All Students Belong in 'The New Zealand Curriculum': A vision supported by the Inclusive Education Capability Building Project

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ABSTRACT

This article describes the Ministry of Education's Inclusive Education Capability Building Project (2013-2014). Project members were tasked with creating resources for professional development that would be used to grow inclusive practice in New Zealand schools. This article also shares the learning journey of some members of the project team as they engaged in the inquiry process around inclusive practice. A key understanding for this project was that all students can be successful learners and belong in *The New Zealand Curriculum* (Ministry of Education, 2007), also referred to in this article as NZC.

Research Paper

Keywords: Inclusive education capability building, inclusive practice, inquiry, professional development

BACKGROUND

The Government's vision for a fully-inclusive education system is supported by Success for All – Every School, Every Child (Ministry of Education, 2010). An Education Review Office report (2010) claimed 80% of schools will be mostly inclusive by 2014, a 30% improvement from 2012. The Inclusive Education Capability Building Project (Ministry of Education, 2013b) was one of a number of responses to this vision, and the project was designed to build confidence in schools, enabling all students to access authentic learning, meaningful teaching, and positive relationships. Inclusive cultures are strengthened when teachers feel confident they have the skills, resources and knowledge to teach all students (Ainscow, Booth & Dyson, 2006).

The vision of the New Zealand Curriculum (Ministry of Education, 2007) is that "young people will be confident, connected, actively involved lifelong learners" (p. 7) who will participate fully in learning alongside their peers (Ministry of Education, 2013b). The rights of disabled students are enshrined in policy and in law: the Education Act (New Zealand Government, 1989), the United Nations

Convention on the Rights of the Child (UNESCO, 1989), the United Nations Convention on the Rights of the Disabled Person (United Nations, 2006), the Salamanca Statement (UNESCO, 1994) and the New Zealand Disability Strategy (Ministry of Health, 2001). These documents support students' rights to equitable access to quality teaching and learning.

UNDERSTANDING INCLUSION

Inclusion is about the full participation and achievement of all learners at school (Ainscow, 2005; Morton, Rietveld, Guerin, McIlroy & Duke, 2012; Slee, 2011). In inclusive schools, children and young people with special education needs are engaged and achieving through presence, participation and learning (Ministry of Education, 2012). Historically, the concept of inclusion grew out of the mainstreaming movement which was essentially about placement of a disabled child in a regular setting with a resourcing package. For some schools, inclusion is still thought about as "a technical problem, in which schools must calculate the correct mix of resources, expertise and personnel to facilitate the placement of the child" (Ware, 2002, p. 154). A technical response is more likely to happen when inclusion is largely understood as being about special education, and not as what schools do to support all their students (Ainscow, 1999; Slee, 2001b). Inclusion is about quality teaching and learning for all students rather than special education for some students (Ballard, 2011; Morton et al., 2012; Slee, 2001b; Slee, 2011) and is central to discussions about curriculum and improvements in schooling (Ainscow, 2008; Curcic, Gabela, Zeitlina, Cribaro-DiFattaa & Glarnera, 2011). Slee (2000) states that "inclusive schooling is not a synonym for assimilation" (p.5) and that an attempt to normalise difference is misguided and results "in stabilising the newcomer in an environment that provides a buffer to enable schools to remain the same" (Slee, 2001a, p. 173). Inclusive schools, therefore, are schools that value diversity and make fundamental changes to provide educational equity and meaningful learning opportunities for all students. An inclusive school

is one based on democratic principles focused on collaboration, the celebration of diversity, community engagement, and flexible delivery of the national curriculum (Curcic et al., 2011).

STARTING OFF - LOCATING THE VISION

The Inclusive Education Capability Building Project could be described as a creative and innovative response to the Ministry of Education's commitment to inclusive practice through quality teaching and learning throughout the sector (Ministry of Education, 2014a). It was a response to feedback from some teachers who said they didn't feel confident to teach students who require the highest levels of support to participate meaningfully in the curriculum (Education Review Office, 2010). This was reported as being particularly challenging in senior secondary school classes. Project resources and materials created by the Inclusive Education Capability Building Project team were intended to support school communities so teachers felt more confident to teach all students. It was intended that through meaningful teaching and learning, students would have equitable access to the knowledge and resources that allow them to develop capabilities and values to live full, satisfying and connected lives (Ministry of Education, 2007).

Responsibility for this project was shared between the Curriculum Teaching and Learning team and the Disability Strategy team of the Ministry of Education. This shared responsibility sent a clear message about all students with special education needs belonging within the NZC (2007). Alternative curricula are not required to teach students labelled as disabled.

This project was framed by an inclusive inquiry-based approach that affirmed the classroom teacher as the leader of learning for all students in their class. The team recognised there was strong evidence for using 'regular' teaching strategies with the majority of students with special education needs (Alton-Lee, 2003; Ministry of Education, 2013b). Project members were practitioners from the professional learning and development environment, and from primary, secondary and special schools who had experience around inclusive practice.

The values and goals of Ka Hikitia (Ministry of Education, 2009b; 2013c) and of the Pasifika Education Plan (Ministry of Education, 2013a) were embedded in the thinking and intended outcomes of this work. This was particularly important as Māori and Pasifika learners disproportionally under-access special education services and support, yet are over represented in statistics reporting numbers of students who are described as having special education needs (Ministry of Education, 2013b). This means actively

valuing relationships, family and community is essential to creating inclusive schools (Macfarlane, Macfarlane, Savage & Glynn, 2012).

Project Structure

The project team operated as three work streams over the course of a year. One work stream developed a framework for inclusive practice for use by all professional learning and development providers, leaders and teachers. The focus for this work was largely around school systems and processes, and included topics such as working with teacher's aides, individual education plans, and roles of boards of trustees. The second work stream developed a suite of tools to support the NZC for use by teachers of learners with special education needs. Curriculum examples included teacher action, student voice, practical ideas in relation to support staff, and ideas for creating social connections between peers. For example, a teacher could engage with material that suggested how a Year 13 NCEA achievement standard in English may be adapted and differentiated to enable meaningful teaching and learning for a student working in that class within Level 1 of the NZC. The third work stream created a progress and achievement framework intended to support leaders and teachers of learners who are described as having special education needs. Particular attention was given to assessment approaches that validated teaching and learning for students who are often invisible or failing within standardised assessment processes. The assessment approaches discussed are strengths-based and support meaningful teaching and learning with clear examples. The Ministry of Education's project 'Through Different Eyes' (Ministry of Education, 2009a), the Ministry's position paper on assessment (Ministry of Education, 2011a) and Collaboration for Success (Ministry of Education, 2011) provided strong support for this work.

