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

MINISTRY OF EDUCATION
Te Tāhuhu o te Mātauranga

Effective Facilitation: Understanding and Improving Learning Conversations with Teachers

Wider Implications of the LPDP Learning

Facilitation has considerable potential to stimulate teacher professional learning that has a real and sustained impact on student outcomes. However, to achieve this potential, we need to develop a theoretical framework for understanding and improving facilitator practice. The Literacy Professional Development Project (LPDP) believes that this theoretical framework should be built on proven principles of human learning. This research summary outlines the basis for such principles and studies their application in the LPDP.

Much of the LPDP's research into facilitation has centred on the interactions that occur between teachers and facilitators of professional learning as the facilitators conduct lesson observations. The LPDP's research demonstrates that a theory for observing and providing feedback on teacher practice should include the following four components.

- A facilitator's suggestions for improved practice should be linked to an analysis of an observed lesson, and that analysis should be conducted jointly with the teacher.
- A facilitator's analyses and suggestions should be explicit so that teachers clearly understand the relevance of the suggestions to their practice. Facilitators should not assume that their suggestions are helpful; rather they should offer them as possible practices that may or may not translate well into the teacher's personal practice context.
- A facilitator should link their suggestions to other professional learning opportunities that the teacher has experienced. This will provide a reference point for teachers, which will help them to understand the theories behind the facilitator's suggestions and encourage them to transfer the ideas to other parts of their practice.
- If learning is to be sustained, it is important that facilitators do more than suggest "next steps" for teaching. Teachers need to be helped to set explicit goals for themselves and to develop strategies for monitoring their progress towards those goals.

Literacy Professional Development Project

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Key Questions

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

- What is the purpose of teacher observations? How do you know whether that purpose has been achieved?
- What are some of the things that effective facilitators do?
- Can you identify some principles that could be brought to a theory for observing and providing feedback on teacher practice? Why are they important?

Main Source for this Research Summary

Coaching through Feedback: A Close and Critical Analysis (Timperley, Parr, & Hulsbosch, 2008)

Background

There is a considerable body of educational research that shows the essential role that teachers play in improving outcomes for students (Alton-Lee, 2003). There is also a great deal of useful research about the characteristics of effective teaching – teaching that enables students to achieve the intended outcomes. However, considerably less attention has been paid to the role that facilitators of professional learning can play in helping teachers make sense of information from research and to how facilitators can apply that research information in their own practices. These have been areas of deep interest in New Zealand, where two large research projects in particular have sought to explore the complex relationship between teacher professional learning and student outcomes. The two projects are as follows.

- The Best Evidence Synthesis iteration (BES) *Teacher Professional Learning and Development* (Timperley, Wilson, Barrar, & Fung, 2007) presents key findings from national and international research about the characteristics of effective professional learning. The booklet "Teacher Professional Learning and Development" (Timperley, 2008) synthesises these characteristics into ten key principles.
- The Inservice Teacher Education Practice (INSTEP) project (Ministry of Education, 2008) aims to improve knowledge about the practice and learning of inservice teacher educators.

The LPDP's learning has taken place alongside both these projects, contributing to them and learning from them. Much of the LPDP's learning has focused on analysing the relationship between its facilitators and teachers, a relationship that is sometimes described as a "coaching" relationship.[1] In particular, there has been a focus on the interactions that take place around observing, analysing, and providing feedback on teachers' classroom practice. This research summary shares some of that learning, which has two strands:

- the evolution of more effective practices for observing, analysing, and providing feedback on teacher practice;
- the development of a theory that can be used to describe, understand, and improve the process of observing and providing feedback on teacher practice.

