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



Using Professional Tools: How the Literacy Learning Progressions Can Support Learning at all Layers

Wider Implications of the LPDP Learning

Teachers use resources to support both their own and their students' learning. These resources include conceptual frameworks, ideas, tools, and procedures that create meaning and new learning. The Literacy Learning Progressions (Ministry of Education, 2010b) is a tool that describes the literacy-related knowledge, skills, and attitudes that students draw on in order to meet the reading and writing demands of the New Zealand Curriculum from year 1 to year 10. This tool was designed to provide a reference point for teachers as they consider their students' literacy strengths and needs in order to plan an effective classroom literacy programme.

The Literacy Professional Development Project (LPDP) was a key project within the National Literacy Strategy from 2004–09. During that time its role was to support schools to improve English language and literacy learning and achievement. It did this by operating as a learning project, supporting all participants to engage in learning so that they could better influence positive outcomes for students.

The draft document of the Literacy Learning Progressions (LLP) was distributed to schools for consultation in November 2007. Throughout 2008, the LPDP used this opportunity to see how teachers used the LLP as a tool to create meaning and new learning.

The LPDP inquiry showed that the LLP became integrated into teachers' practice in the classroom in ways that could potentially raise student achievement. This integration was achieved through facilitated professional discussions, which resulted in considerable learning relating to the needs of both teachers and students. This inquiry underscores the importance of thinking about the process of implementation for any new tool in the classroom.





Key Questions

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

- Which professional tools are in the repertoire that teachers in your community of practice use to design and implement effective literacy programmes?
- How are these tools currently used? Are there any other ways they could be used to improve literacy outcomes for students?
- How can teachers learn to use these tools more effectively?
- What implications does this learning have for the way in which resources are introduced and implemented in schools?

Main Sources for This Research Summary

Repertoires to Scaffold Teacher Learning and Practice in Assessment of Writing (Parr, 2011)

The Chain of Influence from Policy to Practice in the New Zealand Literacy Strategy (Timperley & Parr, 2009)

Tools as Mediators of Project Messages (Timperley & Parr, 2007)

Background

The set of resources that teachers use in their practice can be referred to as a "shared repertoire". These are the shared resources that have been developed as a means to create meaning as teachers work together to achieve common goals for students' learning (Parr, 2011). The repertoire that teachers of literacy in New Zealand schools share includes tools and routines (such as procedures) as well as ideas and conceptual frameworks. This repertoire currently includes resources such as:

- Effective Literacy Practice in Years 1 to 4
- Effective Literacy Practice in Years 5 to 8
- The New Zealand Curriculum Exemplars: English
- The Literacy Learning Progressions (LLP)
- Progressive Achievement Tests (PATs)
- Assessment Tools for Teaching and Learning (asTTle)
- The New Zealand Curriculum Reading and Writing Standards for Years 1–8.

Most resources used in New Zealand schools, including *The New Zealand Curriculum*, are developed using a model that blends ideas and possibilities from a theoretical and evidence base, which are contributed by domain and other experts, with the experiences and perspectives of teachers and others working with the target audience. That is, development of resources follows the "top-down: bottom-up" model.

The Literacy Learning Progressions (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. The LLP tool was developed in order to make the expectations for student literacyrelated progress and achievement clear. It grew out of a concern that the data on literacy achievement still showed a group of learners who were not making the progress they needed to make in order to achieve success in their schooling.

The ideas in the LLP were informed by a notion of progression as well as research about literacy and literacy learning. The development was design-led, unlike many resources for teachers, which are only designed once the content has been agreed. This design focused on the key purpose of the LLP as a tool to alert teachers to what students needed to know and be able to do in terms of reading and writing at specific points in their schooling.

