring teachers, and researching and advocating for educational changes.

Importantly, time must be granted for efforts to build teacher capacity. Teachers need to trust that they will be given the time to unpack and engage in new learning in order to move forward with ownership of ideas and strategies and the ability to implement their thinking and learning with integrity. They need time to meet, connect, develop individual and school-wide plans, network with partners, and participate in professional development that fosters their growth and success in their leadership roles, as well as time and space for teachers to actualise what they have learned.

As schools move forward with teacher leadership development, they will need to be thoughtful about how they build culture, prioritising trust to limit the challenges that come with low teacher morale or investment in a system that they do not fully trust. Similarly, they will need to consider opportunities for networking with new stakeholders and strengthening ties with current partners to be able to provide the needed professional development and additional supports to build teacher capacity.

While we have a good number of studies capturing qualitative data on teacher leadership, there are still few studies that speak specifically to how to develop teacher leadership and the effects of these efforts in quantifiable and actionable ways. Our study will build on the existing literature, sharing findings from a large, federally funded project focused on developing teachers' school renewal efforts and the effects of these school renewal efforts.

## **EFFORTS OF THE HIGH-IMPACT LEADERSHIP PROJECT TO ENHANCE TEACHER LEADERSHIP**

### **High-Impact Leadership Project Background**

The high-impact leadership (HIL) project is a multi-year project involving 150 schools funded by the U.S. Department of Education. The HIL project grew out of the work of (a) faculty members of educational leadership at Western Michigan University (Shen et al., 2018; 2021; Shen, Ma, et al., 2020; Shen & Burt, 2015; Shen & Cooley, 2013), and

(b) school superintendents in the southwest region of the state who formed the Reading Now Network, an initiative focused on equity of opportunity for all students, regardless of school, family, or community circumstances. The project was initially funded for three years by a U.S. Department of Education grant, then renewed for an additional two years, for a total of five years.

The HIL Model for School Renewal is a systems approach to complex change in schools based on four leadership principles and a 5-phase cycle that helps re-energise, re-focus, re-frame, re-imagine, and re-create the work of achieving literacy for all students. The model is grounded in school mission, appreciative of a school’s current state, with a laser focus on the desired state school leaders want to achieve. Its strengths-based approach—powered by a growth mindset—generates hope and aspirations for improved outcomes for all students.

Teacher leaders are essential to HIL’s shared leadership model. As teacher leaders are selected and trained to work collaboratively on school renewal, there is intentional focus on increasing the school-based teams’ capacity for leadership and treating the school as the unit for renewal (Ma et al., 2020).

### The Four Principles and Practices of Sustainable Leadership

Essential to HIL’s way of work are the four principles of sustainable leadership: (a) positive core, (b) collective ownership, (c) evidence-based decisions, and (d) organisational learning. These four principles are used to build motivation and capacity for school renewal. Embedded within each principle are their key components that serve as guides from theory to practice (see Figure 1). The four principles are pillars for school teams that guide their way of work towards school renewal.



Figure 1. HIL Principles for school renewal framework

The positive core consists of four components: mission and vision focused; growth mindset; appreciative lens, and strengths-based leadership. To assist schools in focusing on their positive core, we model mission and vision focused work. Schools are encouraged to identify and focus on their why, linking it to the school mission and vision, understanding how they are unified and being transparent to all stakeholders about their "why" embedded in their mission and vision. The reinforcement or adoption of a growth mindset allows for reimagining about who the people and the organisation are and what they have to offer to its renewal, from teachers, to students, to parents, and community partners. An appreciative lens allows stakeholders to transition from a deficit orientation to a strengths-based orientation, starting with acknowledgement of what is working and what can be used as a foundation to build towards their dreams, as opposed to starting with deficit-based thinking that looks for what is wrong. A strengths-based approach pairs with the appreciative lens by allowing the organisation to use its acknowledged strengths to align with growth goals to build capacity and strengthen renewal efforts.

