Looking at School Improvement Through a Reading Recovery Lens

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ABSTRACT

This paper considers how some features of our recent schooling improvement research in New Zealand could be thought of using a Reading Recovery lens. Three powerful Reading Recovery concepts (among many in the Reading Recovery theoretical base) are used to reflect on our research and development work to increase achievement in reading comprehension in Years 4–8. The concepts of Acceleration, Roaming Around the Known, and *treatment integrity* (and the related concept of Sustainability) inform the ways we can look at schooling improvement, but also through the exercise, suggestions are made for how these concepts can be elaborated and refined further in Reading Recovery.

INTRODUCTION

This paper considers how some features of our recent schooling improvement research in New Zealand could be thought of using a Reading Recovery lens. The rationale for this approach is that Reading Recovery is a powerful intervention. Its effectiveness can be examined at several system levels, from that of a country through districts and schools to the level of the dyadic tutorial system and the resulting individual development. So too, schooling improvement programs, that is those systematic attempts to enhance the effectiveness of schools, are trying to be powerful.

Like other countries, New Zealand is concerned with the disparities in literacy achievement between its cultural groups. New Zealand's and other countries' response to this enduring "education debt" (Ladson-Billings, 2006) has included programs of schooling improvement and school reform, at local, district, and even national levels. There is evidence for varying degrees of effectiveness for these programs. Borman (2005) reviewed the evidence for scaled-up projects of school reform in high-poverty schools in the United States. The review shows that they produce widespread, but generally modest effects (effect sizes between 0.1 and 0.2). Although initial effects are limited, the evidence also suggests stronger effects appearing after 5 years.

From analyses such as Borman's (2005), generalizable principles of effectiveness are being derived; for example about the role of program specificity or the role of professional learning communities. More needs to be known about specific components, but where available the evidence links success to these features of specificity and communities as well as level and quality of implementation, the relationships between the developer and the local school and school district, and the coordination and fit of the model to local circumstances.
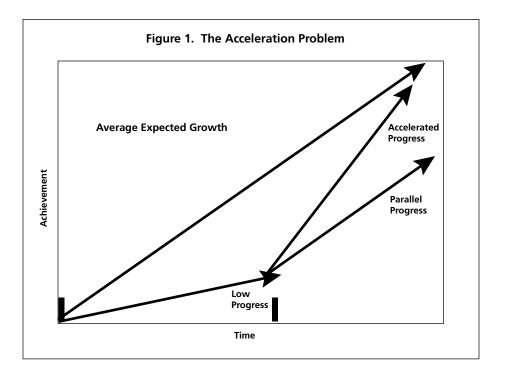
Seen against reviews such as Borman's (2005), some New Zealand schooling improvement projects have been relatively successful. Having reread some of the foundational theory in Reading Recovery recently (Clay, 1979; 2005) it is interesting to find that elements of the approaches taken in the research and development work in New Zealand at least partially parallel some of the core Reading Recovery concepts. While the discussion which follows is a sincere appreciation of those concepts, it is possible that by discussing these concepts from a different perspective—that of schooling improvement— readers interested in Reading Recovery may be provided with some further insights about the operationalizing of the core concepts.

I will discuss the application of three powerful concepts (among many in the Reading Recovery theoretical base) to our research and development work to increase achievement in reading comprehension in Years 4–8: Acceleration, Roaming Around the Known, and *treatment integrity* (and the related concept of Sustainability).

ACCELERATION

The acceleration problem was recognized from the outset of Reading Recovery design by Marie Clay (1979; 2005). Her developmental argument was that in order for an early intervention program to be functional for an individual it needed to change the rate of acquisition to a rate of progress faster than the cohort to whom the individual belonged. This was needed so that over the brief but intensive period of the individualized intervention, a learner would come to function within the average bands required for their classroom.