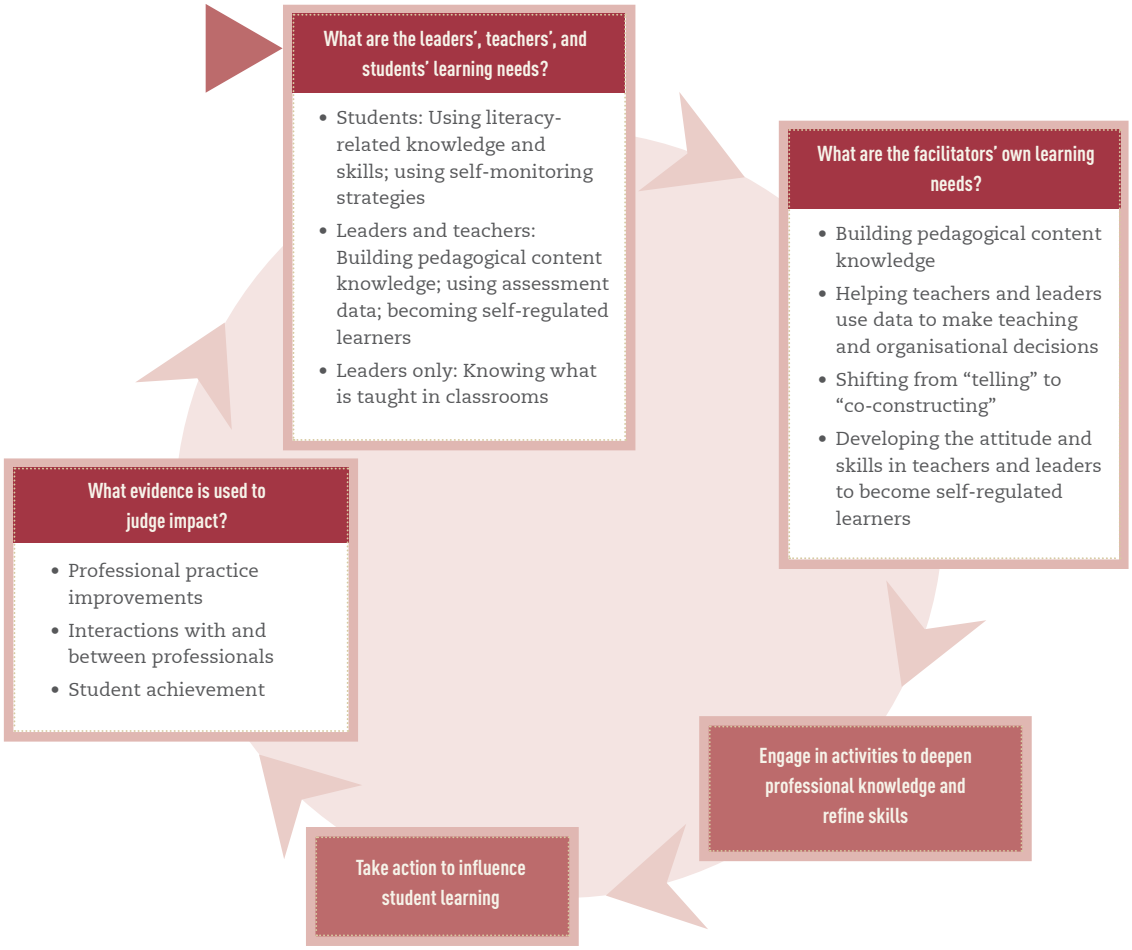
[1] The source paper for this research summary (Timperley, Parr, & Hulsbosch, 2008) was presented at an international coaching symposium. Therefore, quotes use the terms "coaches" and "coaching episodes" rather than "facilitators" and "facilitation", as are commonly applied in the New Zealand context.

Taking Part in Professional Inquiry

The LPDP uses adaptations of the Teacher Inquiry and Knowledge-building Cycle to Promote Valued Student Outcomes presented in the BES *Teacher Professional Learning and Development* (Timperley et al., 2007). The adapted cycles describe how each of the LPDP's participants is supported and challenged to make sense of new information in terms of their own knowledge, experience, and professional learning context. The example in figure 1 below relates to facilitators' learning. It describes a continuous process of evidence-based inquiry that allows facilitators to identify and understand:

- the learning needs of those for whose learning they are responsible, that is, students, teachers, and school leaders;
- their own learning needs;
- the impact of any changes in practice that have resulted from new learning.