THEORETICAL PARADIGM

The project work was located within sociocultural theory. Rather than understanding knowledge as existing in the heads of individuals or in the external world, sociocultural theory positions knowledge as negotiated at the intersection of culture, individuals and activity (Cowie & Carr, 2009; Ministry of Education, 1996). Project members worked together in communities of practice to collaboratively grow a knowledge base from which to springboard practical support for growing inclusive school communities (Wenger, 2000).

When considering the diversity of the professional learning and development landscape, the project team chose to focus on how the resource might add value for the student who is actively positioned at the centre of learning. Attention was given to the role of the teacher and accessibility of the resource. Making spaces to hear student, family and peer voice was made visible. Connections between theory and practice were made by embedding many examples of teacher, student and family thinking and action throughout the project materials. For example, hearing from family that a holiday involving plane travel is a goal, means the teacher can incorporate skills and knowledge required to travel successfully in a plane into the class programme. A student may have a goal of learning to watch a movie using headphones, and this could be supported at school in the class literacy programme. While the meaning and reality of learning and achievement are considered across curriculum levels, focus was on the participation, progress and achievement of students for whom much of their learning is within Level One of the NZC (2007). Thinking, strategies and resources that support the students with the highest levels of need can support the learning of all students. The idea that "when we get school working for students with the highest level of need then we'll have it right for everyone" was a comment frequently used to ground the project teams in their work. When students are visibly present in the NZC, belonging is supported. Conversely, if disabled students are working with alternative curricula, the message is the NZC is for all students except those who are disabled. This does not support the vision of the NZC, nor does it support inclusive practice.

Key thinking guiding the development of these resources was focused on student reality. Would I feel welcomed in this school culture? Does my teacher need to know more about how I learn? Does the leadership team in my school give my teacher enough support? What does my teacher need to learn how to do to help me learn and achieve as much as I can within the NZC alongside the other students in my class? How are my learning and achievement measured? How do my family find out about how I am doing at school? By positioning the student at the centre of this work, the relationships that support collaborative learning are prioritised, and the reality of teaching and learning in the classroom is the practical focus necessary to support authentic learning.

RECORDING THE JOURNEY AND LEARNING FOR TEAM MEMBERS

The author of this article was a member of the Inclusive Education Capability Building project team. Midway through 2013, at the beginning of the project, a conversation between the author and Joanna Curzon of the Ministry of Education led to

an agreement where the author would in some way record the journey of the project. At a full group project meeting, the author outlined the plans to write a narrative of the work and offered all members the opportunity to participate. Key headings were suggested under which team members' thoughts could be grouped. The five members who chose to become involved shared their thoughts or recorded them under those headings. The author guaranteed that no names would be used, and that material recorded in the article would not be harmful if the authors were identified. At all stages of the writing, drafts were sent to participants for checking and approval. Drafts were also sent to the Ministry of Education staff who have been aware of this work.

THE JOURNEY AND EARLY LEARNING FOR TEAM MEMBERS

Throughout the year of the project, team members co-constructed materials in Wellington and gathered regular feedback in their home areas throughout New Zealand. They received support from a wealth of expertise both within the Ministry of Education and from those with specialist knowledge brought in to help guide the thinking and learning in the early stages of the project. Members made comments which suggested a sense of joy in being able to work in an area where many feel passionate. Comments included:

I feel incredibly lucky to be part of this group; it's a dream come true.

It takes time to collaborate, it is really untidy this working together, but it's so worth it.

Work streams took time to plan, to research, and to develop trusting relationships with each other which enabled challenging conversations to occur safely. Over time, project members experienced new learning in different ways. Enthusiasm was tempered with the seriousness and challenge of the tasks in hand. Project members were active learners alongside their colleagues and within the schools where they were working. This project was not about application of a model, but about all participants co-constructing and imagining ways forward which would support teachers in the reality of their classroom practice. The goal of creating change required schools not only to reach a tipping point, but to have the ongoing support to embed new practices. Comments heard included:

Sometimes I am just not sure what we really mean by inclusion; schools have so many different views.

This is messy work but I really believe transformation comes from dissonance.

Unless we all keep a close eye on our students with the most complex needs then we're not talking about inclusion. Inclusion has to be everybody.

This has to be about teachers and students. We have to be practical and be able to support ideas with practice.

I'm afraid that we might not make a difference. What if there isn't the roll-out to support this work? What if we just end up with a resource that sits on a shelf? How's that going to help schools?

Project members talked at length about the busy reality in schools, what could work, and what was and was not negotiable in pursuit of inclusive practice. Teachers on the team constantly brought this work back to classroom realities. There was a developed understanding of the need to be practical.

Some project members were at times challenged when each piece of work produced was examined as to its value for students with high and complex support needs. One project member said:

These students with high and complex needs, where are they? They're not in my area.

Project members had to keep reminding themselves of the importance of teachers being able to think about the applicability of this work for any student. The thinking behind making the NZC meaningful for students on the margins is relevant for all students. Team members recognised different schooling options for some students depending on where they live. The focus of this work was on all school communities feeling confident to teach all students living in that community.

WRITING AND GATHERING RESPONSES TO RESOURCES

The project work moved from a predominantly researching phase to a writing phase. An environmental scan of both national and international material designed to support students with special education needs confirmed how lucky we are in New Zealand to have a curriculum that enables creativity and flexibility, and can work for all students (Hipkins, Bolstad, Boyd & McDowall, 2014). It demands reflexivity from teachers and high expectations of all. Project members found the curriculum document was a great place to begin discussions about inclusion when working back in their local schools.

Even when schools understand that inclusion is about everyone, it is helpful for them to see what the curriculum looks like in action. It takes a bit of imagination to meaningfully include a student who may not read or write in a Year 12 history class and then assess that student's learning. Narrative assessment seems a great way to make learning visible for those students.

We need real examples of everyday practice where all kids are supported. I think we need to hear about teachers' struggles, school struggles, family and student struggles.

Regardless of what approach they use, it seems schools can't be inclusive unless they really own the student with the disability, know that student and know who they can go to - to support them and the student.

