Improving Learning for All:
Learning from the Literacy Professional Development Project

MINISTRY OF EDUCATION
Te Tāhuhu o te Mātauranga

Leadership for Learning: Understanding the Knowledge and Practice of Effective Principals

Wider Implications of the LPDP Learning

A considerable body of literature tells us that the most effective school leaders are those whose primary focus is on promoting teaching and learning. Despite this general agreement, early LPDP research showed that only a few school principals seem to have embraced these ideas whole-heartedly. This may be because the research has not focused on the specific knowledge and skills needed, making it difficult for principals to see how the ideas might apply in their context.

Project researcher Helen Timperley has investigated the knowledge and capabilities of five principals whose leadership practice has contributed to improved student literacy outcomes. She has connected what she found to the theoretical literature, and in the process, found that the literature underestimates the knowledge needed for learning-focused leadership. She suggests that the capabilities of effective school leaders fit within three domains:

- having and building their own and others' pedagogical content knowledge;
- developing learning relationships;
- developing expectations for all to learn.

It may be unrealistic to expect all principals to possess the degree of knowledge necessary to be effective in each of these domains. We need to know more about the procedural knowledge that principals need to be effective leaders of learning and about how to distribute this knowledge through the system.

Literacy
Professional Development Project

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Te Pou Taki Kōrero

Key Questions

As you read this paper, you may like to consider the following questions with regard to your own leadership context:

- What are the capabilities required of a leader of learning in your school?

- Who in your school has these capabilities? How do you know? What systems do you have in place to ensure that these people have opportunities to lead? How can you further build the capabilities of the leaders in your school?

- What steps need to be taken at a systems level to learn more about what knowledge is necessary to be an effective leader of learning and how to distribute that knowledge across the system?

Main Sources for this Research Summary

- Instructional Leadership in Action (Timperley and Hulsbosch, 2010)
- Knowledge and the Leadership of Professional Learning (Timperley, in press)

NB: This summary was written from sources that are currently unpublished, so the quotations are taken from the researchers' notes and are subject to change in the final publication.

Background

There is an emerging consensus in the literature on school leadership about the role leaders can play in promoting effective classroom instruction. This literature has informed the Literacy Professional Development Project (LPDP), which has always included "evidence of effectively led professional learning communities" as one of its outcomes. In particular, the project has taken a "distributed leadership" perspective (Harris, 2008; Spillane, Halverson, & Diamond, 2004), fostering the capability of nominated literacy leaders to support teachers to develop their knowledge and skills in ways that foster improved literacy instruction.

Earlier project research (Timperley & Parr, 2009) showed that teachers tended to view their school's literacy leaders and visiting facilitator as having considerable influence on their professional learning. None of the teachers surveyed for this earlier research regarded their principal as having such an influence. Principals themselves saw their leadership role as being to lead the processes and change in contrast to the literacy leaders, who stressed the importance of building their own and others' pedagogical content knowledge.[1]

Given the relatively consistent portrayal of the importance of institutional leadership, Timperley (in press) asks why many school leaders have not taken on this role to the extent they might. She suggests two reasons for this situation:

I. The literature tends to provide decontextualised, generic descriptions of effective practice, leaving principals to work out for themselves how they apply to their schools.

2. Researchers have not clearly identified what leaders actually need to do in order to influence classroom practices in ways that lead to improved student outcomes.