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



[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.

While each facilitator moves through their own cycles of inquiry in relation to the schools with which they work, they also take part in shared learning across the LPDP. The learning for this research into effective facilitation was led by the LPDP's researchers, who collected and analysed the evidence, worked with other members of the leadership team to develop new strategies, and designed the professional learning activities. As in all of the LPDP's activities, the goal was to improve student literacy achievement by providing opportunities for the LPDP participants to:

- develop the skills of self-regulatory inquiry;
- build relevant content knowledge, pedagogical knowledge, and pedagogical content knowledge.[3]

What Do Research and the Literature Tell Us?

Donovan, Bransford, and Pellegrino's (1999) groundbreaking synthesis of the evidence about how people learn has informed a great deal of the LPDP thinking and decision making. The research summary "If the Teacher Is Clear about It, the Students Will Get It: Professional Inquiry for Teachers" unpacks these findings in some detail. It notes that while the research that Donovan et al. drew on relates to student learning, Donovan et al. argued that their findings apply to all learners. Donovan et al.'s 1999 research had three key findings:

1. Students come to the classroom with preconceptions about how the world works. If their initial understandings are not engaged, they may fail to grasp the new concepts and information that are taught, or they may learn them for purposes of a test but [then] revert to their preconceptions outside the classroom.
2. To develop competence in an area of inquiry, students must: (a) have a deep understanding of factual knowledge, (b) understand facts and ideas in the context of a conceptual framework, and (c) organise knowledge in ways that facilitate retrieval and application.
3. A "metacognitive" approach to instruction can help students learn to take control of their own learning by defining their own learning goals and monitoring their own progress in achieving them.

pp. 20–23

A teacher's preconceptions about how the world works include their theories of practice, that is, the beliefs, values, assumptions, knowledge, and emotions that guide the way they think and make decisions about their practice. Often these theories are so much a part of a teacher's ways of thinking, seeing, and acting that the teacher is not consciously aware of them. To be effective, facilitators of professional learning need to help teachers explore, question, and, if necessary, change and improve their theories of practice.

[3] 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.

> *If these theories [of practice] are not engaged, then new concepts and information that are presented are unlikely to be well understood because they will be interpreted in terms of existing theories. Darling-Hammond and Bransford (1995) refer to this problem in teaching as one of over-assimilation. Teachers believe they understand new concepts, but do so only partially and so enact them in ways consistent with their existing theories. This problem has been well documented in mathematics and science instruction also by Firestone, Schorr & Monfils (2004) and Spillane, Reiser & Reimer (2002).*
>
> Timperley, Parr, & Hulsbosch, 2008,
> under Phase One: Method, para. 2

Leaders', teachers', and students' learning needs

From its inception, the LPDP has taken a "needs-based" approach to professional development. When the project began in 2004, the facilitators were given training in the use of a set of needs analysis tools for identifying the learning needs of the students, teachers, and leaders in each school. They were then encouraged to work with the schools to design action plans that would be responsive to these and any new learning needs that might emerge.

Facilitators' own learning needs

While the LPDP always knew that classroom observations would be an important part of its practice, at first, facilitators were not given specific training in how to conduct such observations. They were, however, encouraged to question students about their understandings of the learning aims and the criteria for successful achievement and of the feedback they received from their teachers. The reason for this was to encourage the teachers to be more responsive to their students' understandings.

The researchers made it a priority to investigate this part of facilitation practice early in the LPDP. They recorded nine post-observation interviews between teachers and facilitators. They also recorded the facilitators' interviews with the students, and they recorded interviews that they themselves conducted with the teachers to find out whether the teachers intended to change their practices as a result of the feedback they had received.