This is illustrated in Figure 1. Low progress on entry to school is apparent by reference to expected growth from the school cohort. The problem is to not just get progress back to the expected growth because that will at best produce parallel growth over time. Under this scenario, the learner never catches up. Rather, the challenge is to increase the rate of progress relative to the expected growth to get the learner back to an expected level. In large-scale studies of the effectiveness of Reading Recovery the same logic about demonstrating acceleration also applies. That is, national evaluations of Reading Recovery analyze rates of gain for aggregated Reading Recovery children compared with classroom matched random samples of students over fall, mid-year, and spring (Gómez-Bellengé & Rodgers, 2006).

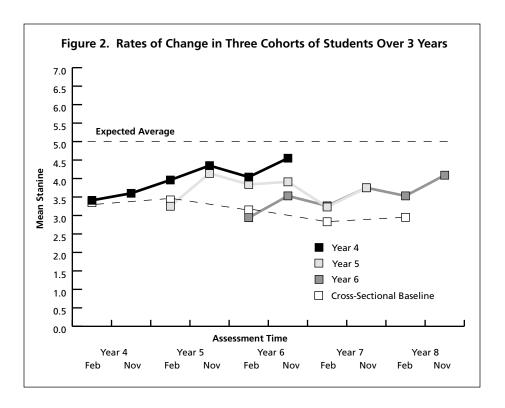**Figure 1. The Acceleration Problem**

The issue for groups of students from particular cultural groups who have not been well-served by school instruction also is to make accelerated gains, to come to function like other students at equivalent levels. Their rates of progress need to be higher than comparison cohorts. The issue for these students is not the same as in Reading Recovery in that the target is not for a group of students to come to function as a group within average bands. Rather, in the ideal case, the distribution of students needs to approximate an expected distribution; in the case of New Zealand students the New Zealand national distribution. The probability of being in the lower (or indeed the upper) 'tail' of the distribution should be no more than would be expected in the population at large. The same logic applies to schools that serve these children. The schools' teaching needs to be associated with achievement distributions that are well matched with national distributions.

In the original Reading Recovery formulation this is a very hard criterion. It asks for a judgment as to whether educationally and developmentally significant gains have occurred. The former part of the criterion means a rate of gain occurred that actually takes the child to a level that is equivalent to the level expected, while the latter part means that the success is defined by being able to cope at the levels required in a real-lived context. The judgment to discontinue Reading Recovery sessions having met the criterion is based on a theoretically derived assumption. It is that by developing the strategies and skills for reading and writing actual classroom tasks such as reading texts and writing texts to the average levels of the home classroom children will have the necessary capabilities for learning from the existing conditions in that classroom. This tough criterion has been shown to be achievable for a large majority of individual children (e.g., Gómez-Bellengé & Rodgers, 2006).

Achieving acceleration turns out, of course, to be every bit as hard in a schooling improvement context, and the later the educational level for improvement the harder to accelerate. In our case we start from a very low base in reading comprehension in the middle- to upper-primary school, of the order of 2 years below average levels after 4 years at school. The process is made more challenging because there is little evidence that national improvements in the first years of instruction on fluency and accuracy of reading texts that have occurred have impacted on this gap in reading comprehension (McNaughton, Lai, MacDonald, & Farry, 2004).
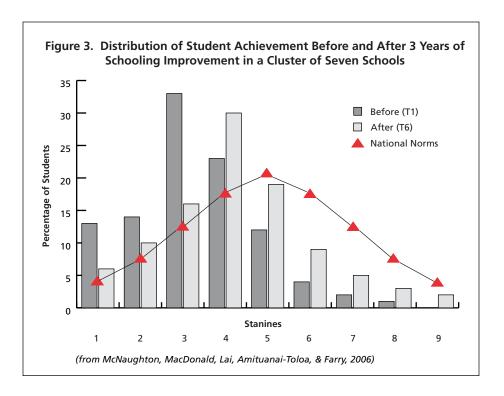
We have been working with two clusters of seven multicultural "decile 1" schools (schools serving the lowest-income communities and having the highest proportions of indigenous Māori students and students from the Pacific islands communities). They have the very low profiles of achievement in reading comprehension noted above. Figure 2 shows a baseline picture before intervention in the form of cross sectional data taken from the beginning of a first year of study. The cross section presents achievement levels for school Year 4 through Year 8 students in one of the clusters of schools (with about 1,500 students).