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[1] The research summary "It's All about the Students: Helping Students Become Self-regulated Learners" discusses the relationship between content knowledge, pedagogical knowledge, and pedagogical content knowledge. Teachers blend their content knowledge with their knowledge of effective pedagogy to develop their pedagogical content knowledge, the unique knowledge needed to teach effectively within a specific discipline.
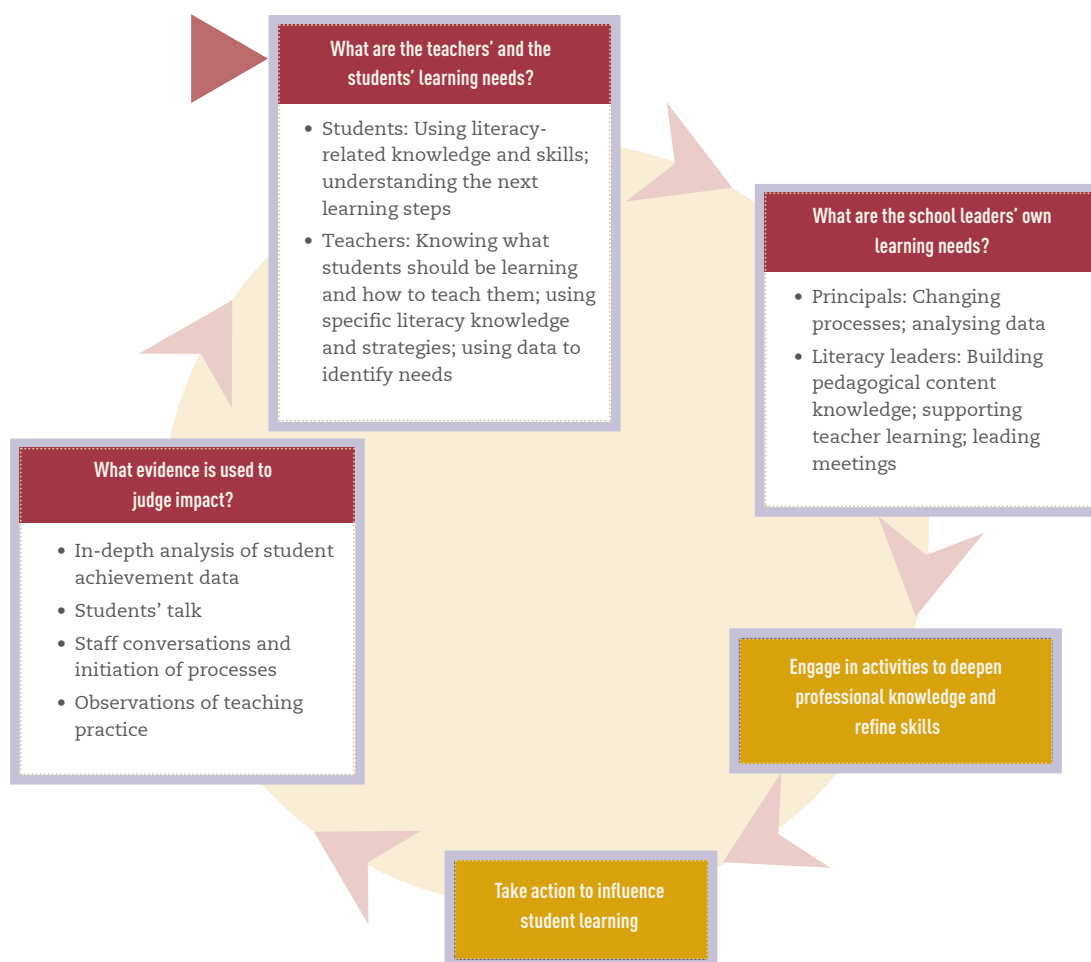
This research summary focuses on the leadership practices of school principals, as opposed to other leaders of learning within the school. It addresses the issues of decontextualisation and lack of clarity by examining the actual leadership practices of five school principals who seemed to be having a significant positive influence on classroom practice and student outcomes.

Taking Part in Professional Inquiry

The research summary "If the Teacher Is Clear about It, the Students Will Get It: Professional Inquiry for Teachers" describes how the LPDP has innovated on the Teacher Inquiry and Knowledge-building Cycle presented in the *BES Teacher Professional Learning and Development* (Timperley, Wilson, Barr, & Fung, 2007) to ensure that all its participants are supported to build their knowledge around literacy and to self-regulate their learning. The adapted cycle for school leaders is presented in figure 1 below. The project's researchers conduct formal research that parallels those cycles of practitioner inquiry. That is, they gather and analyse a range of evidence, including student achievement information, to identify and understand:

- the learning needs of the students whose learning they are responsible for;

- their own learning needs;

- the impact of any changes in practice that have resulted from their new learning.