The researchers analysed the transcripts of the interviews using an analytical framework based on Donovan et al.'s 1999 key findings:

1. Engaging with prior knowledge and preconceptions:
   Facilitators need to engage teachers' current theories of practice; that is, their beliefs and values relating to the outcomes they wish to achieve and the practices that will enable them to achieve these outcomes.
2. Developing a deep foundation of knowledge, using conceptual frameworks:
   Teachers need to take an active part in analysing their teaching practices so that they can organise the new facts and ideas within conceptual frameworks that are defined clearly enough to be easily accessed within the complex demands of the classroom.
3. Taking control of one's own learning through metacognitive and self-regulatory processes:
   Teachers and facilitators need to consider two sets of inter-connected goals – the literacy learning goals of the students and the teaching practice goals of the teachers. Any analysis of teacher practice should include consideration of its impact on students.

> *The coach summarised the key features of the teachers' practice, asked the teachers to identify their personal beliefs on which their practice was based and outlined the consequences for students in terms of their considerable confusion about the learning aims [of] the lesson and [the] success criteria related to the learning aims … [This had arisen] because the teachers had not been explicit about these features of the lesson. Teachers and coaches then moved on to jointly construct new practices designed to solve the problem of student confusion, to identify sources of information on which the teachers could draw to develop needed pedagogical content knowledge and to develop systems of peer feedback to support them in the construction of their new practice. These teachers expressed high levels of motivation to change their practice and over a four month period engaged further with the coach and managed to improve their students' writing levels significantly (ES=1.04).*
>
> Timperley et al., 2008,
> under Phase One: Results, para. 1

When the transcripts were analysed, only one facilitator's practice showed evidence of all three features of the analytical framework.

The following three points relate to results from the other facilitators' "coaching" episodes:

- Only four facilitators referred to the student interviews in discussion with their teachers. In response, one teacher was dismayed to discover that her students didn't understand the learning aims and success criteria, but she did not know how she could change her practice to avoid this confusion; one teacher rejected the students' views as invalid; and two teachers made no comment.
- None of these facilitators managed to engage their teachers' existing theories of practice in sufficient depth to allow the teachers to understand the difference between their existing practices and the practices that were being recommended.
- The facilitators made many suggestions for new practices, but these tended to be disconnected from the lesson they had observed. Though the suggestions were supported by literacy instructional theory, the facilitators did not justify them with links to that theory. Moreover, they offered their suggestions tentatively, using phrases such as, "I was wondering if you might …?" and "What do you think about …?".

In follow-up interviews with the teachers, the researchers found that none of the teachers intended to change their practices as a result of the facilitator observations. Half the teachers disagreed with the advice they had received, while the others could see its value but couldn't see how to make the suggested changes.

Engaging in activities to deepen professional knowledge and refine skills

The researchers shared what they had learned with all the participants on the LPDP. The facilitators were then taken through a set of newly designed principles for analysing "learning conversations", which were based on the analytical framework used in the research. Each facilitator recorded a feedback conversation and used the new principles to analyse the conversation in their regional teams.

A central criterion of an effective professional learning conversation is the understanding that professional learning is the shared responsibility of the teacher and the facilitator. That is, the process of deconstructing a teacher's practice in an observed lesson (identifying the strengths and any problems) and co-constructing new practices for that teacher needs to be undertaken by the teacher and the facilitator working together.

Some key features of learning conversations are described below and are linked to the analytical framework described previously:

1. Engaging with prior knowledge and preconceptions:
   The researchers and their colleagues in the LPDP realised that if the facilitators were to engage with teachers' theories of practice, the facilitators needed to be more explicit about their own theories of practice. They needed to state clearly both the changes they were advocating and the reasons for advocating those changes. This would help teachers understand where the facilitators were coming from and the lens through which the facilitators would be observing and analysing their practices. The facilitators also needed to provide reasons for the questions they were asking so that teachers would not feel interrogated but, rather, would understand the relevance of each question. The facilitators needed to encourage the teachers to be explicit about their theories of practice by asking the teachers to explain their reasons for particular practices.
2. Developing a deep foundation of knowledge, using conceptual frameworks:
   Facilitators were encouraged to be more explicit about exploring their own and the teachers' theories of practice and to make stronger references to the evidence from the observed lessons. This would make it easier for teachers and facilitators to work together to construct shared understandings and develop frameworks for establishing what effective practice looks like.
3. Taking control of one's own learning through metacognitive and self-regulatory processes:
   Facilitators were encouraged to make greater use of the students' responses to their questions as a way of helping teachers understand the immediate impact of their lessons on their students.