Figure 2. Rates of Change in Three Cohorts of Students Over 3 Years

Expected Average

Mean Stanine

- ■ Year 4
- □ Year 5
- ■ Year 6
- □ Cross-Sectional Baseline

Assessment Time

| Year 4 | | Year 5 | | Year 6 | | Year 7 | | Year 8 | |
| Feb | Nov | Feb | Nov | Feb | Nov | Feb | Nov | Feb | Nov |

This baseline captures a trend which is close to linear although dropping even lower at the upper-year levels of Year 7 and Year 8, and this was true in both clusters. Across all these year levels, achievement was about 2 years below expected levels, and already so in Year 4. The cross sectional data show that there is no improvement over years, but that teachers are more or less teaching sufficiently effectively to maintain a year's progress for one year at school; albeit consistently 2 years below. This cross sectional data is also plotted as a distribution in Figure 3 and at the baseline (T1), the distribution is markedly skewed below average.

Many studies of the effectiveness of a schooling improvement program examine pre and posttest differences (Borman, 2005). Where there are contrast or even direct comparison groups the changes can be analyzed in terms of differences between the groups in the resulting levels or gain scores. To the extent that differences between comparable groups can be established, then there is some evidence that gains have occurred. But the Reading Recovery concept directs attention to whether these have been educationally and developmentally significant as required by the acceleration criterion.

In our program of intervention over 3 years with the two clusters of schools we have asked that question: Have the achievement gains accelerated? The collaboration has achieved about 1 year's gain in addition to expected gains over 3

Figure 3. Distribution of Student Achievement Before and After 3 Years of Schooling Improvement in a Cluster of Seven Schools

(from McNaughton, MacDonald, Lai, Amituanai-Toloa, & Farry, 2006)

years. So in our case, acceleration has occurred and we are close to the criterion of mapping achievement onto the national distribution, but we are not yet there. Figure 2 shows the original cross sectional baseline levels in one cluster of schools. It also shows changes in the rates of progress for three cohorts of children—a Year 4 cohort, a Year 5 cohort, and a Year 6 cohort—against the reading comprehension measure age adjusted to stanines. The original low flat rate of gain meant some progress year by year but no change towards expected levels. Acceleration was achieved with some variation across cohorts. The rates show trends towards average levels, but full comparability with these levels which will require more time to complete. Because the assessments are age-adjusted stanines, the average rate of growth would be a flat line (and for average students that would be at stanine 5). The resulting distribution is shown in Figure 3; there was a 0.97 gain in stanine in addition to expected growth across 3 years.
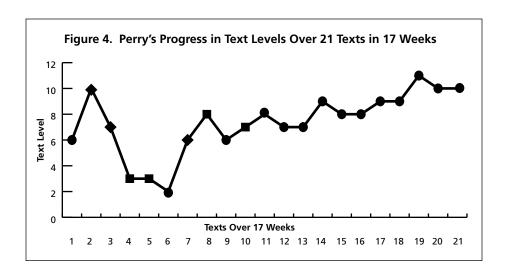
There are further refinements happening to the intervention designed to increase the match with the expected distribution of achievement. The refinements occur because this is very deliberately a research and development partnership which is being sustained over time. In this sense it is unlike the Reading Recovery model at the level of the dyadic tutorial because there is no sense that discontinuing is the goal. In Reading Recovery, once the acceleration criterion is achieved the sessions are stopped, and the tutorial partnership is discontinued.