Figure 1: School Leaders' Inquiry and Knowledge-building Cycle[2]

What are the teachers' and the students' learning needs?

- Students: Using literacy-related knowledge and skills; understanding the next learning steps
- Teachers: Knowing what students should be learning and how to teach them; using specific literacy knowledge and strategies; using data to identify needs

What are the school leaders' own learning needs?

- Principals: Changing processes; analysing data
- Literacy leaders: Building pedagogical content knowledge; supporting teacher learning; leading meetings

What evidence is used to judge impact?

- In-depth analysis of student achievement data
- Students' talk
- Staff conversations and initiation of processes
- Observations of teaching practice

Engage in activities to deepen professional knowledge and refine skills

Take action to influence student learning

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[2] This cycle was first presented in the *BES Teacher Professional Learning and Development* (Timperley et al., 2007). Since then, it has been adapted slightly by the lead writer, Helen Timperley.

An important feature of inquiry is that it is iterative. As noted above, this research built on earlier research that investigated the "chain of influence" (Timperley & Parr, 2009). That research is summarised in "Creating a Chain of Influence: Enabling Reciprocal Learning from Policy to Practice". It included the finding that there was a break in the chain of influence: none of the teachers who participated in the research nominated their principal as a source of knowledge or as instrumental in promoting their learning.

The research summarised in this paper seeks answers to the inquiry question "How can we as **leaders** promote learning for our teachers so that they can bridge the gap for our students?" It does so by exploring the knowledge and practices of principals who have been successful in positively influencing student outcomes at their schools. At the same time as this research was being conducted, the project leaders conducted their own inquiry, exploring ways to further support principals to lead the professional learning in their schools while maintaining the support for literacy leaders that was proving so effective.

Designing the Research: What Are the Capabilities of Effective School Principals?

Timperley refined her research question to ask: "What leadership capabilities were demonstrated by principals in schools with accelerated student achievement when enacting their role as leaders of learning?" (Timperley, in press, para. 3)

Timperley's first step was to use the project's student achievement data to identify schools that had successfully accelerated student literacy achievement. The rates of progress of students at these schools were considerably above what would be expected through normal maturation and learning:

> *Student achievement in the schools in the study had an average effect size[3] over expected rates of progress of 0.42 (3.3 times the expected rate) in the first year and 0.35 (2.7 times the expected rate) in the second year. The overall rate of progress was approximately three times the expected rate of progress over the two years.*
>
> Timperley, in press, under Context and Data Collection, para. 1

Timperley then asked the project's facilitators to identify five schools in which the principal had contributed to the students' achievement gains. She was able to check the facilitators' perceptions by asking teachers at the schools to rate their principals on the five dimensions of effective practice identified by Robinson, Hohepa, and Lloyd (2009) as associated with high student achievement (see below). All the principals rated highly on all of the dimensions, with the strongest ratings being for the dimension associated with the highest effect sizes: promoting and participating in teacher learning and development.

Timperley then asked each principal to nominate and record an occasion when they believed they were being an effective instructional leader. Interestingly, all of the principals chose to record occasions when they were promoting teacher learning and development although, when questioned, they could all nominate occasions that were representative of the other dimensions. All considered improving teaching and learning to be their top priority, with three principals admitting that this sometimes meant that administrative tasks were not given the same priority.

Timperley then interviewed both the principal and the participating teachers to find out about the knowledge and skills required to lead the recorded activities. This enabled her to understand both the principal's theories-of-actions (the thinking behind their actions) and their theories-in-use (what actually happened).

Timperley and a colleague analysed this evidence through the lens of a framework that drew from three areas of research, as described below.