Collective ownership is the embodiment of the win-win theory. This second principle emphasises distributed leadership, shared responsibility, social trust, and interdependence. Distributed leadership accentuates the power of all stakeholders, aligning their strengths with leadership opportunities, shared responsibility showcases equal investment in the goals of the organisation and an understanding of the vital behaviours necessary to carry out the individual responsibilities. Social trust fosters the conditions for all stakeholders to safely explore, grow, and adapt to new learning and opportunities. Finally, interdependence evolves as the result of regular opportunities for stakeholders to co-create, co-investigate and co-develop.

The third principle of evidence-based decision-making underscores the importance of collaborative inquiry, performance profiling, progress monitoring, and utilising both leading and lagging indicators. Collaborative inquiry leverages the power of questions to guide the direction of the organisation. Schools are encouraged to investigate current student, staff, and school strengths and growth edges. Performance profiling allows schools to push inquiry work to the next level, as they identify priorities and set growth targets for the school as well as individual staff and students. These performance profiles are implemented with integrity through the utilisation of progress monitoring tools. Schools participate in real time progress monitoring, identifying the appropriate measures and benchmarks for student, staff, and school growth targets. A focus on leading and lagging indicators allows for an integration of annual, interim, and real-time data measures to inform the work of the school.

The fourth HIL principle is organisational learning. Organisational learning accentuates reflective practice, double-loop questioning, systems thinking and alignment, and levels of learning. Reflection is an appreciative practice that allows the organisation to pause, reflect and acknowledge what is working well and where there is room for growth moving forward. HIL encourages its schools to reflect and engage at weekly and monthly meetings to analyse data on their progress toward their desired state. Double-loop questioning involves another layer of analysis into the thoughts and assumptions that are guiding the team. Schools are asked to question deeply their beliefs and assumptions and how those align with the reality of their qualitative and quantitative data to guide growth, adaptations, and future learning. Systems thinking and alignment ensures schools are using their knowledge of strengths and resources to appropriately align their capacity with their process to support

their progress toward the desired state. Finally, levels of learning create the foundation to learn, adapt, and evolving, fostering a safe learning environment for both adults and students.

Professional development for HIL emphasises the four principles. For example, teacher leaders may explore the positive core through completion of a strengths inventory, a reflection on personal strengths and team strengths to identify meaningful points of engagement and capacity building for all members of the team. The positive core and evidence-based decisions may be dually practiced as teacher leaders experiment with planning teacher sessions or site professional development that model appreciative data analysis. This process allows school sites to capture wholistic stories of student success with both qualitative and quantitative data and study these successes and their manifested strengths as building blocks for teacher and student growth.

### **The HIL School Renewal Cycle**

The four principles for sustainable leadership manifests tangibly as HIL facilitators walk side by side with school principals and teacher leaders in their process of school renewal, transitioning through the five phases of the HIL school renewal cycle, including appreciative vision; performance profile; aligned growth targets; progress monitoring; and reflection and renewal. Phase one's appreciative visioning is a shared vision of success that engages multiple stakeholders. Phase two's performance profile takes a snapshot of the current state of the organisation, highlighting the strengths of the school. Phase three's aligned growth targets provide a deep dive into next steps with educators identifying where they want to grow and the strategies, practices, and behaviours that will support this growth. The fourth phase, progress monitoring, allows schools to closely monitor progress towards their growth targets using leading and lagging indicators. At the end of a cycle, schools engage in phase five's reflection and renewal, assessing progress, celebrating successes, and preparing for another cycle of renewal with a new self-selected focus.

## **EFFECTS OF THE HIGH-IMPACT LEADERSHIP PROJECT ON ENHANCING TEACHER LEADERSHIP**

### **Sample and Study Design**

Data came from two waves (2019–2020 and 2021–2022) of schools that participated in the HIL project designed for, among others, strengthening teacher leadership. We implemented a pre-test and post-test research design, with data collection conducted in the spring of both 2020 and 2022 using two questionnaires measuring teacher leadership. To maintain a “true” pre-test and post-test design, we analysed data from teachers who provided data during both data collections. The resulting sample size was 508 teachers from 54 schools. Data collection procedures were approved by the Institutional Review Board. Since the two waves of data were collected in Spring 2020 and Spring 2022, the comparison between the two time points showed the effect of the HIL project on teacher leadership.