It's important that teachers and students get the right support at the right time with the right people. We have to make sure schools – and teachers really – get the message that they are not alone.

Team members commented on regularly seeing teachers who were very skilled at adapting and differentiating the curriculum, but who said that they felt isolated. Project members understood the need for schools to recognise that they often had great reservoirs of skill, and that creating networks of knowledge and support in their communities would allow those skills to be shared for the benefit of all. Creating successful inclusive practice begins with a culture of care and respect for staff, students and families (Ainscow, Booth & Dyson, 2004; Monchinski, 2010; Wink, 2011).

Feedback from early iterations of the work reinforced the importance of relationships with and within schools, and opportunities for ongoing dialogue when talking about creating change. It follows then that talking about inclusive practice in schools involves open, challenging and respectful conversations about children's rights, about an ethic of care, about quality teaching for all, about supportive leadership and about knowing the learner.

Responses from the sector confirmed the desire to see what successful inclusion looked like. Some teachers said they would really value having someone come into their classroom and having practical conversations with them so they could learn more about being inclusive in their practice. Many teachers wanted practical ongoing support around differentiating the curriculum. One secondary teacher said:

I get the theory, and I really want to do this, but no one seems to really know how I can make Year 13 English useful in my class for a student working in Level 1 of the curriculum. It's the practical stuff we need. A number of teachers expressed an interest in finding out more about learning stories, citing assessment for some students as a particular challenge. The project team recognised value in embedding practical examples of different approaches to assessment in the resources. These include teacher actions and their reflections on learning outcomes. When teachers read the stories of others, they are more likely to try something new and to then reconstruct their own stories (Clandinin & Connelly, 2000).

When thinking about potential to change, the project members recognise that telling a story is more effective than writing a rationale or guidelines. An example of this is the story of a family who had experienced some challenge around their daughter's enrolment in a couple of local schools. The family had arranged an appointment with the principal of a different school they were considering for their family. The principal greeted the family and immediately addressed the child "Welcome [name of child]. I see you love wearing pink. I think you'll have to meet [name of teacher] in Room 2 because pink is her favourite colour too. I think you two will get on famously". The family reported feeling welcome and valued. "He saw our daughter, a kid - he took no notice of her chair". The principal recognised the child's sense of belonging as central to being in that school. A number of Ministry of Education resources similarly use stories to demonstrate authentic learning (Aitken & Sinnema, 2008; Alton-Lee, 2003; Ministry of Education, 2009a; Robinson, Hohepa, & Lloyd, 2009; Timperley, Wilson, Barrar & Fung, 2007).

THE IMPORTANCE OF LEADERSHIP

A consistent theme that emerged from the research and from sector feedback of draft project materials was that of inclusive values, beginning with school leadership. Leadership appears to be essential in supporting a culture where all students are valued and every student's learning is important. Conversely, teachers and professional development providers commented that their attempts to be more inclusive were challenged by a lack of understanding within some leadership teams.

Timperley et al., (2007) identify two significant types of leadership. Transformational leadership focuses on vision and inspiration based on relationships. Pedagogical leadership places emphasis on establishing key educational goals, planning using the curriculum, and evaluating teaching and learning programmes. Research suggests pedagogical leadership is four times more effective in achieving intended outcomes than transformational leadership. Teachers were noted to value clear goals and

expectations (Timperley et al., 2007). This is not denying the importance of relationships as schools recognised as high-performing value communication within school and with their communities. Meaningful school-wide reflexive practice that actively involves the school leadership team not only helps create a culture of respect but supports teachers to take risks and make changes in their practice (Lovett, 2007; Wenger, 2000).

One of the useful things I saw when taking this material to school for feedback was that it created a focus for meaningful conversations. I heard a couple of teachers in the staffroom talking about how they were going to introduce some sign language in school assembly and that learning a bit of sign so more people could communicate with [name of student] would be useful for everyone really. Talking together about stuff they could do quite easily.

WHAT WAS LEARNED, AND ONGOING CHALLENGES

This project team was supported by a skilled and knowledgeable sector advisory group, including a number of members from the disability community. One work stream sought external mentoring from critical friends, and the shared wisdom of these participants greatly strengthened the work of the project. As one team member said:

Our critical friends have been very important to me, as touchstones or markers along the way. They helped us know what was on track and off track. What a gift to have a group of people to share the learning journey with.

Macfarlane (2013) of the University of Canterbury talked about the purpose of assessment and the reality for many students. She suggested a concept to guide this work could be that assessment shall do no harm. This has real implication for pedagogical frameworks and for classroom practice. It impacts on how teachers assess, and what principals do with assessment data. Hipkins (2013) of the New Zealand Council for Educational Research talked about the creativity enabled by the NZC, and encouraged team members to imagine how teaching and learning could be different. Thinking creatively about teaching and learning could help teachers to grow student potential and to support student capabilities. Morton (2013) of the University of Canterbury talked about inclusive practice as a process of moving away from and moving towards. An example of this could be moving away from a one-off meeting and moving towards developing relationships and knowledge over time. It could be moving away from relying on

one source of information to make decisions about student capability, and moving towards drawing on the knowledge of the student, their parents, family/ whanau and those supporting them. This way of thinking framed much of the work in the project. It provided a space for all to position and reflect on their practice, and to plan their own next steps in creating inclusive classroom and school communities.

The journey for some members of the project team involved personal and professional challenge. A number of iterations were drafted and rejected in attempts to create practical resources with transformative potential. Project members developed their own understandings of inclusive practice, enabling them to better support the sector in the variety of roles in which they continue to work:

I've learnt lots about inclusion. All kids have to have the opportunity to achieve in the NZC. That's not negotiable. End of story.

Inclusion's about an ethic of care; about thinking about teaching all kids better. I think it's about a value of kindness being obvious right through the school.

Inclusion is not so much about theory or head knowledge – it comes from the heart!

Inclusive practice is all about the quality of relationships and how we treat other people. It is not just about the vision; it is about modelling it, persistence, working together.

As project members learned together, they became more cognisant and open to discuss the challenges they believed lay ahead:

I get so cross about that oh so damning statement that says something like - these learners are expected to spend a long time working within Level One of the NZC. What rubbish! Is so limiting and provides a weasel-out clause. Like they're not expected to make progress.

A challenge for me is thinking about and talking about support staff. I often find when I ask the schools about their students with special education needs they immediately focus on the number of teacher-aide hours the students get, as if that's the answer to being inclusive. I understand this - it's so hard when schools are stretched to breaking point around resourcing the kids who need support.