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[3] The term "effect size" is used in measuring the LPDP's impact. It shows the extent of student progress in the project relative to their starting point and allows comparison with the students' expected progress.

What Do Research and the Literature Tell Us?

Timperley's analytical framework drew on the theoretical and empirical literature on leadership, learning, and interpersonal processes. It had three key features.

First, the framework rested on the assumption that leadership is about the exercise of influence. That influence may or may not be positive. Spillane (2006) writes:

Leadership refers to activities tied to the core work of the organization that are designed by organizational members to influence the motivation, affect, or practices of other organizational members or that are understood by organizational members as intended to influence their motivation, knowledge, affect, or practices (pp. 11–12).

cited in Timperley and Hulsbosch, 2010, p. 43

Second, the framework drew on research into the dimensions of leadership that have a positive impact on student outcomes. Robinson et al. (2009) identified five dimensions of effective school leadership:

- establishing goals and expectations;
- resourcing strategically;
- planning, co-ordinating, and evaluating teaching and the curriculum;
- promoting and participating in teacher learning and development;
- ensuring an orderly and supportive environment.

Third, the framework drew on two related theoretical frameworks:

- Argyris and Schōn's (1996) work on interpersonal processes, with its emphasis on developing respectful relationships in which it is safe to inquire into and test ideas and theories;
- Donovan, Bransford, and Pellegrino's (1999)[4] synthesis of the evidence on how people learn, with its three processes:
  - engaging with learners' prior knowledge and preconceptions;
  - developing a deep foundation of factual knowledge using conceptual frameworks;
  - taking control of one's own learning through metacognitive and self-regulatory processes.

After undertaking a first cut of the analysis, Timperley refined her framework, conceptualising principals' leadership capabilities as sitting within three interlinked domains:

- having and building their own and others' pedagogical content knowledge;
- creating a collaborative and challenging learning culture;
- building mutually respectful relationships with high expectations of themselves and others.

She visualised "linking teaching and learning" as the "wallpaper" that sits behind all the activities and relationships in schools that are focused on instructional improvement.

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[4] Donovan et al.'s synthesis is a key resource for the LPDP. These three processes are described in the research summary "If the Teacher Is Clear about It, the Students Will Get It: Professional Inquiry for Teachers".

What Were the Findings?

After reviewing her findings, Timperley realised that her initial framework did not capture all that she had found about the knowledge and practice of these effective instructional leaders. She revised her conception of the three domains, breaking each domain into two sub-domains, as follows:

- having and building their own and others' pedagogical content knowledge
  - leaders being a source of knowledge
  - ensuring the transfer of knowledge to practice;
- developing learning relationships
  - building relational trust
  - engaging in challenging evaluative conversations;
- developing expectations for all to learn
  - linking student and teacher learning
  - developing high expectations of themselves and others.

Table 1 presents the ratings for each of the five principals, according to whether the evidence for each of the domains was strong, indicative, absent, or contradictory.

Table 1: Strength of Evidence for Each of the Three Domains

School	Having and building knowledge		Learning relationships		Expectations for all to learn	
	Establishing leaders as a source of knowledge	Ensuring transfer to practice	Building relational trust	Engaging in challenging evaluative conversations	Linking student and teacher learning	Developing high expectations of themselves and others
1	Strong	Strong	Strong	Strong	Strong	Strong
2	Strong	Strong	Strong	Indicative	Strong	Strong
3	Strong	Strong	Indicative	Strong	Strong	Strong
4	Indicative	Indicative	Strong	Strong	Indicative	Strong
5	Strong	Strong	Strong	Strong	Strong	Strong

It is important to recall that the evidence was based on just three data sources: the principal's interview, the teachers' interview, and the recorded episode.