### **Instruments**

Instruments were designed for the HIL project to measure school leadership from different perspectives. These instruments were developed, validated, and published in peer-reviewed

journals. Specific to the teacher questionnaire, there were several scales, two of which were (a) Orientation to School Renewal (Ma et al., 2020; Shen, Ma, et al., 2020; Shen, Wu, et al., 2020; Shen et al., 2021) and (b) Learning-Centered School Leadership (Shen et al., 2018 (see Appendices A and B, respectively). The scale of Orientation to School Renewal has 21 items on which teachers grade their effort in promoting school renewal. The scale is based on the theoretical framework on school renewal with seven dimensions, including a focus on students and their achievement, continuous school improvement, a balance between internal and external influences, an emphasis on the dialogue, decision, action, and evaluation (DDAE) process, implementation integrity, implementers as active developers, and internal responsibility and professionalism. The scale has been validated in the published literature and is shown to have sound psychometric properties (Ma et al., 2020; Shen, Ma, et al., 2020; Shen, Wu, et al., 2020; Shen et al., 2021). In this study, Cronbach's alpha for the scale was 0.995 for the pre-test and 0.996 for the post-test. The test-retest reliability was 0.496.<sup>1</sup> Analytically in this study, valid average was used to create a score on each dimension of principal school renewal effort for each teacher (on a measurement scale of 1 to 6), together with an overall score combining all dimensions.

The scale of Learning-Centered School Leadership, also having been validated in the published literature and having sound psychometrics (Shen et al., 2018), has 42 items on which teachers grade school effort in promoting educational policies and practices with a focus on learning. The scale is based on the theoretical framework on schooling processes, with seven dimensions of data-informed decision-making; safe and orderly school operation; high, cohesive, and culturally relevant expectations for all students; distributive and empowering leadership; coherent curricular programs; real-time and embedded instructional assessment; and commitment and passion for school renewal. In this study, Cronbach's alpha for the scale was 0.996 for the pre-test and 0.997 for the post-test. The test-retest reliability was 0.521. Analytically, valid average was used to create a score on each dimension of school learning center leadership effort for each teacher (on a measurement scale of 1 to 6), together with an overall score combining all dimensions.

## **Analysis**

Because of our adoption of the pre-test and post-test research design to the examine the treatment effects of the HIL project, we used the dependent-samples *t* test to compare the change from pre-test to post-test ( $\alpha = 0.05$ ). This *t*-test was performed for each scale and within each scale for each dimension. Therefore, for each scale, a total of eight *t*-tests were performed on seven dimensions within each scale plus the overall scale. The Bonferroni adjustment was applied to the alpha level (0.05) for each scale, so as to prevent an inflation of the familywise Type I error. As a result, any statement about statistical significance would be based on the Bonferroni adjustment. Finally, in addition to statistical significance, we provided a measure of the practical importance of any statistically significant treatment effects. Specifically, we adopted Cohen's *d* as the effect size measure, with small effects as 0.30, moderate effects as 0.50, and large effects as 0.80.

## **Results on High-Impact Leadership Project's Effect on Enhancing Teacher Leadership**

Tables 1 and 2 present information about both statistical significance and practical importance on the two scales of teacher leadership, namely, Orientation to School Renewal and Learning-Centered School Leadership. For each scale, the means for both pre-test

and post-test on all dimensions and the overall scale were provided as the background for the comparisons between pre-test and post-test scores. Information on *t*-statistic and corresponding standard error (SE) was also provided for each test. The final column of each table indicated effect size (in the form of Cohen's *d*).

Concerning Orientation to School Renewal (see Table 1 and Appendix A), all eight measures (i.e., the overall measure for the whole scale and measures for each of the seven dimensions) demonstrated statistically significant results, indicating that there was statistically significant improvement from pre-test to post-test on all dimensions within this scale and this scale overall. In terms of effect size, all treatment effects were considered large, bearing important practical importance for educational policies and practices (effect size ranged from 0.85 to 1.16). Therefore, the HIL project had practically important impact on teachers' effort to lead their schools towards school renewal.