The idea of discontinuing, successful completion of the intervention at average or higher levels of achievement, is one concept that is probably not appropriately applied to ongoing partnership models for schooling improvement. However, there is a parallel in Reading Recovery. An ongoing partnership is more like the ongoing relationship between teacher leaders and teachers. Teacher leaders or tutors are the educators who provide the professional development for teachers to become Reading Recovery teachers. Given that new ideas and new resources are developed—such as practitioner texts and assessments—the relationship is ongoing between the educators and the teachers. A potentially critical difference nevertheless in our case is that in our collaborative research and development model, the roles of researcher and practitioner/educator are complementary in the ongoing problem solving of effective instruction.

ROAMING AROUND THE KNOWN

The concept of Roaming Around the Known (Clay, 1979; 2005) is as equally challenging as the concept of acceleration. It is also an inspired piece of developmental analysis. Roaming Around the Known means that the learner and teacher stay within tasks such as the level of texts used for reading that are familiar for the first few weeks of each child's Reading Recovery intervention; levels at which the learner is currently successful with their knowledge and strategies. By providing the supportive context of the known, the tutorial stays focused on the needs for the early learner who is in some difficulty. These needs include gaining some awareness of and control over those aspects of current performance and knowledge that are expressible in a familiar environment so that they become more automatic, immediate and predictable. It focuses, as well, on the needs of the teacher who is also facing some difficulty in the sense of designing an effective program. Finally, it focuses on their joint needs to establish an effective generative tutorial system requiring intersubjectivity. That is, a shared understanding of each other's goals, resources, and ways of acting.

From the teacher's perspective, the focus on the familiar while reading and writing texts over the first 10 sessions is meant to involve active recording of strengths and weaknesses on a range of tasks in the tutorial relationship. According to Clay, the process of looking for the personalized profile is meant to stop teachers teaching from "preconceived ideas." Teachers draw on the pedagogical content knowledge they acquired in training to develop the profile, but in addition further conditions were defined to enable the teacher to be as open as possible to being informed by the evidence. In characteristically forthright prose Clay wrote "no forms should be used" (2005, p. 33)—meaning no precategorized recording systems—but teachers are asked to diarize and record evidence for what was not in the assessments. Teachers look for the psychological resources that children might have and the areas where there are confusions and difficulties, without making assumptions. The test of what is needed is in the evidence and certainly not just the standardized recording evidence.

Figure 4. Perry's Progress in Text Levels Over 21 Texts in 17 Weeks

A graphic illustration of the process at work is presented in Figure 4. It comes from one of the earliest Reading Recovery studies by Marie Clay and Barbara Watson (1982) of lessons with Māori children. Using the records from 17 weeks of tutoring, it shows the 21 successively reported texts read between Perry and his teacher in terms of different texts over time and the levels of the texts. It also shows the difficulty level of the text by three symbols: The appropriate level text for the reader in terms of accuracy is the closed circle symbol; the other symbols represent books too easy or too difficult. The time it took to establish a well-tuned tutorial system for the learner and the teacher, until what Clay calls the "climb up through" the levels, is indexed by the fluctuation in the level of the texts and the extended problem solving to choose an appropriate text and the right difficulty level for the individual learner. After the 11th text (coinciding with the 11th week) the tutorial system seems to come together and a steady trajectory of progress through appropriate texts takes place.

The processes associated with this Roaming Around the Known were difficult and variable and somewhat protracted. It is interesting to see how Reading Recovery practices around the world have finely tuned this complex process so that teachers now are generally more adept. An example of a more representative system in the most recent publication (Clay, 2005) indicates 22 titles read over 4 weeks before the climb took place. Rochelle and her teacher needed these titles, but just 4 weeks to establish the mutuality required for progress which ended after 17 weeks and 41 lessons at level 14 on the leveled texts. The extended period with Perry at the very beginning of the Reading Recovery community developing its practices helps us see how the system at the level of the learner and teacher, as well as at the level of the professional community, has learned about the processes taking place. But it also illustrates the finding

that it may take longer for a teacher to establish mutual understanding with some groups of children. This may be particularly the case for teachers with indigenous children and children from specific cultural and linguistic minority groups (McDowell, Boyd, & Hodgen, with van Liet, 2005) — those children who find schools risky places (McNaughton, 2002).