Taking action to influence student learning

By this stage, the LPDP was halfway through its second year. The facilitators consciously worked to apply the principles of learning conversations, not just in their interactions with teachers when observing and analysing the teachers' practices (a process that they now called "practice analysis") but in all their interactions. Along with other members of the LPDP's lead team, the researchers re-worked the principles, adding two further items to the analytical framework, related to the second and third of Donovan et al.'s 2009 findings:

2. Developing a deep foundation of knowledge, using conceptual frameworks:
   Suggestions about changes to teaching practice should be linked to a theoretical framework (for example, the framework for literacy acquisition presented in the Effective Literacy Practice handbooks; Ministry of Education, 2003 and 2006.) If teachers understand the deeper reasons for advocating particular practices, they would be able to use these practices more thoughtfully and strategically.
3. Taking control of one's own learning through metacognitive and self-regulatory processes:
   The project realised that if it were to continue to have an impact after the facilitators had left the schools, it needed to increase the emphasis on building teachers' ability to self-regulate their learning. That meant helping the teachers set personal learning goals and develop processes for monitoring their progress towards those goals.

What Do Research and the Literature Tell Us?

The Inservice Teacher Education Practice (INSTEP) materials (Ministry of Education, 2008) include six learning cases that illustrate examples of inservice teacher educators (facilitators) inquiring into their work and its impact on teacher and student learning. "Case 4: Supporting Teachers to Be Self-regulatory/Te Tautoko i nga Kaiako kia" illustrates the application of practice analysis by Melanie Winthrop, an experienced LPDP facilitator. Melanie observed a writing lesson by Glenda Stewart, a teacher at Rata Street School, and the two teachers conducted conversations that allowed Melanie to help Glenda examine and improve her practice. You can link to this case at: www.instep.net.nz/learning_cases/case_4/learning_and_impact

Evidence Used to Judge Impact

The researchers collected transcripts of fifty practice analysis and feedback episodes from eighteen facilitators as well as written questionnaires from the teachers. They were able to use this information to identify a significant shift in practice towards interactions that were consistent with the analytical framework that had been developing. The following two points provide examples of this development.

- In forty-two of the fifty episodes, the facilitators made clear links between the teachers' practices and the students' understandings of the lesson aims and success criteria. Sometimes this involved simple "telling" the teachers about their practices, but more often the facilitator provided examples from student interviews to support their analysis. In the example below, the teacher had used a hamburger metaphor to describe the structure of a speech to their students:

> *Facilitator: So when it came down to [asking students] what are you learning to do as a writer and how will you know that you've been successful … there was a big range of what they thought they were doing. So [student's name] [said], "We're learning to write speeches in the hamburger form", so she clicked into what you were talking about the hamburger. "And the audience will like it." And then [student's name] has also hooked into the hamburger and how to produce the speech. …*
>
> Timperley et al., 2008,
> under Phase Two: Results, para. 2

- All but seven of the teachers accepted the validity of the students' responses and were motivated to discuss related changes to their practices.

It was clear from the research information that some of the learning conversation principles were difficult to enact in practice.

- Only twenty-two of the fifty episodes showed evidence of facilitators engaging with teachers' current theories of effective practice and probing the teachers for their reasons for using particular teaching practices.
- Most of the time, facilitators did not provide reasons for the questions they asked. (295 questions were asked without giving reasons compared to 72 with reasons given.)