**Table 1.** Pre-test and post-test comparison on orientation to school renewal via teachers

	Pre	Post	<i>t</i>	SE	<i>d</i>
Overall	4.43	4.65	5.71*	0.04	0.88
Focus on students and their achievement	4.85	5.04	4.97*	0.04	0.85
Continuous school improvement	4.74	4.96	5.63*	0.04	0.91
Balance between the internal and external influences	4.37	4.52	3.55*	0.04	1.00
The dialogue, decision, action, and evaluation (DDAE) process	4.34	4.64	5.86*	0.05	1.16
Implementation integrity	4.23	4.51	5.62*	0.05	1.13
Implementers as active developers	4.16	4.39	4.47*	0.05	1.14
Internal responsibility and professionalism	4.51	4.71	4.28*	0.05	1.05

Notes. \**p* < 0.05; Bonferroni adjustment is applied to the alpha level.

Concerning Learning-Centered School Leadership (see Table 2 and Appendix B), all measures demonstrated statistically significant results, except one measure, safe and orderly school operation. Apart from this dimension, there was statistically significant improvement from pre-test to post-test on all other dimensions within this scale and this scale overall. In terms of effect size, treatment effects on statistically significant dimensions were all considered large, bearing important practical importance for educational policies and practices (effect size ranged from 0.87 to 1.13). Furthermore, the scale of Learning-Centered School Leadership overall showed a large effect size of 0.80 as well. Therefore, the HIL project produced practically important impact on teachers' learning-centered school leadership.

**Table 2.** Pre-test and post-test comparison on learning-centered school leadership via teachers

	Pre	Post	<i>t</i>	SE	<i>d</i>
Overall	4.17	4.40	6.66*	0.04	0.80
Data-informed decision-making	4.11	4.45	7.47*	0.04	1.01
Safe and orderly school operation	4.39	4.44	1.07	0.04	0.99
High, cohesive, and culturally relevant expectations for all students	4.23	4.37	3.79*	0.04	0.87
Distributive and empowering leadership	4.07	4.25	3.90*	0.04	1.01
Coherent curricular programs	3.73	4.12	7.68*	0.05	1.13
Real-time and embedded instructional assessment	4.21	4.52	8.08*	0.04	0.87
Commitment and passion for school renewal	4.59	4.76	4.02*	0.04	0.95

*Note.* \* $p < 0.05$ ; Bonferroni adjustment is applied to the alpha level.

## DISCUSSION

Based on the quantitative findings and our team's reflection on the conduct of the HIL project, we offered the following four discussion points on the practice, policy and research related to teacher leadership.

### An Image of the Possible

The research results reported in this paper contribute to the literature and illustrate the image of the possible. The literature on teacher leadership is largely normative, arguing for teacher leadership from philosophical and moral perspectives. There is also a body of literature focusing on the effects of teacher leadership as reflected in Shen, Wu, et al.'s (2020) meta-analysis of teacher leadership's effect on student achievement. However, very few empirical studies, particularly experimental studies, reported on how to develop and improve teacher leadership. The present study illustrated an image of the possible, a case of statistically significant enhancement of teacher leadership.

A primary distinction in HIL's image of the possible is the approach, providing a means for how to engage schools in change, the power of school renewal in place of school reform, emphasising an internal compass as opposed to external, to be discussed further below. Additionally, one has to understand the power of the HIL framework, providing principles that support school renewal: the positive core, collective ownership, evidence-based decisions, and organisational learning. These principles embody the key mechanisms emphasised in the orientation to school leadership and learning-centered school leadership instruments. For example, one may not successfully sustain distributive and empowering leadership without leveraging the positive core by identifying teacher strengths and aligning these strengths with teacher interests and school needs, fostering collective ownership by creating a culture that promotes social trust amongst teachers and leaders, and practicing distributed leadership that is a balance of shared responsibility and interdependence, as well as the promotion of organisational learning that allows teacher leaders to build capacity at the site as teachers grow through reflective practice.

### The Power of School Renewal (vs. School Reform)

The school renewal model enhances teacher leadership. Embedded in the HIL Project is the contrast between the renewal and reform model, as illustrated in the following table (Shen, 2020). It is clear from the contrast that the renewal model relies on school's internal initiative, responsiveness, responsibility, and professionalism for continuous school improvement, an approach that is demonstrated to enhance teacher leadership. Silva et al. (2000) speak to a third wave of teacher leadership that promotes a "reculturing" that honors the creativity and strengths of existing stakeholders. The renewal model aligns with this premise of grassroots empowerment and engagement for schools.