I'm having discussions with a school about what they believe being inclusive is. It seems to me it starts with knowing the student well, then we can focus on the goals for that student and how we can achieve them. In my experience it's not about teacher-aide hours. It's - well it is about that a bit - of course teachers need support - but it's really about the teacher feeling confident and feeling supported. It's about knowing who to ask and having someone knowledgeable at your fingertips who you can throw ideas around with. Sometimes these people are in the school; sometimes they are specialists from outside the school who have amazing knowledge. It's not about these knowledgeable people having set hours with the student; it's about the teachers being able to have meaningful learning conversations with these people when the support is needed.

Some project members confronted their own thinking as they had conversations in schools about resourcing. Lack of resources was often cited as a reason schools felt they struggled to be inclusive. In some cases, limited teacher-aide support was a real barrier to meaningful participation in the classroom. In some cases, the barriers were not about resourcing but about attitudes.

You know some teachers still seem to think that the students with special education needs aren't really their responsibility. I'm learning to be brave and say 'Actually you're the teacher; you're responsible for all your students. What support do you need?' Not easy for me.

In a culture where everyone is valued, the staff support each other and there are high expectations around learning for all students. Discussion about resourcing became more about supporting the teacher to teach all students rather than supporting a student by giving them teacher-aide hours (Ainscow, Booth & Dyson, 2006; Ministry of Education, 2014; Rutherford, 2008; Slee, 2011). Many students require additional support to participate at school and to meaningfully access the curriculum. This support is undeniably critical to successful inclusion for some students. Project members were challenged in some schools, when teacher-aides appeared to have responsibility for student learning. Some team members engaged in conversations where they questioned why expectations for students with special education needs were lower than those of their peers.

Some teachers recognised that students with complex needs have strengths that do not pigeonhole them within a curriculum level and that high expectations of all students begin with knowing the learner (Marshall, Ralph & Palmer, 2002; Rutherford, 2008; 2012). Students often demonstrate strengths in learning outside the school context, and meaningful relationships between school and family enable such

authentic learning to be recognised and transferred across settings. MacArthur (2009) notes that when New Zealand students with special education needs were asked what they wanted from school and how teachers could support their learning, they most wanted to be "part of the whole peer group" and to be "fully involved at school" (p. 42). Expectations for social and academic inclusion are equally valid for all students. A challenge in a busy school environment is valuing the process of inclusion sufficiently to take the time to connect with families, and to develop respectful and equal relationships in school. Without this connection, collaboration is not possible.

Teachers benefit from opportunities to share experiences and ideas with their colleagues to help create collaborative learning communities. Many of the teachers involved in trialling resources for this project said that having opportunities to work collaboratively and share experiences and ideas around inclusive practice helped them to develop confidence, to be more creative, and take risks to better include all students in classroom learning.

CHANGES TO PRACTICE NOW AND IN THE FUTURE

Project members completed their tasks and left the project in two stages. Those who left after three terms were able to provide valuable feedback on how participation in the project had changed their practice:

This work has completely reframed how I'm running my school. I thought we were inclusive but since I've come back, the school has been recultured. Everyone is taking this work on board - they don't have a choice. It's been about active management and active leadership. All kids need the opportunities to be the very best they can be. We've focused on presence and engagement for everyone. We will see a lift in achievement for all kids. I'm quite determined about that.

I just know how much more I have to learn.

I'm a lot more confident when I talk to people about inclusion. I also think I have become a more understanding teacher and a more determined advocate for social justice.

We have to remember when we talk to schools that we've been on a big journey. It's like the Kingston Flyer. We might have already got to Lumsden, but many people are still somewhere further back on the track. We have to pick them up and take them with us.

The reality is schools will get on this inclusion train at different stations. The process of becoming more inclusive is about recognising that station, and making changes to travel further up the line (moving from and moving towards). Project members talked about their personal learning and changes they intended to make as they moved back to their work as practitioners. Comments included:

I need to continue to grow my knowledge of ways to support teachers who have students with high and complex needs, then support my colleagues to also grow their knowledge. One key focus area is the approaches schools are using to capture evidence to share the powerful stories of a student's progress over time. I feel assessment knowledge is something we need to develop more and ensure all our facilitators have the skills to support their teachers and leaders.

I really thought I was inclusive but I've learnt a lot about listening to student voice. I really see how important this is and I've learnt some really useful strategies to achieve this.

NEXT LEARNING STEPS

Creating change in education is a many-pronged approach, from policy to practice across a range of contexts. The process of embedding change is seen as incredibly fragile, and one that needs ongoing practical and focused support. School leaders most successfully lead change when the decisions they make are informed by deep knowledge of effective pedagogy (Timperley et al., 2007). This is supported when they are able to engage in meaningful learning conversations, create a culture of trust and analyse and solve complex problems (Bendikson, Robinson & Hattie, 2012; Timperley et al., 2007).

For teachers, building capability requires understanding why new ways of doing things may be better than what they have done before. Useful professional development supports changes of deep understanding, not change that occurs at a systems or practice level only. Without embedded understanding there is no incentive to maintain any change to practice that emerges from professional development (Timperley et al., 2007). Ballard (2011) reminds us that meaningful change happens within big picture thinking. Efficacy of change at the front-line in classrooms is largely determined by teachers. This project work aims to help teachers to think critically and teach in a way that supports just and democratic classrooms, schools and communities. Wink (2011) suggests that change is most effective when it comes from the heart. Belief and passion are great motivators for progressing change. Recognition of existing

knowledge and skill within new learning is seen as pivotal to creating change. Teachers as change agents can transform classrooms to create authentic learning communities where everyone is welcome and everyone collaborates to support learning. As Ayers, Quinn and Stovall note, "we don't really know how to change the world, of course; we don't know when our efforts are in vain; but we do know that change in small places can gesture towards larger transformations, and that changing a single mind can unleash a universe of possibilities" (Ayers et al., 2009, p. 726. In Morton et al., 2012).

The art of walking upright here Is the art of using both feet.
One is for holding on.
One is for letting go.