From the outset, the development team worked with an idea of what the progressions should look like in their finished form. A designed prototype was drawn-up based on the specification that the progressions were to be "easily engaged with" and "slim". In particular, it was considered critical that teachers were able to see the full set of progressions at a glance. The constraints determined by the prototype helped the development team to be disciplined in their decision-making about content. The prototype also dictated elements such as how the content could be structured (for example, sub-headings are not used in the competency descriptors because of the potential to create confusion with the themes used to structure English in The New Zealand Curriculum).

Because the sector's response to the design of the draft progressions was overwhelmingly positive, the same constraints applied in developing the final version. This meant that some content, in particular the characteristics of text that students read and write at particular levels, had to be left out in order to keep the reading and writing progressions side by side across the fold-out pages.

Ministry of Education, 2010a, pages 2-3

The draft of the LLP was distributed for consultation in November 2007. Feedback was collated and analysed in November 2008, and a report of the findings published in February 2009 (at www.educationcounts.govt.nz/publications/literacy/43632).

An effective professional tool that has been developed to represent the ideas of a particular community can be used in a number of ways. However, in New Zealand, there has been little investigation into how tools are being used by teachers. The Literacy Professional Development Project (LPDP) took the opportunity to inquire into teachers' understandings of and reactions to the draft LLP in 2008, both initially and after a year in which teachers had used the document.

What Do Research and the Literature Tell Us?

Resources are "shared repertoires"

There is a growing literature about how teachers use resources in their practice in ways that lead to better outcomes for students. These resources include ideas, frameworks, tools, and procedures (routines). The resources that are developed and used by teachers in a community of practice, such as teachers of literacy in New Zealand schools, can be referred to as a "shared repertoire".

A repertoire, according to Wenger (1998) is a community's set of shared resources. These resources are created to negotiate meaning in the joint pursuit of an enterprise.

Parr, 2011, page 33

Furthermore, the way this repertoire is used by the teachers is dynamic: it changes as teachers' understanding deepens and their inquiry leads them to explore different aspects of its use. As Parr puts it, the resources may have

recognisably well-established interpretations but they can also be re-engaged in novel situations to produce new, negotiated meaning (Wenger, 1998).

Parr, 2011, page 34

Tools are a particular kind of resource in the shared repertoire

Tools are a particular kind of resource in the teaching community's shared repertoire. They are described in the literature as material artefacts that shape the activities and understandings of their users.

The notion of tools derives from both Vygotskian and cognitive theory. Tools are considered to be externalised representations of ideas that people use in their practice (Norman, 1988, Spillane, Reiser, & Reimer, 2002). Tools mediate teacher action in and on the world (Spillane, Halverson, & Diamond, 2001).

Parr, 2011, page 34

If the tool incorporates valid ideas as well being well-designed to meet its purpose, it is known as a "smart tool" (Robinson, Hohepa & Lloyd, 2009). These authors suggest that smart tools incorporate sound theory about how to achieve the purpose of the task in question.

Learning progressions as a professional tool

There is increasing interest in providing "learning progressions" as a professional tool for teachers.

There are a number of definitions of learning progressions in the literature (e.g., Masters & Forster, 1996; Popham, 2007; Wilson & Bertenthal, 2005). Underpinning these definitions is the notion of a vertical continuum of increasing expertise over time.

Parr, 2011, page 35

Learning progressions are usually developed to support teaching practice by articulating the knowledge, skills, and attitudes teachers should look for at specific points along a learning pathway that should be typical for most students. Progressions describe signposts along the way, often referenced to years at school or significant "stages" in learning. By laying these out in a continuum, the intention is to enable teachers to clearly see next steps for learning, or indeed, where there might be gaps in learning.

A common way of thinking about learning progressions has been described by Duschl, Schweingruber, and Shouse (2007) who see progressions as being anchored on one end by what is known about the concepts and reasoning of students entering school while, at the other end, are societal expectations. Learning progressions propose the intermediate understandings between these anchor points and are reasonably coherent networks of ideas and practices.