How does the concept of Roaming Around the Known apply to a schooling improvement process? In our work we have used the same idea; needing to figure out the "problem" in the context of the participants' teaching and learning. In the Reading Recovery case, the need for roaming comes from a developmental theory of reading. Children make slow progress for a number of reasons; the pathways can look different as learners put different parts of the system together. If this multiplicity of patterns is the case for individuals over the first year of instruction it is certainly true for a collective system of learners, teachers, and schools, and a context of cultural and linguistic diversity.

We have built into a three-phased approach to working with schools a first phase which bears a resemblance to Roaming Around the Known (see McNaughton et al., 2004). In our case, it is the teachers and researchers collaboratively doing the informed roaming. The joint needs are to develop understanding of teaching and learning needs which is informed by the evidence. In so doing they are to avoid making critical mistakes about what the learning and the instructional needs are within the given schooling context. Local patterns of achievement and instruction create specific needs for what needs improving (McNaughton et al.). There are additional joint needs, too; to understand what the researchers and leaders and teachers each bring to the solving by way of resources, goals, and ways of acting so that an effective collaborative enterprise—a professional learning community—develops.

Our roaming is based on systematic analysis of evidence, too. Data are collected, analyzed, and critically discussed within that professional learning community. Cluster-wide data of both achievement and instruction are analyzed by the school leaders and researchers and involve a close examination of students' strengths and weaknesses and of current instruction to understand learning and teaching needs. Competing theories are raised about the problem and the evidence for these competing theories is evaluated (McNaughton et al., 2004).

This baseline profiling, which in these studies has included assessments of students' comprehension and classroom observation of instruction, enables us collaboratively with schools to develop context-specific interventions, avoiding some glaring mistakes if highly specified but generic programs had been adopted (McNaughton et al., 2004). One mistake we avoided was that although analysis of assessment data—especially from levels of paragraph comprehension and of the errors made by students on cloze paragraphs—implied the need to increase explicit instruction of comprehension strategies, we found high rates of explicit instruction for strategies occurring in classrooms. The

instructional issue was how that instruction was being used; specifically it needed to be recoupled to the search for and construction of meaning rather than being run off as a formulaic and concretized teaching procedure.

Another example was that low vocabulary scores on tests suggested the need to increase vocabulary instruction, but again classroom instruction showed high rates. When classroom instruction was observed closely we found that the instruction was focused on technical language (e.g., "main points" or "prediction") and topic words with little focus on low-frequency words or unusual uses of language such as idiomatic and literary uses, word usage critical to the reading texts they needed to read at advanced levels.

This profiling has highlighted for us some general risks in effective teaching. The probability of these risks being realized is likely exaggerated in circumstances where there is no systematic collection of evidence about instruction. Two of these risks are related and might be useful to consider. The first is what can be called a "default to recipe" and the second is overuse of explicit instruction out of the context of reading and writing connected text.

Both of these were found during our profiling of instruction and are exemplified in our findings about explicit strategy instruction. The explicit instruction which occurred at high rates tended to be formulaic with repeated identifying, defining, and rehearsing of strategies (e.g., predictions) often outside of texts, and often used without checking the strategies' usefulness. For example, predicting was taught explicitly and repeated predictions were elicited when texts were introduced in guided reading or during reciprocal teaching. But there was almost no explicit checking when reading the text of the appropriateness or effectiveness of the predictions. Time was being taken away from actual reading and writing and the explicit instruction had focused students on the strategies as ends in themselves.