**Table 3.** School reform model versus school renewal model

The "Reform" Model	The "Renewal" Model
Shifting focus	Focus on students and their achievement
Driven by the reform agenda	Continuous school improvement
Externally driven	Balance between the internal and external influences
The research, development, dissemination, and evaluation (RDDE) process	The dialogue, decision, action, and evaluation (DDAE) process
Rigid, context-free implementation	Contextualised and data-informed development and implementation
Implementers as passive receivers	Implementers as active developers
External accountability	Internal responsibility and professionalism

### Challenges in Developing Teacher Leadership

As part of the learnings on how to develop teacher leadership, it is important to note the challenges that HIL faced as we endeavoured to foster teacher leadership. Teacher leadership is at the center of the HIL process for developing school-level motivation and capacity for transformative change that results in greater student success and equity of student outcomes. Principal leadership in the HIL process focuses on creating the conditions for teachers to gain agency, efficacy and competence with shared leadership and collective ownership for the mission, vision, and outcomes of the school. As we worked with 150 school teams, consisting of the principal and three teacher leaders for each school, from 83 different school districts over a five-year period, we observed both conditions that supported the emergence of teacher leadership and conditions that created challenges for teachers to enlist and engage with one another as full participants in shaping the leadership processes of the school.

Conditions that contributed to the emergence and establishment of teachers as shared leaders and decision-makers included pre-existing processes and structures for teacher engagement, i.e., professional learning communities, work groups, school improvement teams, school leadership teams, and dedicated time for these teaming activities. Where these teaming processes were routinely focused on issues of teaching and learning, teachers were

more ready to identify and collaboratively address issues of student success. Where teachers had limited previous interaction with each other reflecting on their classroom practices and debriefing evidence of student learning, principals had to move slower through all phases of the HIL School Renewal Process. In situations where school routines did not promote interdependence, teachers tended to be slower in recognising each other as co-leaders and co-constructors of conditions that could best support student learning. Historically, when access to information and influence over school office directives and superstructures, teachers were less inclined to view themselves as agents of transformative change. Instead, they were more inclined to see collaborative work as a means to ensure compliance and their classrooms as the only spaces where they could exert some degree of control. As a result, they were skeptical of processes like instructional rounds, learning walks, PLC work, and other processes intended to foster shared understandings, shared responsibility, and shared leadership.

### **The Need to Dive Deeper into How to Develop Teacher Leadership**

The paper calls for more research on how to develop and enhance teacher leadership. As indicated in the foregoing, among the literature on teacher leadership, empirical studies on how to develop and enhance teacher leadership are rare. One emphasis of the continuing development of literature on teacher leadership is to focus on the “how to develop and enhance teacher leadership.” Given the overwhelming evidence reported on the positive outcomes related to teacher leadership, the focus on the “how” question will not only improve practice and policy, but also lead to the next level of research on teacher leadership. This study is among the first steps toward this direction, as it highlights the impact of school renewal and its four principles' ability to significantly enhance teacher leadership.

### **NOTES**

1. In general, for a cognitive test, a test-retest reliability of 0.800 (in correlation) is considered as sound. This standard may not directly apply to a perceptive survey in that it is easier to change perception (e.g., emotion) than to change cognition (e.g., ability) of respondents. For a preceptive survey, a moderate test-retest reliability around 0.500, such as what we encountered in this study, actually captures the fluctuation in perception at different time points. After all, even a good degree of correlation can still be accompanied by a poor level of agreement among respondents at different time points (Bland & Altman, 1986). Overall, we considered our two instruments (each with a high Cronbach's alpha at different time points and a moderate test-retest correlation across different time points) as sufficient for measurement purposes.

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## APPENDICES

### Appendix A

#### Orientation to School Renewal Measured via Teachers

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##### Focus on students and their achievement

Our school improvement process is guided strongly by the goal of improving student achievement.

Our school truly has high expectations for all students.