Glen Colquhoun (2010)

Inclusive Education Capability Building resources have been drafted, and the first stage of the project completed. Team members await the Ministry of Education's progression, completion and implementation of this work in 2015. As the poet Colquhoun writes, team members have let this work go and trusted that the key messages they valued will be prioritised in the final product. They also recognised that, regardless of the nature of the final product, without an ongoing commitment to practical professional development, the tipping point may remain elusive. The project team have returned to their home towns and will endeavour to be agents of change in their own workplaces, striving towards a culture where all students can participate as valued members of their school communities to become "actively engaged lifelong learners" (Ministry of Education, 2007, p. 7).

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Whole Language and Phonics: Which Instructional Practices a Most Effective in Teaching At-Risk Students to Read?

Tamara Senior, Alison Arrow, Keith Greaney



ABSTRACT

A disproportionate number of New Zealand students fail to learn to read. Children from low socioeconomic backgrounds are over-represented among New Zealand's under-achieving readers. This study investigated the extent to which teachers of beginning readers in low-decile schools emphasised explicit phonological-based instruction, as well as the relationship between teacher emphasis on phonological instruction and student progress in reading-related skills. Results demonstrated that children from different literacy instruction programmes progressed similarly in all reading-related skills except word reading. Students receiving explicit phonologicalbased literacy instruction made superior progress in word reading skills over children receiving implicit phonological-based instruction. A strong emphasis on explicit phonological instruction was also associated with a reduction in variation of class word reading scores over time. The study findings support previous research demonstrating that phonological awareness and decoding skills play a crucial role in the development of word reading ability and that explicit phonological-based instruction can attenuate differences in word reading development. Implications for teachers and policy makers are described.

Keywords: literacy, phonological instruction, reading

Research Paper

INTRODUCTION

Theories of Reading: Searchlights and the Simple View of Reading

The two most widely-used models of reading development are the Searchlights or 'multiple cues' theory and the Simple View of Reading (SVR). The multiple cues model claims that readers use information from four sources in order to read: meaning, sentence structure, visual cues, and phonological cues (Clay & Cazden, 1990). According to multiple cues theory, readers should focus

primarily on meaning while 'cross-checking' the multiple sources of information against each other. Only when this "higher-order" strategy falters should the reader look more closely at individual sources of information such as letter-sound cues (Clay & Cazden, 1990). The multiple cues approach tends to emphasise the development of unconstrained skills such as vocabulary and comprehension in order to support reading (Tunmer, Chapman, Greaney, Prochnow & Arrow, 2013).

In contrast to the multiple cues theory, the SVR emphasises the importance of underlying constrained skills such as phonological and decoding ability (skill in converting letters and letter strings into phonological representations) (Allan & Harwood, 2014) alongside comprehension skills (Stuart, Stainthorp & Snowling, 2008; Tunmer et al., 2013). The SVR states that reading is a product of decoding and listening comprehension (Gough & Tunmer, 1986). According to the SVR, reading cannot be achieved without adequate decoding and listening comprehension; having just one or the other is not sufficient to access text independently (Gough & Tunmer, 1986).

Reading Development

Key instructional components necessary for the development of reading have been well-documented. In their 2001 report on current reading research instruction, the National Reading Panel identified five 'pillars' required for comprehensive reading instruction: phonological awareness, instruction in graphophonemic relationships, vocabulary knowledge, fluency, and comprehension (Anderson, 2009).

Phonological Awareness

Prior to learning to decode text, a child needs to acquire sensitivity to the sounds of spoken language (McNamara, Scissons & Gutknecth, 2011). Phonological awareness is the ability to consciously identify and manipulate sounds in speech (Stanovich, 1986), and phonemic awareness is the ability to

identify and manipulate the *smallest* sounds within speech (National Reading Panel, 2000). Because spoken language is oriented around meaning, children do not usually become aware of the individual sound units that make up words without some form of explicit instruction (Lundberg, Larsman & Strid, 2012). Thus, instruction plays a key role in developing specific phonological abilities for most children (Shankweiler & Fowler, 2004). Moreover, it is essential that children grasp the relationships between sounds and letters early in their reading development. If not, they may be forced to use other, unhelpful cues such as syntax or semantics in their reading (Tunmer & Prochnow, 2009).

Graphophonemic Decoding and Orthographic Knowledge

Once phoneme awareness has begun to develop, children can begin to understand the way sounds and letters are linked by learning which individual sounds are visually represented by which letters (Shankweiler & Fowler, 2004). Most children need explicit teaching in letter-sound correspondences, with knowledge of initial letter-sound correspondences being consolidated and extended through the introduction of basic words that use the same letter-sound patterns (Rayner, Foorman, Perfetti, Pesetsky & Seidenberg, 2001).

Understanding of letter-sound correspondences enables children to begin unlocking the alphabetic code – a vital step towards independence in learning to read (Stanovich, 1986). The idea that progress in reading can become self-perpetuating is known as the self-teaching hypothesis (Allan & Harwood, 2014). The self-teaching hypothesis is supported by research which demonstrates that children, once in possession of enough knowledge about graphophonemic correspondences, can independently go on to deduce further graphophonic knowledge through successful experiences in sounding out new words (Conners, Loveall, Moore, Hume & Maddox, 2011).

When a child first begins to use their knowledge of letter-sound correspondence to decode words, their attempts are conscious and sometimes laborious (Ehri, 2005). Through practice in accurately decoding frequently-encountered letter strings and making successful attempts to pronounce new words using decoding ability, graphophonic knowledge becomes cemented in orthographic memory and is thereby available for future encounters with unknown words containing familiar letter strings (Arrow & Tunmer, 2012). The connections formed between phonemes and graphemes become triggers to enable rapid retrieval of word pronunciations as well as meanings (Ehri, 2005). Having access to a mental store of partial

word representations enables children to read with less reliance on laborious phoneme-grapheme decoding; they are able to recode larger units of print rapidly into phonological representations that match words stored in their vocabulary (Arrow & Tunmer, 2012).

An ability to use the alphabetic code is crucial in developing automaticity in word reading (Simos et al., 2007). Phonological decoding is more useful than a reliance on orthographic decoding when learning new words because learning new words via phonological recoding is likely to result in fewer identification errors and more rapid orthographic recognition than learning words via visual representation only (Kyte & Johnson, 2006). Indeed, it is the very *process* of phonological decoding that causes the orthographic representation of words to become entrenched in memory (Juel & Minden-Cupp, 2000; Kyte & Johnson, 2006; Simos et al., 2007).

