

This document is part of a set of materials for teachers and school leaders that summarises research articles and milestone reports from New Zealand's Literacy Professional Development Project (LPDP). The full set is available online at www.literacyonline.tki.org.nz

Online users can also access the hyperlinks indicated in blue in the text.

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



Introducing the Literacy Professional Development Project: A Learning Project

Sharing Learning from the Literacy Professional Development Project

The *Literacy Professional Development Project (LPDP)* has learned a great deal from the research and inquiry carried out by others in the educational community. In turn, it has shared much of its own learning through its working papers, milestone reports, and conference papers, some of which are available online.¹ The *Improving Learning for All* set of research summaries offers a new way of sharing the LPDP's learning. The seven summaries provide insights into some of the research conducted by the project's "embedded researchers", in partnership with others involved in the project. The summaries are presented because they contain ideas of relevance to teachers, school leaders, facilitators of professional learning, and policy makers across the education sector. In particular, they aim to share two of the project's key messages about the characteristics of professional learning that have a real and ongoing effect on student learning outcomes. These are that professional learning initiatives should enable all participants, from national leadership teams to teachers and students, the opportunity to:

- develop the skills of self-regulatory inquiry;
- build relevant content knowledge, pedagogical knowledge, and pedagogical content knowledge.²

The Context

Teachers, school leaders, and other educators have always known that students should be at the centre of teaching and learning. Moreover, literacy is one of the foundations that students need to be able to build on if they are to become "confident, connected, actively involved, and lifelong learners" (Ministry of Education, 2007, page 7). The New Zealand education sector wants all of its students to achieve the literacy levels necessary for success. In recent years, tools and resources such as *asTTle* (Ministry of Education, ongoing), *The Literacy Learning Progressions* (Ministry of Education, 2010), and the *National Reading and Writing Standards* (Ministry of Education, 2009) have increased the sector's understandings of what those levels are and students' progress along them.

¹ See www.learningmedia.co.nz/our-services/professional-development, www.tki.org.nz, www.minedu.govt.nz

² 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 specialised knowledge needed to teach effectively within a specific discipline.

The LPDP is one of a number of professional learning initiatives in New Zealand that use information about expected levels of student achievement to drive their improvement. As these research summaries demonstrate, the LPDP is able to manage its learning and strive towards greater effectiveness by linking its decisions about what adult learners need to know and improve in with information about student strengths and needs. It is hoped that the research summaries will provide a useful contribution to our nation's efforts to improve educational outcomes for all young New Zealanders.

■ ■ Fostering Student Literacy Achievement

The LPDP began in 2004, with the first cohort completing participation by December 2005. The third cohort completed its participation in December 2009. The project is an important part of the Literacy Strategy.³ The Literacy Strategy is the set of initiatives and resources that the Ministry of Education offers schools to help them achieve a shared goal: “to improve English language and literacy learning and achievement and equip all New Zealand students with the necessary literacy knowledge and skills to be successful throughout schooling and as citizens”.⁴

The project has had great success in achieving this goal, with results that place it among the best performing professional learning projects in the world (see [Timperley, Wilson, Barrar, & Fung, 2007](#)). Of special significance in the New Zealand context is the project's success in improving the literacy achievement of students who were previously achieving below expectations for students at their year level. This group includes a high proportion of Māori and Pasifika students. For example, results for the February 2006 to December 2007 cohort of 127 schools include the following:

- For reading, the project's average effect size⁵ over the two years was 0.96, which was almost double the expected progress. The rate of progress for students in the lowest 20 percent was much greater, with an average effect size of 1.79.
- For writing, the project's average effect size over the two years was 1.05. The rate of progress for students in the lowest 20 percent was more than double that, with an average effect size of 2.53.
- Māori students in general made significant progress, with an overall effect size of 0.73 in the schools that had a primary focus on reading and 1.05 in the schools that had a primary focus on writing.
- The shifts for Pasifika students were even greater than those for the whole cohort. The average effect size for Pasifika students in the reading schools was 1.39. For those in the writing schools, it was 1.21.

Each cohort has had an improved picture of progress and achievement than the cohort before it.