For reasons of space, this summary will only use quotes from Schools 1 and 5 to illustrate the domains and sub-domains. In these two schools, which achieved the highest improvements in student progress, the principals were given strong ratings for all six sub-domains. The activities recorded by these principals were:

- School 1: A discussion with two teachers whose Pasifika students showed a discrepancy between their reading and writing achievement results.
- School 5:
  - Two meetings with deputy principals related to introducing the idea of monitoring meetings to teachers. (At monitoring meetings, teachers review evidence of their students' learning and consider the implications for their practice.)
  - A whole-school meeting where the teachers were introduced to the idea of monitoring meetings.
  - The first monitoring meeting for a syndicate.

Having and building pedagogical content knowledge

Four of the five principals rated strongly in this domain. They saw themselves as a source of knowledge for their staff and believed that their role included helping to build others' knowledge. Their pedagogical content knowledge was both declarative and procedural, as described in the literature (see below). However, Timperley found that, in fact, their procedural knowledge went further than that described in the literature. The principals did not just apply their knowledge of teaching and learning to their own practice; they also sought to use that knowledge to influence their teachers' practice. They did this in a variety of ways, including trying out new skills for themselves, modelling the skills, and observing teachers and giving feedback.

The following evidence was used to rate the principal at School 1 strongly in this domain:

- He expressed his belief in the importance of having as much content knowledge as the classroom teachers by keeping up with the literature. As well as participating in all the LPDP activities, he was taking a course on critical literacy and had shared his learning from that course with his teachers.

- He expressed the belief that teachers should feel able to go to him for help with their teaching.

  They need to be able to come to me at any point in time and discuss any questions they have got around managing a reading program.

- He expected that teachers would prepare for staff meetings by reading selected relevant professional articles.

- The teachers confirmed all of the principal's statements. They said that they saw him as a valuable source of knowledge and that they felt comfortable going to him for help in addressing the variety of situations that can arise in teaching practice. They valued the professional readings:

  I personally like it … I find that really helpful rather than [going] to a meeting and it is very broad and you think, "Hold on a minute. I don't think I'm very well prepared here because nobody specified …". It's actually easier, even if there is a little bit of work involved, because it is actually working smart.

- The discussion with two teachers about the discrepancy between their students' reading and writing achievement incorporated frequent links between knowledge and practice. The principal often supplied or prompted the necessary knowledge, but in such a way that he prompted reflection rather than imposing a solution, for example:

  One of the things we have talked about is making links between reading and writing. So the reason why I asked you the questions about reading was to try to identify the strengths in reading that we could then build on to link to writing.

- He frequently "borrowed" teachers' classes so that he could understand how new literacy knowledge translated into practice. Observations had become reciprocal:

  When the teachers were observed, I went in and observed a teacher and I said, "Well, you need to observe me now." And he said, "I can't observe – you are the principal", and I said, "Of course you can observe me." So the next day, I went in and took his class and I went through exactly the same process with him. I wrote up what I was going to do and he observed me and gave me feedback. He found it a little bit uncomfortable.

What Do Research and the Literature Tell Us?

The research summary "It's All about the Students: Helping Students Become Self-regulated Learners" emphasises that teachers need to develop high levels of pedagogical content knowledge if they are to let their students in on the secrets of successful learning. Likewise, it is clear from the literature that leaders need a strong knowledge base if they are to be effective leaders of learning for their teachers (for example, Spillane & Seashore Louis, 2002; Seashore, 2009). While there is less clarity about the kinds of knowledge needed for effective leadership, an important distinction is often drawn between declarative knowledge and procedural knowledge (Bransford, Brown, & Cocking, 2000; Barnes, Camburn, Sanders, & Sebastian, 2010):

- **declarative knowledge** involves knowledge of what to do and includes facts, ideas, and principles;
- **procedural knowledge** is knowledge of the steps required to perform a task, action, or process.