Children at Risk of Reading Failure

Research indicates that children from low socioeconomic backgrounds are more at risk of reading failure than children from high socio-economic backgrounds (D'Angiulli, Siegel & Hertzman, 2004; Kieffer, 2010). There is evidence indicating that children from low-income backgrounds in New Zealand face a disproportionately high risk of reading failure (Greaney, 2004; Tunmer et al., 2013).

Impact of Schooling

The methods needed to teach a new-entrant child to read depend on what skills the child brings to school (HM Treasury Department for Education and Skills, 2007). However, the first priority for at-risk beginning readers is the development of phonological awareness and understanding of the alphabetic principle (Rayner et al., 2001; Tunmer et al., 2008). Research demonstrates that children lacking readingrelated skills such as phonological awareness and knowledge of the alphabetic code at school entry, benefit most from instruction that is explicit, systematic, intensive, and rich in opportunities to practise skills that have been learned in isolation from connected text (Jimerson, Oakland & Farrell, 2006). Research also indicates that while children from low socio-economic backgrounds tend to be at higher risk of reading failure (Noble, Farah & McCandliss, 2006), schooling can attenuate these risks substantially.

Explicit and Systematic Instruction

Children who come to school with limited readingrelated skills need *explicit* instruction in phonological awareness and graphophonic relationships, including letter-sound matching (Connor, Morrison & Katch, 2004; National Reading Panel, 2000). Teachers cannot assume that children are able to hear individual sounds in words or make connections between sounds and print (Torgesen, 2004). As Torgesen (2004) explains, explicit instruction involves the teacher deliberately focusing the child's attention on letter-sound connections.

Teaching, for children at risk of reading failure, also needs to be systematic - that is, to follow a planned structure geared to address the needs of the students. Following a review of reading research, Ehri (2004) reflected that any phonological-based programme (either in prevention or remediation of reading difficulties) is more effective if it is systematic. However, in order to plan a systematic phonologicalbased programme to address the specific needs of students, assessment of phonological awareness needs to be comprehensive (Anthony & Francis, 2005). Teacher knowledge about the exact phonological needs of students allows for the planning of instruction to cater for specific skill gaps which could, if ignored, lead to reading failure in the future (Anthony & Francis, 2005).

Intensity of Instruction

Explicit, systematic instruction that provides opportunities for skills practice in isolation and in connected text will be of limited benefit unless it is provided with sufficient intensity. Research on reading programmes for prevention and intervention supports the idea that increasing the intensity of phonics programmes by reducing group size and tailoring instruction time is most beneficial for children at risk for (or experiencing) reading failure (Hansen, Litzelman, Marsh & Milspaw, 2004).

Skills in Isolation and Practice in Context

Beginning readers benefit from skills instruction that takes place in isolation from connected text, followed by opportunities to practise their skills within connected text (Tunmer & Chapman, 2003). Researchers suggest that the usefulness of first teaching skills in isolation can be attributed to four factors: children are able to focus their attention on letter-sound patterns; employment of letter-sound skills is useful for all texts, whereas the helpfulness of context cues depends on the specific text being read; being forced to rely on letter-sound cues when skills are taught in isolation discourages the reader from relying on context cues; and isolated instruction in letter-sound skills encourages the struggling reader to see that these skills are actually more reliable than context cues (Ryder, Tunmer & Greaney, 2008).

Researchers caution that the teaching of new words in connected text may only be useful to children once they have learned at least some decoding skills. For younger children who have not yet developed the ability to use graphophonic correspondence, solely learning new words in the context of text could be detrimental because they are likely to begin to rely on cues that exclude the use of graphophonic relationships (Harwood, 2006). Where the use of graphophonic relationships is limited, children are more likely to make incorrect orthographic-phonological correspondence (Share, 1999). Children who have adequate decoding skills, however, are able to use context to aid them in developing their orthographic knowledge further (Allan & Harwood, 2014).

The recommendation to teach decoding strategies in isolation does not imply that beginning readers should not be reading connected text. On the contrary, children at risk of reading failure need mileage in reading connected text if they are to learn how to apply their skills in practice (Tunmer et al., 2007). However, research demonstrates that graphophonic cues are more useful for beginning readers than contextual cues, and therefore children need to be supported to use the letter-sound cues *primarily* when reading connected text (Rayner et al., 2001; Tunmer & Chapman, 2003).

READING INSTRUCTION IN NEW ZEALAND

Whole Language Heritage

In the past, New Zealand held a predominantly whole-language theory of reading instruction. The whole language approach to literacy instruction marked a departure from explicit teaching of the rules and regularities involved in decoding of text to a study of language-meaning within the context of texts (Smith & Goodman, 1971). A wholelanguage reading programme is non-prescriptive because whole-language theory emphasises using child-motivation and experience as a basis from which to teach reading - often within the context of a relevant and interesting theme (Tracey & Morrow, 2006). Historically, the whole-language view of reading development promoted the idea that reading, like language, is a naturally-acquired skill that develops when children are surrounded by captivating literature (Rayner et al., 2001; Smith & Goodman, 1971; Tracey & Morrow, 2006). More recently, whole-language enthusiasts have begun to acknowledge that instruction in phonological skills should occur, but within the context of meaningful texts (Pressley, 2006).

Certain aspects of the whole-language approach are not necessarily incompatible with a phonological-based approach, and are certainly beneficial for developing readers when employed alongside phonological-based methods to produce a balanced instructional programme (Rayner et al., 2001; Xue & Meisels, 2004). However, the issue with a predominantly whole-language approach is the *emphasis* placed on meaning and context, which occurs at the expense of thorough and isolated instruction in essential phonological skills (Tunmer & Chapman, 2003).

Assessment of New Entrant Children

An area of concern noted in an Education Review Office evaluation Reading and Writing in Years 1 and 2 (Education Review Office, 2009) is the lack of attention paid to the progress of children in their first year at school. Research demonstrates that there are very few, if any, remediation programmes that can remediate most children successfully (Torgesen et al., 2001). It follows that in order for most children to succeed in reading, they need to progress adequately from the moment they begin school. Research also indicates that phonological awareness is a significant predictor of reading development (National Early Literacy Panel, 2008). In order to avoid the 'wait to fail' approach where children are not identified for support such as Reading Recovery until the formal Observation Survey conducted after one year at school (Greaney & Arrow, 2012), teachers need to know exactly what level of phonological awareness and other reading-related skills each of their students possess as soon as they begin school. Apart from letter-sound knowledge and hearing and recording sounds, the Observation Survey tool (Clay, 2005) provides little specific information on phonological awareness. A poor result may indicate that a child is at risk for reading difficulties. However, unless an assessment produces detailed information about the specific phonological skills a child is lacking, an educator will have limited knowledge about how to prevent reading failure (Anthony et al., 2003).