Parr, 2011, page 35

The different types of learning progressions include developmental sequences informed by cognitive psychology, curriculum frameworks that map how knowledge and skills should or could be taught, and assessment frameworks that specify constructs to measure progress and achievement.

Because learning is a complex, iterative, and uneven process, it is challenging to develop a single set of progressions to show how a diverse group of students develop expertise. Most teachers of literacy in New Zealand are familiar with the idea of different pathways to common outcomes as described by Clay (1998).

Another key idea about progressions, particularly relevant to the LLP, is whether they describe current or desired (aspirational) levels of achievement.

Progression descriptions may outline "what must be" or "what should be" or "what is or has been" (Gong, 2008).

Parr, 2011, page 35

The LLP are a mix of both actual and aspirational. The descriptors were determined by the reading and writing demands of the curriculum at particular points in the system and the knowledge, skills and attitudes that students needed if they were to meet those demands and be on track to match societal expectations at the end of schooling. The descriptors are not a reflection of the students' current reading and writing achievement (Ministry of Education, 2010a, page 11).

Project inquiry and knowledge building

The LPDP has elaborated on the Teacher Inquiry and Knowledge-building Cycle to Promote Valued Student Outcomes to ensure that participants at each layer of the LPDP use a range of evidence, including student achievement information, to identify and understand:

- the learning needs of those for whose learning they are responsible
- their own learning needs
- the impact of any changes in practice that have resulted in new learning.

For this particular inquiry, the project leaders wanted to understand the level of teacher knowledge needed to use the LLP effectively. This knowledge was essential if the leaders were to support facilitators to provide the professional learning in schools to meet this teacher need. The researchers collected case studies from facilitators and developed questionnaires with both open-ended and scale questions for teachers and school leaders.

Teachers' use of tools

Before undertaking this inquiry in the 2008–09 cohort of schools, the project leaders drew on their knowledge of a previous inquiry into the use of project-derived tools to carry MoE messages that was undertaken in the 2006–07 LPDP cohort of schools.

The 2006–07 project inquiry showed that it is not the tool itself that promotes the learning, but how the tool is integrated into the routines of practice (Timperley & Parr, 2007; Timperley & Parr, 2009). The inquiry looked at how six different tools in the community's shared repertoire were used to support the LPDP goals. The inquiry asked questions about the tools themselves as well as how they were used – in particular, how they were used to carry messages through the layers in the system. The tools were:

- I. Classroom Observation Tool with Student Interviews (a classroom observation schedule with an analysis protocol and a template for student interviews)
- 2. Evaluation through the Phases (a matrix setting out 3 phases for each LPDP project outcome)
- **3.** Catering for Individual and Multiple Learning Pathways: Evidence-Based Decisions for Effective Reading Instruction (an itemised list of tools and resources to assess reading along with a statement about personalising instruction)
- **4.** Leadership Responsibilities Diagram showing how the school takes over leadership of the project
- **5.** Phase 3: Evaluating and Sustaining Change Diagram (the "honeycomb" diagram placed in a sustainability context)
- 6. The On-line Resource (video clips with commentary).

This inquiry found that three of the tools, Classroom Observation and Student Interviews, Evaluation through the Phases, and Catering for Individual and Multiple Learning Pathways, were more effective than the others in both conveying project messages and being well used. These tools had some specific features in common. Most importantly, the

routines around them required the user to examine evidence of their own practice and/or students' understanding/achievement, and they contained within them clear directions for how to improve ... The key messages embedded in the tools were an integral part of the actions specified by the tools and the improvement messages were well understood.