■ ■ A Learning Project

From its inception, the LPDP has characterised itself as a “learning project”. While the driver for all participants in the project is the desire to improve students' life chances by improving their literacy achievement, there is a shared belief that this goal requires each participant to be a lifelong learner themselves: to learn from their own experiences, and those of others, how they can better foster student learning. The project draws this information from both formal research and ongoing professional inquiry. Wherever possible, it seeks evidence of effectiveness

³ See Literacy Online for an overview of the Literacy Strategy (<http://literacyonline.tki.org.nz>)

⁴ Retrieved on 10 August 2009 from <http://literacyonline.tki.org.nz/Literacy-Online/What-do-I-need-to-know-and-do/Professional-development/Foundation-Learning-Literacy>

⁵ 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.

that is clearly linked to five outcomes. The first of these is the project’s “strategic outcome” – its reason for being. The four other outcomes are based on research into the factors that will enable the project to achieve that strategic outcome. Thus the five outcomes are:

- 1.** Evidence of improved student achievement
- 2.** Evidence of improved teacher content knowledge
- 3.** Evidence of improved transfer of understanding of literacy pedagogy to practice
- 4.** Evidence of effectively led professional learning communities
- 5.** Evidence of effective facilitation.

The project’s initial design drew on research into:

- effective literacy practice;
- the characteristics of quality teaching, leadership, and facilitation;
- the processes of learning, change, and improvement.

In particular, the LPDP built on learning from a previous teacher professional learning and development project that hadn’t achieved the desired improvements in students’ literacy outcomes (Timperley, Parr, & Higginson, 2003). That project’s evaluators suggested ways in which the project model could have been strengthened. Their suggestions included:

- testing assumptions about schools’ capacity to engage in evidence-based decision making;
- providing professional development to ensure schools have the knowledge and skills they need to engage in evidence-based decision making;
- analysing leaders’ needs to ensure that support is tailored to meet them.

Two of the evaluators have gone on to participate in the LPDP as embedded researchers. Like all participants in the project, they collect and analyse a range of evidence, including student achievement information, to identify and understand:

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

The presence of the researchers as active participants and fellow inquirers within the LPDP is a significant innovation. Traditionally, educational researchers have attempted to influence the practice of policy makers and teachers by writing research articles or delivering talks. The Best Evidence Synthesis iteration (BES) *Teacher Professional Learning and Development* (Timperley et al., 2007) shows that such activities do not in themselves result in the deep engagement with people’s theories of practices (the ideas, values, and beliefs that inform their decision making) that is necessary to achieve significant learning and changes to practice. In her inaugural professorial address in 2007, Helen Timperley stated:

In summary, for researchers to make a difference to student outcomes they need to exercise influence cautiously with policy makers and practitioners through reciprocal engagement of theories and evidence underpinning the research and the theories of action of those responsible for student outcomes, whether policy makers, school leaders or teachers. There must be an acknowledged issue around student learning that all care about and an agreement on the standards we are aiming for. The most important component, however, is to work together to develop evidence-informed inquiry systems so the impact of any changes to practice can be judged in terms of valued student outcomes.