Multiple Cues Theory and Ready-to-Read Texts

Despite the importance of phonological-based instruction for beginning readers, a constructivist view of reading development is encouraged in many New Zealand classes (Greaney, 2011; Tracey & Morrow, 2006), where beginning readers are encouraged to use syntactic and semantic cues as well as graphophonic cues in order to predict unfamiliar words (Ministry of Education, 2003). An over-emphasis of context-based teaching recommendations (which comes at the expense of

phonological-based recommendations) is particularly unhelpful for at-risk beginning readers, as these children need explicit instruction in word-level skills and strategies in order to make the connections necessary to become independent readers (Tunmer et al., 2013).

The Ministry of Education has also shown a preference for the multiple cues theory in the text series recommended for use with beginning readers (Eber, 2001). In their curriculum support tool entitled Literacy Learning Progressions: Meeting the Reading and Writing Demands of the Curriculum (2010), the Ministry of Education states that the Ready-to-Read book series should be the main resource used by teachers of beginning readers. The Ministry of Education also supplies these books free-of-charge to all state and integrated schools in New Zealand (Van Acker, 2007). While the Ready-to-Read series is levelled, sentences are simply constructed and vocabulary is supposedly familiar, the texts are chosen because they provide opportunity for students to "draw on their oral language", "make meaning", and "think critically" (Eber, 2001, p. 9). These texts have repetitive vocabulary and sentence structure, which make reading predictable rather than necessarily decodable. Beginning readers are provided with opportunities to practice repeated words but limited opportunities to practice repeated graphophonic patterns in different words (Juel & Minden-Cupp, 2000).

Research also indicates that Ready to Read books contain significantly less words than the other popular instructional series in New Zealand, the *Price Milburn* (PM) series (Van Acker, 2007). As Greaney states, there is a danger that struggling readers in classrooms which rely heavily on Ready-to-Read books may not be getting the mileage required to attain reading fluency (Van Acker, 2007). While many classrooms in New Zealand are likely to use a range of instructional reading materials, an over-reliance on the Ready-to-Read series is not likely to be helpful for struggling readers (Van Acker, 2007).

AIMS OF THE STUDY

The following research questions were investigated in the current study:

- 1. To what extent is there evidence of phonologicalbased literacy teaching and assessment practices in new-entrant classes of low-decile schools?
- 2. What is the relationship between methods of literacy instruction and literacy progress in the first year of school?

METHOD

An embedded mixed-method approach (Creswell, 2008) was used to examine relationships between instructional methods and aspects of literacy progress in new entrant children during their first year of school. Quantitative data was gathered via repeated measures of student skills as well as single systematic observational recordings of teacher methods. The qualitative data were gathered concurrent with the quantitative data through narrative recordings of teacher observations and individual teacher interviews.

Naturally-occurring independent class groups were allocated to either an 'explicit phonics' group or an 'implicit phonics' group based on the emphasis their teachers placed on explicit phonics instruction. A measure of control was gained for the existence of non-equivalent groups by tracking group progress between two assessment times. The student data was gathered via reading-related assessments once at the beginning of the study (Time 1) and once towards the end of the study (Time 2).

Participants and Setting

Nine new-entrant teachers and the children from their classrooms took part in the study. These participants were drawn from four schools located in lower socio-economic areas of a small urban city in New Zealand. Three of these schools were Decile 2 and one school was Decile 3.

Forty-three children took part in the study, with ages ranging from 5.0 - 5.8 years. The majority (*n* = 37) of children in the sample were from families who identified themselves as Maori. Each child was individually assessed on five measures designed to assess letter and sound knowledge, phonological awareness, and vocabulary skills. Testing took place on two occasions, the first towards the end of Term Two (June/July) and the second at the end of Term Three (August/September).

An observation of at least one literacy lesson in each participating classroom was conducted. Most lessons included guided reading sessions and guided, shared, or independent writing. A time sampling recording system was used in which the teacher's behaviour and the context in which it occurred (connected text or isolation) was recorded at 30-second intervals.

As occurred in Connor et al.'s (2004) study, teacher methods were categorised as Explicit/In context, Explicit/Out of context, Implicit/In context, or Implicit/Out of context. The term *explicit* was used to describe direct teaching or practice of phonological awareness and/or alphabetic code. Examples included teacher prompts to use letter-/cluster-sound correspondence

(e.g. "sound it out" or "what sound do those letters make?"). The term *implicit* was used to describe vocabulary instruction or practice, teacher reading out loud, child reading out loud or silently, listening to others read out loud (e.g. buddy reading, round-robin reading), teacher prompts directing attention to meaning or syntax, instruction about meaning or syntax, dictation (e.g. teacher-child or child-teacher), discussions about texts, conventions of print, listening comprehension, or isolated word reading.

The context in which reading skills were being taught was also included within the coding method. Therefore, *Explicit/In context* indicated direct instruction within the context of connected text (book or piece of writing), while *Explicit/Out of context* described direct instruction or practice in the alphabetic code in isolation from connected text. Finally, a written narrative recording was made of each lesson in order to capture finer details such as examples of prompts used, sequences of events, and descriptions of activities.

Immediately prior to conducting the Time 2 child assessments, individual interviews were undertaken with each participating teacher. The interviews were designed to supplement classroom observations by providing information about each teacher's practice such as planning, assessment, methods for catering for struggling readers, and views on instructional methods and materials.

RESULTS

Instructional Emphasis

The explicit phonological emphasis scores (context and isolation combined) across teachers suggested two naturally-occurring groups divided by differences in mean percentages of time spent teaching explicit phonological strategies. The three Explicit Phonics teachers spent more time teaching explicit phonological strategies in isolation (e.g. identification of initial phonemes in spoken words) and in connected text (e.g. directing students to attend to letter-sound correspondences during reading). In contrast, the six Implicit Phonics teachers spent proportionately more time using implicit phonological-based methods such as emphasising reading and writing goals focused on meaning or concepts about print. Teachers in both groups were observed using explicit and implicit phonologicalbased strategies, but groupings were based on the proportion of time spent using these methods.