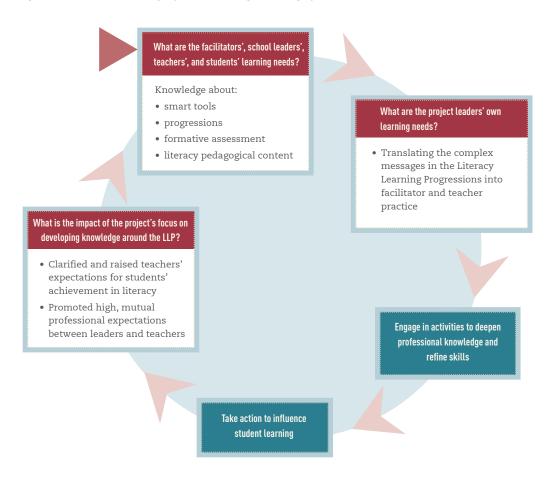
Timperley & Parr, 2007

In other words, the ideas and/or theory embedded in the tool (generally in the words and design) were so clear that they informed the action of the user. In taking the action, the user started to understand the theory.

This earlier inquiry found that, at each layer in the project, the learning needs of the participants were developed in response to the learning needs of those for whom they were responsible. All participants were able to articulate those needs, although the facilitators were particularly effective in terms of influencing the thinking and practice of others. Facilitators formed a powerful and positive means of spanning the boundary between policy and the project leadership, and the understandings and implementation of the project schools.

Figure 1 summarises the project leaders' inquiry into the what would be needed to support teachers to use the Literacy Learning Progressions effectively.

Figure 1: School Leaders' Inquiry and Knowledge-building Cycle¹



Implementing the LLP

The LLP were developed by the Ministry of Education in response to a perceived need to deepen teachers' knowledge of what they should expect students to achieve at particular points in schooling as they develop their literacy expertise. The progressions were a more complex tool than those in the earlier project inquiry, so offered the LPDP an opportunity to further investigate an implementation process.

In particular, the inquiry investigated how the LLP was used in the LPDP to develop content and pedagogical knowledge about literacy. It looked at the level of knowledge teachers needed if they were to use the tool within their practice in ways that helped them to improve literacy outcomes for diverse students. The inquiry involved a questionnaire survey of teachers (Max N =291) that was administered by the LPDP national facilitators in their case study schools at two points in time: initially when the draft LLP were sent to schools and after a year in which the teachers had used the document.

¹ 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.



Teachers learn to use tools for different purposes in a number of ways. The case study schools in the LPDP showed how teachers interpreted and used this tool. The inquiry focused not just on how the LLP were used as a tool to promote learning but also how they were integrated into practice. The researchers found that the LLP:

- helped to clarify and raise teachers' expectations for students' achievement in literacy, as well as promoting high, mutual professional expectations between leaders and teachers
- were integrated into the practice of assessment for learning through the leaders of learning in schools systematically building their teachers' knowledge in both theoretical and practical ways.

The LPDP inquiry showed that teachers are more likely to develop the knowledge they need to use tools effectively when their professional learning is facilitated. The responses to the open-ended questions asked at the beginning of the inquiry suggested that teachers were at an elementary stage of interaction with the LLP. The richness of the information had yet to be realised. There was a noticeable change in the tenor of the responses at the end of the inquiry. More teachers could articulate what they were using the LLP for. They were also able to respond in a more specific manner. This underscores the need for skilled facilitation of the tool: for routines of use to be wrapped around it, and for there to be a period of time for new learning to be applied.

Like the earlier project inquiry, this inquiry showed that new learning was needed at each layer in the system as facilitators, school leaders, and teachers developed their knowledge of the LLP and looked at ways that this tool could enhance and inform existing practice.

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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Acknowledgments

The Ministry of Education would like to thank all those who contributed to these materials, in particular:

- all LPDP facilitators and all schools who have participated in the research;
- Helen Timperley, Judy Parr, and their research team at The University of Auckland:
- Pam O'Connell, Lyn Bareta, and Carolyn English, LPDP Project Directors at Learning Media.

Writer: Sue Douglas Editor: June Hannah Designer: Simon Waterfield

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Published 2011 for the Ministry of Education by Learning Media Limited, Box 3293, Wellington 6140, New Zealand. www.learningmedia.co.nz

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ISBN 978 07903 3729 9 Item number 33729