All teachers have a clear, shared vision about expectations for all students.

##### Continuous school improvement

Our school has a continuous focus on teaching and learning.

All our teachers continuously seek ways to enhance the teaching and learning processes.

Our school consistently uses a continuous improvement process/strategy, rather than starting from scratch for each initiative.

##### Balance between the internal and external influences

We openly welcome ideas and input on school improvement from all stakeholders.

We successfully balance external pressure and internal initiative for school improvement.

We successfully prioritise our school improvement efforts despite competing priorities.

##### The dialogue, decision, action, and evaluation (DDAE) process

We consistently dialogue in our school about our school improvement priorities.

Our school improvement strategies are well coordinated within the school.

Our school successfully monitors the progress of our school improvement initiatives with data.

##### Implementation integrity

We consistently monitor our data and develop school improvement initiatives accordingly.

We have a clear process in place to continuously generate new ideas for school improvement.

We consistently re-prioritise school improvement efforts based on continuous data updates.

##### Implementers as active developers

Our school really decides our school improvement priorities.

We usually develop our own programs for school improvement (rather than buying from an external vendor).

We consistently adapt and adjust existing programs based on our outcome data.

##### Internal responsibility and professionalism

We all hold ourselves and each other accountable.

We all hold our students accountable for their own achievement.

Continuous reflection on school improvement is part of our professional culture.

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## **Appendix B**

### **Learning-Centered School Leadership Measured via Teachers**

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#### Data-informed decision-making

We consistently analyze student achievement to establish school improvement goals.

We collaborate with each other across grade levels to conduct inquiry using school-wide data.

We have received adequate professional development on analysing and interpreting data.

We have strong support from the central office administration for using data for decision-making.

We have sufficient technology to utilise the data we need.

We consistently use data from multiple sources to monitor student learning.

#### Safe and orderly school operation

We have comprehensive safety policies and procedures in place.

We have a positive school climate conducive to student learning.

We have good policies to protect students from cyber and other bullying.

We consistently monitor and work to reduce student behavior referrals.

Our building overall is in good physical condition.

We have policies that effectively promote respect for differences in our school environment.

#### High, cohesive, and culturally relevant expectations for all students

We have an effective process for students to set learning expectations for themselves.

Our teachers design learning activities that are relevant to our students' personal backgrounds.

We consistently share specific learning goals with our students.

Our school activities engage students and their families in ways that relate to their family circumstances and cultures.

We regularly monitor and address student achievement gaps.

We utilise strategies to engage parents fully as instructional partners.

#### Distributive and empowering leadership

The majority of our teachers are involved in school leadership activities via committees or other organizational structures.

We have an environment in which teachers feel very comfortable in offering input on needed improvements.

The majority of our teachers engage in peer observations and feedback.

We have an environment in which teachers work together closely on school improvement activities.

We have one or more fairly strong professional learning communities in place within our school.

We have a culture of collective responsibility among all teachers and staff within our school.

#### Coherent curricular programs

Our curriculum is well aligned horizontally and vertically across grades in our school.

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Our teachers regularly meet to discuss how they are interpreting the curriculum and building lessons/units.

Our teachers regularly meet to share and evaluate instructional strategies for teaching the curriculum units and lessons.

Our teachers consistently meet to design student work and formative assessments.

Our teachers consistently communicate the key curriculum performance standards to students and parents.

Our students consistently track their own progress in mastering key curriculum performance standards.

#### Real-time and embedded instructional assessment

We consistently implement biweekly or more frequent assessments in each subject at each grade level.

Our teachers consistently use data from formative assessments to inform further instruction.

Our teachers meet with students on a regular basis to review their formative assessment data.

All our teachers understand and utilise formative assessments.

We consistently use different feedback strategies depending on the needs of the students.

Our students understand what they are to learn on a daily basis.

#### Commitment and passion for school renewal

We have a culture in which teachers hold themselves accountable for student achievement.

We have a school culture where teachers learn from each other.

We regularly celebrate our successes.

All of our teachers and staff are continuously seeking ways to enhance the teaching and learning processes in our school.

We have a clear, shared vision about what we want and expect for all students.

We have a positive school environment in which student learning is the primary focus.

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