In nearly all episodes, there was strong evidence of facilitators and teachers jointly deconstructing the lesson and co-constructing new strategies together:

> Deconstruction
>
> *Teacher: Well, they seemed to [understand]. Like when I was saying to them what an action verb is they could tell me it was a … sophisticated doing word, and that sort of thing. But then they were saying things like, "the slithering … snail" and the "slithering" they were saying… would be the action verb.*

Facilitator: And that's where that confusion arises, doesn't it?

Teacher: Yeah. Yeah. And I felt I was probably confusing them a bit because … I mean, "slithering" is … a verb. But in that context, it's not.

Facilitator: Yeah, I know. And … there's no point in saying that we won't have that sort of word ….

Reconstruction

Teacher: … maybe, if I did it again, I'd do adjectives and verbs.

Facilitator: Yes.

Teacher: You know, rather than trying to push that into the action verbs … I think it was a little bit too much.

Facilitator: Yes, and just do the verb first without upping the expectation that it will have a lot of … quality to it.

Timperley et al., 2008,
under Phase Two: Results, para. 6

The responses from the teachers were far more positive as they progressed through the project.

- Thirty-four of the fifty teachers rated the sessions as a 6 ("definitely useful") on a six-point scale.
- Forty-seven teachers indicated that they would change their practice as a result of the session, though most said that this would involve "tweaking" practice rather than making a more substantive change.

However, two learning conversation principles were still largely absent.

First, in all episodes, although the facilitators' suggestions were more closely linked to their analysis of the observed lessons than in the first set of observations, their suggestions still tended to be at a practical level without an explanation of the theories that sat behind the suggestions. Only eight episodes showed evidence of linking practice to theory. In the best example, one facilitator explained the reason for revision:

Revising learning is a form of scaffolding because you are setting up [the idea] that these are the things you need to support your learning today. You have given them access to it because children often have strategies but they don't use them or can't access them.

Timperley et al., 2008,
under Phase Two: Results, para. 9

Given this gap in how the principles were applied, it is not surprising that the researchers also found few examples of facilitators linking their suggestions to other "sites of learning" within the project (for example, workshops and other professional learning opportunities where the suggested practice had been introduced within the context of a theoretical framework of effective literacy practice).

In addition, the facilitators were not yet prompting self-regulated learning. While the student interviews were used to help understand what had happened in the observed lesson, they were not used to set teacher learning goals, nor were they promoted as a strategy that teachers could use to monitor their movement towards their learning goals.

Continuing the Cycle

When the results of the researcher's analysis were presented, a group of project leaders and facilitators worked together to further refine the practice analysis process. They wanted to retain the features that were working well, that is:

- linking the analysis to students' responses;
- jointly deconstructing the lesson and co-constructing new strategies with clear links to the observed lesson;
- having facilitators probe the teachers' reasons for their existing practices.

They also wanted to highlight features that had not yet been transferred to facilitator practices, such as:

- situating the practice analysis and feedback in the context of a theoretical framework;
- developing self-regulatory systems so that ongoing improvement was not dependent on the presence of the facilitator.

The project leaders and facilitators felt that the following changes to facilitator practices were necessary in order to advance those practices.

- Before beginning any lesson analysis, facilitators and teachers would agree on the focus of the analysis, placing this within a theoretical framework and identifying criteria for effective practice in relation to that framework. (For example, if the focus were to be student engagement, the facilitator and teacher would agree on what such engagement should look like and how they would determine whether students had been engaged.)
- The theoretical framework for analysis would be one that the facilitator had introduced at an earlier professional learning session.

Informal reports support the idea that while facilitators find it challenging to make the explicit link from practice to theory, when they do so, the teachers find it easier to identify what is and is not effective about their practice. On the other hand, the development of self-regulatory strategies seems to be a more difficult process; there seems to be an inclination to focus on the steps that follow a lesson rather than to foster teachers' ability to assess their own effectiveness in an ongoing way.

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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