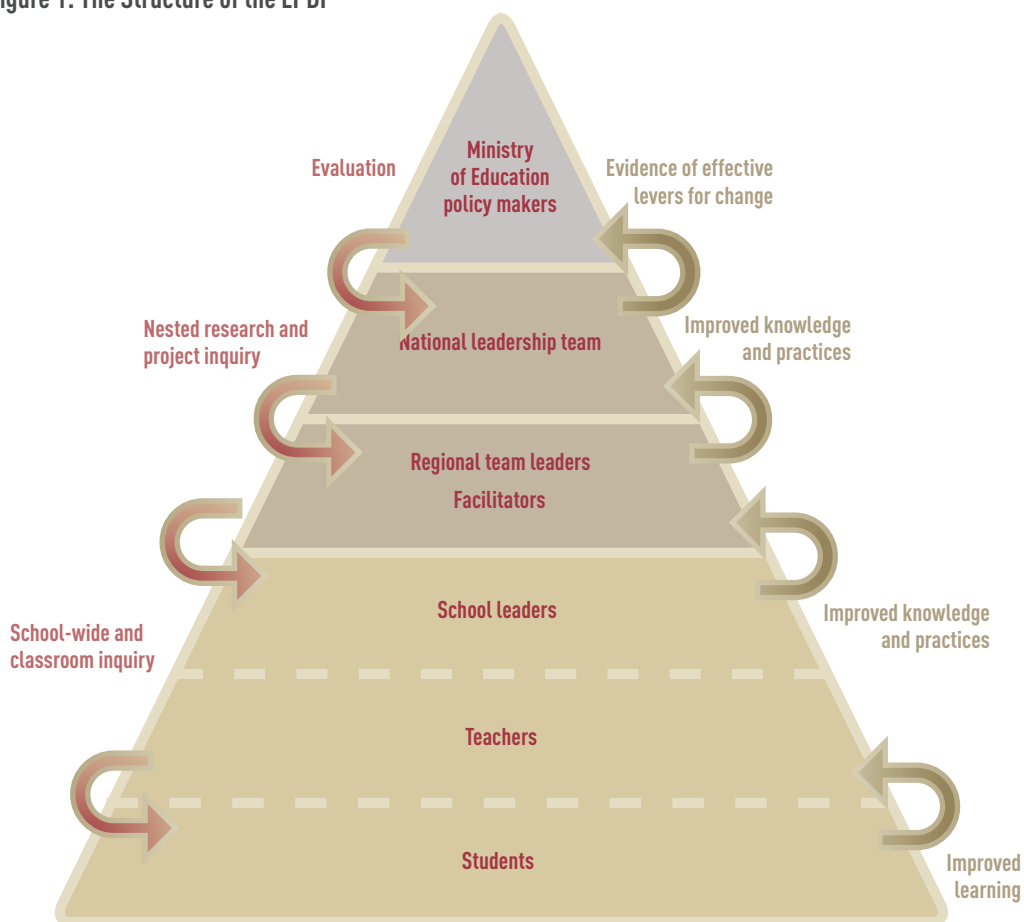
This has not always been an easy process, and one of the biggest challenges has been the move from theorising and critiquing to constructing practical solutions to issues as they arise. However, it is a process that has led to rich learning, some of which is shared in these LPDP research summaries.

■ ■ The Structure of the LPDP

The LPDP is organised in seven layers (see figure 1 below).

- Ministry of Education policy makers contract the professional development providers and monitor the LPDP's progress.
- National LPDP leaders work with the regional team leaders, the two researchers, and a Ministry of Education representative to constitute a leadership team. This team meets regularly to review progress, make adjustments to the project, and plan implementation strategies.
- Each regional team leader co-ordinates a small team of facilitators in their region.
- Each facilitator works for two years with teachers and literacy leaders in six to eight schools. The facilitators meet regularly in their regional teams and as a national team.
- Schools appoint leaders (principals and literacy leaders) to lead the learning and provide a link between the facilitator and the rest of the staff.
- Teachers take part in whole-school learning that is nevertheless targeted to the specific strengths and needs of the students in their individual classes.
- Student achievement is the “touchstone” for measuring the impact of changes in teacher practice. Teachers learn to notice, recognise, and respond to their students' strengths and needs.