Developing learning relationships

The evidence for mutual respect, long agreed to be an important feature of the relational trust needed for instructional leadership (see below), was strong in all but one of the schools. (It was indicative in the other school, not because it was absent but because the question was not asked.) The feature of the relationships between teachers and leaders in these schools that had not previously been captured in the literature was their focus on promoting mutual learning. This was particularly evident in the recorded conversations. In any discussion about the impact of teachers' practice on their students, the leaders maintained a strong focus on what could be learned for the future. In this way, the leaders were able to incorporate both challenge and evaluation in these conversations without apportioning blame.

The following evidence was used to rate the principal at School 5 strongly in this domain:

- The tenor of all the principal's comments about the staff was that she regarded them as fundamentally competent while having things to learn:

  So it is that really breaking it down and ensuring the feedback and feedforward – all that assessment stuff – is happening in classes. I think that probably some can do it really well and for others it's not so clear in how you do it. … I know the teachers wanted more understanding about teaching comprehension.

- The deputy principal commented on how the principal's respectfulness encouraged others to take risks:

  You know, it is actually talking to people in a respectful manner so people can actually feel comfortable, free to express where they are at and that they don't feel that they might be criticised or spoken about out of the room.

- Teachers appreciated the trust she showed in giving them extra responsibilities:

  So it is not the top down – it is "we are on an even keel" type [of] thing. She instructs and, I suppose, trusts us as well, as opposed to just being told what to do. … I have been here under the old system as well, and for me, now being handed responsibility where before it was held tight [by] the previous principal. So now it is, like, I am a team leader, I have more responsibility on my team.

- The principal explained her reasons for the monitoring meetings rather than simply imposing them on staff:

So we have been doing a lot of reading about the importance of monitoring, you know. We are doing a lot of teaching, and a lot of data gathering and finding out about our students, but if we don't check regularly on what we are doing and whether it is effective, then we don't know if we are wasting our time and whether we are having impacts on the children, and that is what we are about.

- Her challenge to teachers included challenging their expectations for their students by encouraging them to listen to the parents.

When we talk about targets, we had lots of discussion and some of the feeling was this was [school name]. It was OK that we weren't expected to be at national expectations; our children were coming in really low beforehand. We had discussions around that. Once we saw that parents wanted their children at national expectation, things changed.

What Do Research and the Literature Tell Us?

An important strand of literature comes from the successful Chicago public schools reforms of the 1980s (Bryk & Schneider, 2002; Bryk, Sebring, Allensworth, & Luppescu, 2010). These reformers emphasise the importance of relational trust forged through day-to-day social interactions. Features of relationships characterised by relational trust include:

- respect achieved through people genuinely listening to each other;
- personal regard, revealed by people's willingness to extend themselves beyond what is formally required;
- a sense of confidence in each person's ability to fulfil the requirements of their role and deliver on their intentions and promises.

While relational trust does not have a direct impact on student outcomes, it creates the social conditions that enable that possibility by:

- supporting risk taking for teachers;
- building stronger professional learning communities;
- promoting conversations that are focused on teaching and learning.

Park and Datnow (2009) note a particular challenge for the leaders of schools that use data to drive decision making. This is that while it is essential to use data to identify when instructional strategies are or are not effective, it is also important to avoid blame.

Developing expectations for all to learn

The research literature has long emphasised the importance of high expectations for students, but Timperley's investigation into practice reveals the importance of extending high expectations to teachers' and leaders' learning. Four of the five principals had strong evidence for linking teacher and student learning. Whenever issues around student learning were discussed, they were linked to teacher learning. In the other school, both student and teacher learning were discussed, but were not as strongly linked. All five principals were strong in the other sub-domain of high expectations for themselves and others.

The following evidence was used to rate the principal at School 5 strongly in this domain:

- The principal expressed her personal belief in the crucial role of teacher learning in lifting student achievement:

Literacy was our whole focus, so a big [part] of our annual plan was literacy, raising student achievement. It was focused on the teacher being an efficient practitioner, teachers being able to analyse the data and use it to inform their teaching, and also those important partnerships and links to parents.