Overall, the teacher observations and interviews demonstrated that there was minimal evidence of explicit phonological-based teaching. Six out of

nine teachers spent less than thirty percent of their literacy lessons explicitly emphasising phonologicalbased strategies. Observation findings indicated that the teachers in the Implicit Phonics group spent significantly less time on average emphasising explicit phonological-based teaching strategies than the three teachers in the Explicit Phonics group. Interview findings supported the observation findings to some extent, but there were discrepancies between the way some teachers described their literacy focus and the emphasis they were observed making in teaching practice. Implicit Phonics teachers were more likely to describe their literacy programmes as a mixture of whole-language and phonics, but all of these teachers demonstrated minimal evidence of explicit phonological emphasis. The interviews also indicated that the Implicit Phonics group of teachers were lesslikely to consider phonological skills development in their planning, use of prompts in guided reading, or in student assessment.

Student Progress in Reading-Related Measures

In order to examine the relationship between teacher emphasis on phonological teaching methods and student progress, students were assessed in reading-related measures at Time 1 and Time 2. Student groups corresponded to their teacher groups, i.e. students whose teachers were in the Explicit Phonics group were also placed in the Explicit Phonics group, and students whose teachers were in the Implicit Phonics group were also in the Implicit Phonics group.

Statistical analyses revealed that both the Implicit Phonics group of students and the Explicit Phonics group made significant progress in letter-name and letter-sound knowledge, letter writing ability, and rime identification, but neither of the groups made significant progress in initial or final sound identification skills. The differences between group scores and between the two groups' rate of progress were not significant for any of the measures except word reading. Although Burt word reading scores did not differ significantly between the two groups overall, the Explicit Phonics group showed significantly greater progress in word reading scores over time.

Research shows that an emphasis on explicit phonological-based instruction can significantly increase the achievement of at-risk readers (Greaney & Arrow, 2012). Before forming the two large groups of teachers (Explicit and Implicit Phonics), it was clear that there were two outlier teachers at either end of the Explicit-Implicit Phonics spectrum. Analysis of score variance within the classroom receiving the most-explicit instruction (Class A) and the least-

explicit instruction (Class I) revealed that the variance in word reading scores was wide at Time 1 for both classes. However, the variance in scores decreased over time in Class A (Explicit Phonics) but increased over time in Class I (Implicit Phonics). Thus, as the Class A mean scores increased over time, the range in scores decreased. However, as the Class I mean scores increased over time, so did their range in scores; the gap between the lowest and highest readers was widening.

Observations during administration of the Burt measure indicated that just over half the children from each group made at least some attempt to decode at least one unknown word, or made errors that showed they were attending to at least the initial letter of words. However, none of the children from the Implicit Phonics group were successful in any of their attempts to decode unknown words. In contrast, four of the 14 students from the Explicit Phonics group were successful in at least some of their decoding attempts. These children made more frequent and more extended efforts to decode whole words (rather than just initial letters). Several children showed they were able to decode whole words but not yet able to blend the sounds together every time. All of the children who were successfully able to decode some words came from the class whose teacher demonstrated the most emphasis on explicit phonological instruction (Class A). Two of these children showed a particularly dramatic improvement from Time 1, when they knew one and two words respectively, to Time 2 when they scored 18 and 21 respectively.

DISCUSSION

The current study's observation and interview findings indicated that the majority of teachers placed little emphasis on explicit phonological instruction and high emphasis on implicit phonological-based instruction and use of multiple cues in reading. Given the large static gap between low- and high-achieving readers in New Zealand, and latest Progress in International Reading Literacy Study (PIRLS) results demonstrating that children from low socio-economic backgrounds make up the majority of the country's lowest-achieving readers (Chamberlain, 2013), the current study's findings regarding teacher instruction of at-risk beginning readers are concerning. It appears that teachers of children likely to be at risk of reading failure continue to practise implicit phonological-based reading instruction regardless of student learning needs at school entry. Given research showing that explicit phonological-based instruction can attenuate the gap between poor and good readers, it is imperative that teachers of at-risk

beginning readers recognise the need to give students explicit and isolated instruction in phonological skills.

Current assessment practices of beginning readers are also of concern. Research demonstrates that phonological awareness is a direct contributor to reading progress (Anthony & Francis, 2005), yet the current study indicated that most teachers neglected to assess children's phonological awareness at school entry. Comprehensive assessment is essential in informing instructional practice (Greaney & Arrow, 2012). In order to tailor reading instruction to students' individual learning needs, teachers need to know what phonological skills their students possess as soon as they begin school. Given research demonstrating that remediation programmes are rarely successful (Torgesen et al., 2001) but that early identification of potential difficulties and immediate explicit phonological instruction can prevent reading failure (D'Angiulli et al., 2004), waiting until a child demonstrates significant reading delay before attempting intervention is both unnecessary and unethical. It is essential that teachers are not only made aware of the importance of comprehensive phonological skills assessment at school-entry but also provided with the direction necessary to carry out such assessment.

CONCLUSION

The current study's findings showed faster rates of progress in word reading scores and superior skill in word decoding in classes receiving the highest emphasis on explicit phonological instruction. These results are similar to previous findings suggesting that explicit phonological instruction is more helpful in teaching at-risk students to read than implicit phonological instruction. Moreover, the finding that a relatively strong emphasis on explicit phonological instruction was associated with substantially reduced variation in class word reading scores over time, and that a relatively weak emphasis on explicit phonological instruction was associated with increased variation of class word reading scores over time, adds to research demonstrating the superiority of explicit phonological instruction over implicit phonological instruction.

It seems likely that the large achievement gap evident between low- and high-achieving readers in New Zealand remains wide because the predominantly whole-language methods persisting in this country fail to provide the kind of intensive phonics instruction that at-risk children need in the first year of school. In order to address this problem, systemic changes need to be made whereby at-risk children are provided with explicit, isolated instruction in phonological

awareness and decoding skills. Instruction needs to be systematic, unique to individual children's needs, and sufficiently intensive to eliminate the gaps that exist at school-entry.

If change is to be systemic, however, it needs to be advocated by education leadership (Tunmer et al., 2013). Ministry of Education initiatives need to emphasise that some children come to school with greater literacy-related needs than others, that children with phonological weaknesses need to be identified at school entry (if not before), and that these children must have their learning needs addressed immediately. Teachers of new-entrant children at risk of reading failure may also require further professional development to assist them to better address the literacy learning needs of all children.

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