Figure 1: The Structure of the LPDP



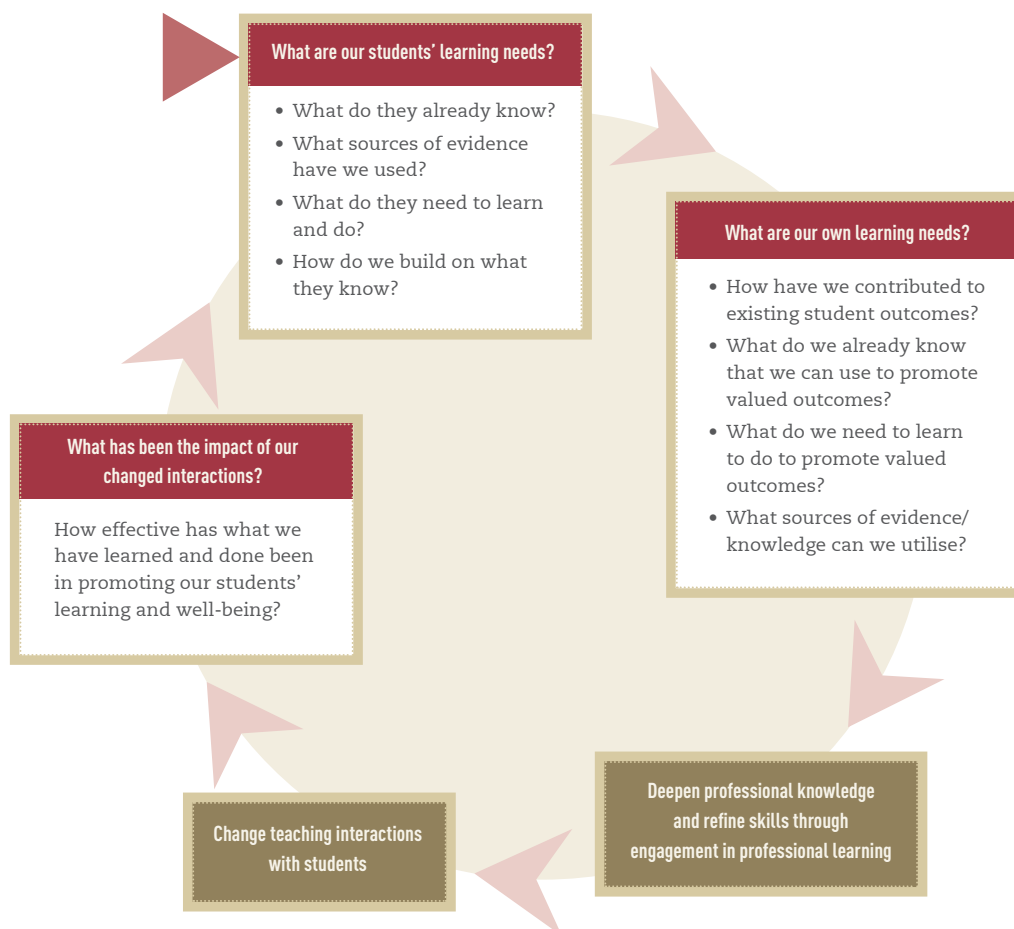
■ ■ The Organisation of the Research Summaries

The BES *Teacher Professional Learning and Development* (Timperley et al., 2007) presents a Teacher Inquiry and Knowledge-building Cycle to Promote Valued Student Outcomes that closely mirrors the LPDP's own process of learning and inquiry. This cycle is presented in figure 2 below. It integrates the two key messages about the importance of self-regulated inquiry and of building content knowledge, pedagogical knowledge and pedagogical content knowledge. It is iterative, ensuring that professional learning is always linked to and responsive to information about its impact on student achievement.

Each of the research summaries in this series is linked to the inquiry and knowledge-building cycle and represents at least one full turn around the cycle. More specifically, each summary:

- begins with a section describing what are believed to be the wider implications of the learning from the LPDP;
- suggests some questions that may help the reader consider the relevance of the research to their own professional learning context;
- identifies the key source(s) on which the summary is based;
- provides background information, placing the research in a wider context;
- incorporates brief summaries of related research and professional literature;
- provides a brief overview of the cycle of professional inquiry that is being described;
- describes one or two cycles of professional inquiry.

Figure 2: Teacher Inquiry and Knowledge-building Cycle to Promote Valued Student Outcomes⁶



⁶ 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.

■ ■ The Content of the Research Summaries

The LPDP is organised in a traditional, hierarchical structure, but its ways of working are intended to ensure that new knowledge is constructed collaboratively rather than simply disseminated from the top down. Six of the seven research summaries are intended to illustrate inquiry-based learning at a particular layer (or layers) of the project. The seventh research summary shows how the learning is connected between the layers to form what the project calls a “chain of influence”. This chain is created through using shared tools and routines and through reciprocal interactions between people at different layers of the project. Below are synopses of the seven research summaries. The full research summary papers and this introductory paper can be accessed online at www.literacyonline.tki.org.nz

Research summary: “It’s All about the Students: Helping Students Become Self-regulated Learners”

The LPDP’S strategic outcome is “evidence of improved student achievement”. The project’s fundamental purpose is to give students the literacy knowledge and skills they need to access the curriculum at the appropriate level and to develop the competencies of a lifelong learner. Therefore, it is crucial that teachers provide their students with the knowledge and skills the students need to become independent, self-regulated learners who can manage and take responsibility for their own learning.

The second and third project outcomes are “evidence of improved teacher content knowledge” and “evidence of improved transfer of understanding of literacy pedagogy to practice”. The research reported in this and the other summaries affirms the role of formative assessment in providing students with the information they need to monitor the progress of their learning. It raises questions about whether teachers have the knowledge and skills they need to “let their students in on the secrets” of successful learning and describes how the project has sought to help teachers discover and build on this knowledge.