- A teacher expressed her understanding of this message:

When they are succeeding and they are moving, you sort of think, "OK, cool, what I am doing is fine. I will keep going." For me, if they are moving, that is all right, but "Are they moving fast enough?" would be my next question I would have to ask myself. It is when the children aren't moving, you have to sit back and think, "Well, that didn't work" … and really try and find what you need to do.

- When she introduced the monitoring meetings to teachers, the principal made it explicit that their purpose is to enable the teachers to inquire into the impact of their teaching on students, paying particular attention to those students who are not achieving as expected:

So the purpose of the monitoring helps us to identify groups of students who are underachieving in literacy and to develop and implement teaching and learning strategies to address these learning needs and to closely track their progress … It is a regular opportunity for us to work collegially and to share and support so that we are able to use the data and the evidence about our students' learning needs and inquire into how our teaching practices impact on that learning.

We can't change the data, we can't change where the children are starting at, but we can change the way that we approach it and often these children won't make progress with that normal practice that perhaps we are doing in our classroom every day. Sometimes it is going to take us to rethink what we are doing.

- Her expectations for learning extended to herself and her management team:

One of the things that were getting pushed aside was leading learning for my management team; that was something that wasn't really happening. We were so busy attending to the needs of everybody else in the school that we don't always attend to our learning needs … We have to be inquiring into our practices as well.

- She made it explicit to the teachers that they were on a shared learning journey:

So our aim is to see significant shifts in the progress of underachieving students through changes in our teaching practice and improved leadership and literacy, and that includes myself.

Conclusions

Timperley began her research by wondering why school leaders do not seem to have whole-heartedly embraced the ideas and practices that underpin the concept of leadership for learning. By focusing on what effective instructional leaders actually do, she discovered that the problem may be that researchers have underestimated the knowledge required to carry out this role. She points out that:

- The principals had a deep knowledge of teaching and learning, including:
  – declarative knowledge about theories and principles of effective instruction
  – procedural knowledge about teaching strategies that are consistent with those theories and principles.
- The principals brought their specialised knowledge to their relationships with staff, creating learning relationships founded on relational trust.
- The principals were able to conduct challenging learning conversations with staff in which evaluation led not to blame but to inquiry into how to do things differently.
- The schools' visions and goals were based on high expectations for students and those high expectations extended to teachers and leaders.
- The leaders did not just participate in professional learning but led it, fitting other tasks around what they considered to be their central task.

Continuing the Cycle

A criticism of the early literature on leadership was that leaders were expected to be heroes, carrying primary responsibility for the change process. Timperley acknowledges that it would not be possible for all principals to have this degree of knowledge and to exercise influence in this way. This is especially so in secondary schools, with their requirement for highly specialised subject knowledge:

> As Levin (2008) cautions, we cannot rely on a system having large numbers of extraordinary people. If there was a heroic element, it was the principals' deep knowledge of teaching and learning and how they built relationships and expectations based on this knowledge. Without their knowledge, it would have been impossible for these leaders to enact the roles as they did.

Timperley, in press, under Conclusions, para 7

- Timperley wonders how the evidence from this study about the importance of knowledge might be used within our education system to achieve the kinds of improvement in achievement evident in these schools. The solution she suggests is to turn to the concept of distributed leadership and for principals to "create networks of *informed* influence throughout their schools":

> The implication is more that those with responsibility for promoting teacher learning in schools must have the deep pedagogical content knowledge and that principals need systems for identifying and ensuring these people have the opportunities to lead. The distribution of leadership influence must be based on expertise.

Timperley, in press, under Conclusions, para 8

Timperley acknowledges the value of earlier research that identified the importance of leadership that focuses on teaching and learning, but she urges that the next step is to unpack the knowledge required for such leadership and to consider how to distribute it across the system.

> Now that you have read this research summary, you may like to refer back to the wider implications and suggested key questions sections at the start of the summary to think about how you might use the summary as a springboard for professional learning in your own context.

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