This research summary describes three cycles of inquiry conducted with two successive cohorts. It demonstrates how the project as a whole learns from the embedded research and responds to its learning.

Research summary: “If the Teacher Is Clear about It, the Students Will Get It: Professional Inquiry for Teachers”

This research summary looks at what makes the LPDP so successful in its impact on student outcomes. It presents the argument that the LPDP’s key point of difference is in its embedded processes for self-monitoring. These processes ensure that the skills and knowledge that the project fosters in its participants, be they teachers, school leaders, or facilitators, are specific to the participants’ needs but also show an awareness of and connection with the needs of the people the participants are teaching – the school leaders, the teachers, and ultimately the students.

In this research summary, the primary focus is on teacher learning, and so the summary illustrates the self-monitoring processes, using the original Teacher Inquiry and Knowledge-building Cycle to Promote Valued Student Outcomes as developed by the writers of the *BES Teacher Professional Learning and Development* (Timperley et al., 2007). This highlights the fact that the purpose of improving teacher content knowledge and pedagogy (outcomes 2 and 3) is to improve student outcomes (outcome 1). The teacher professional inquiry that is described in this summary took place in a school that participated in the research into student self-regulation, and so the research summary demonstrates the importance of self-regulation for all learners.

The summary also demonstrates the impact on the LPDP of two important syntheses of research. Clearly, one of these is the *BES Teacher Professional Learning and Development* described above. The other is [Donovan, Bransford, and Pellegrino's \(1999\)](#) synthesis of evidence of how people learn. This synthesis influenced the original design of the LPDP and continues to shape the project's understandings about human learning. Its three key findings emphasise the importance of:

- engaging prior knowledge and preconceptions;
- developing a deep foundation of knowledge, using conceptual frameworks;
- taking control of one's own learning through metacognitive and self-regulatory processes.

Research summary: “Leadership for Learning: Understanding the Knowledge and Practice of Effective Principals”

The LPDP's fourth outcome is “evidence of effectively led professional learning communities”. The LPDP has always focused on the leadership needed for professional learning. The project takes a broad view of the term “leadership” as encompassing all those with the capability to influence the knowledge and practice of others, including the project's facilitators and the schools' literacy leaders.

As the research summary “Creating a Chain of Influence: Enabling Reciprocal Learning from Policy to Practice” shows, the project's facilitators have been especially influential in communicating key ideas from research in a way that positively influences teachers' practice. This is shown in the diagram on page 16 of that research summary. School principals are omitted from the diagram because none of the teachers surveyed for that research identified principals as influencing their practice. This is a puzzle, given multiple messages from the research literature about the influential part principals can play in teacher and student learning when they take on the role of instructional leaders (or “leaders of professional learning”).

The project leaders' response to this research finding was to explore ways to further support principals to lead the professional learning in their schools while maintaining support for the literacy leaders. The researchers' response was to delve into the actual practice and capabilities of school principals who are effective instructional leaders. This research summary shares findings from this subsequent research on effective principals. The findings suggest that we have greatly underestimated the depth and complexity of the knowledge needed for instructional leadership. By identifying three interlinked domains of knowledge, this research suggests a way to investigate the knowledge required for school leadership and how our theoretical understandings about effective school leadership can be translated into practice.

Research summary: “Coherence and Inquiry as Key Dimensions for Sustainability of Professional Learning”

This summary reports on research into the concept of sustainable educational reform. The LPDP's development has been informed by the literature on sustainability. However, in 2006, as the second cohort of schools entered the project, the project leaders reflected that they simply did not know whether the previous cohort was going to sustain its improvements. A new, in-depth study was launched into a sample of schools. Its purpose was to:

- determine whether the gains in student achievement and shifts in teacher and leader literacy knowledge and practices were being sustained;
- define more precisely the nature of sustainability and the relative importance of the various conditions that the research literature says are necessary for professional learning to be sustained.

This study was followed by a second, which investigated in greater depth the conditions that determine whether schools maintain the gains in student achievement resulting from their previous professional learning, improve on those results, or slip backwards.

The lead researcher developed a conceptual model for sustainability that takes into account the importance of ensuring a system-wide chain of learning. That model has two dimensions:

- co- and self-regulated inquiry practices;
- coherence of effective instructional practices.

The study found that many schools were able to maintain achievement gains that were similar to those they achieved through participation in the LPDP when they systematically applied their learning to new cohorts of students. However, a smaller group of schools was actually able to sustain the upward projector of their achievement gains. In these schools:

- the inquiry was iterative, with everyone involved continually refocusing their inquiry on persistent issues of underachievement and investing in continued knowledge building to address those issues;
- the teachers and school leaders sought to identify and highlight the coherence in instructional practices that are effective within and across curriculum areas.

Research summary: “Effective Facilitation: Understanding and Improving Learning Conversations with the Teachers”

The fifth research summary focuses on facilitator learning and on how the LPDP works towards its fifth outcome, “evidence of effective facilitation”.

In recent years, there has been considerable research into the role that facilitators of professional learning can play in helping teachers to make sense of information from research and apply this understanding in their practices. A lot of this work has looked at the interactions between teachers and facilitators who are conducting observations of classroom practices.

This research summary uses an adaptation of the Teacher Inquiry and Knowledge-building Cycle to Promote Valued Student Outcomes to show how facilitators’ learning needs arise out of teachers’ learning needs, which arise out of students’ learning needs. This particular cycle of learning has been project-wide. It began at the project’s inception and continues. It has resulted in the development of protocols around observing and providing feedback on teachers’ classroom practices. The development of these protocols has been accompanied by the formulation of a theory of “practice analysis”, which the project has linked to [Donovan et al.’s \(1999\)](#) findings about people’s learning (see above). It is a theory that will continue to evolve through the LPDP’s own research and inquiry and through the contributions of others who have an interest in this essential aspect of facilitator practice.

Research summary: “Using Professional Tools: How the Literacy Learning Progressions Can Support Learning at all Layers”

This research summary looks at how professional tools can support both teacher and student learning. It focuses on how one tool, *The Literacy Learning Progressions* (LLP), was used in the LPDP to develop pedagogical content knowledge about literacy.

Tools are a kind of material resource that represents ideas teachers can use in their practice. “Smart tools” incorporate valid ideas in ways that enable them to be integrated into practice. The LLP is an example of a tool designed for a specific purpose as part of the repertoire of resources shared by teachers in New Zealand schools. Its development was informed by a notion of progression as well as by research about literacy and literacy learning.

The aim of the research in this summary was to find out about the level of teacher knowledge needed to use the LLP effectively. Teachers in the LPDP case study schools were surveyed using a questionnaire at two points: when teachers were initially introduced to the LLP and again, a year later, when they had had a chance to work with the LLP.

The key finding was that the LLP had become integrated into teachers' practice as part of assessment for learning in the classroom. This had been achieved through facilitated professional discussions about both teacher and student learning.

Research summary: “Creating a Chain of Influence: Enabling Reciprocal Learning from Policy to Practice”

New Zealand's self-managing school system means that policy makers can only rarely impose their viewpoints on schools. Instead, the designers of the Literacy Strategy use initiatives such as the LPDP to convey key messages, derived from research, about how teachers and school leaders can change their practices in ways that will improve students' literacy achievement.

This research summary introduces the notion of “sense-making theory”. Sense-making theory rests on the idea that learning involves the active construction of new knowledge. This process can involve the reconstruction or even total rejection of old ideas and beliefs. The actual translation of a policy message into practice is highly dependent on what an individual brings to their learning and on the context in which that learning takes place. Learning is not complete until the learner has the understandings needed to self-regulate their learning: to set learning goals for themselves and to monitor their own progress towards those goals.

This depth of learning can be both cognitively and emotionally demanding, and so it is essential that the interactions between those involved in professional learning are characterised by mutual trust and respect. The relationship between participants in learning should be reciprocal. While one person may have greater expertise in a particular area, it is essential that they remain open to learning from others so that the learning process is interactive rather than imposed.

The researchers for this research summary interviewed teachers, school leaders, facilitators, project leaders, and policy makers to find out about their experiences in relation to the inquiry and knowledge-building cycle. Their research shows that the LPDP has succeeded in enabling participants to make sense of its key messages in light of their own existing knowledge, theories, and professional context. This has led to changes in the professionals' practices and improvements in the students' outcomes. The researchers conclude that the reciprocal relationships that have developed between people at different layers of the project, and through the use of shared tools and routines, have created a “chain of influence” that connects learning through the LPDP.

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