A solid research base exists which provides considerable evidence for the significance of developing comprehension strategies (Pressley, 2002). But what was not initially anticipated from that research base was the specific problem with strategy instruction. Having searched the literature, we found that previous commentators have signaled that this could be a problem with strategy instruction (Baker, 2002; Moats, 2004). The problem is derived from the tendency for instructional packages to be presented and then deployed in a formulaic way as routines to be run off rather than as strategic acts whose use and properties are determined by the overarching goal to enable readers to construct and use appropriate meanings from texts (Pressley, 2002).

We acted to counter the formulaic instruction by switching teachers to prompting and modeling a focus on checking and maintaining meaning using the strategies. This was achieved through a professional development process over the second of the three years (McNaughton et al., 2004). There were gains in component tests for reading comprehension, including paragraph comprehension, that were associated with the increased focus on checking and building

awareness of use over the intervention. Our resulting hypothesis is that maintaining the focus on using texts to clarify, confirm, or resolve meanings and avoiding the risk of making strategies ends in themselves may be particularly important to the continued effectiveness of strategy instruction in the context of cultural and linguistic diversity.

Returning to Reading Recovery, clearly Roaming Around the Known is a very significant component of the overall process. As a researcher, I would like to know more about how that works—notably the conditions under which the process works well and not so well. Among the conditions that need to be analyzed are what level of theoretical preparation is needed to be well primed to see strengths (and not just weaknesses) of new learners, and especially to see psychological and linguistic resources brought by students of diversity. My prediction is that features of the knowledge a teacher has about the literacy practices in the communities of his or her children and that teacher's awareness of the nature and uses of the knowledge are very important (McNaughton, 2002).

Darling-Hammond and Bransford (2005) argue that teachers need to draw on sociocultural frameworks and develop "sociocultural consciousness." McNaughton (2002) uses a similar concept of "diversity awareness," drawing on the general metacognition literature, with awareness referring to both control and regulation of one's knowledge about diversity. This awareness is in addition to what we now call pedagogical content knowledge. And there is a very interesting source of evidence about this in the samples of notes Marie Clay asked teachers to keep, and in any links that can be made between these and the effectiveness of the teaching.

But there is a second query associated with the activity of Roaming Around the Known. What enabled us in the schooling improvement studies to avoid making misguided judgments about what was needed were observations of instruction. The question here is whether there is a need in Roaming Around the Known to extend the notes to what instructional moves by the teacher were associated with what sorts of responses. Looking for strengths and weaknesses in a child profile requires considerable pedagogical content knowledge, something Reading Recovery is very good at providing. But checking contingencies between teacher acts and child acts requires something more—knowledge of instructional types and conditions.

There is a question that applies to both Reading Recovery and schooling improvement, to which the concept of Roaming Around the Known is the answer. Why not buy a ready-made program off the shelf rather than spend time figuring out and designing a purpose built program? The reasons are the same in both cases; that generic programs of schooling improvement and indeed early intervention that highly prespecify content may not necessarily provide the best fit with local conditions at the level of learning and instructional needs.

TREATMENT INTEGRITY AND SUSTAINABILITY

The buzzword in schooling improvement is *sustainability* and this is closely linked with the ideas of treatment integrity or fidelity and scaling up, concepts well known to Reading Recovery developers. Treatment fidelity and integrity refer to the degree to which in any intervention or development a defined treatment is actually applied as designed. The associated concept of scaling up is taking a defined program of change or treatment and applying it across new contexts, again assuming known features with known results are successfully put in place. While sustainability has several meanings, the most usual is akin to generalization across time (the effects of the intervention keep going to some defined level). But sustainability can also mean sustaining the treatment with new cohorts of learners and also with new cohorts of teachers. The latter meanings are closer to the idea of integrity and fidelity.

But there is an issue here for schooling improvement. Integrity has been associated with specificity in a program for a school or sets of schools and this specificity has been seen as very significant for two reasons. One is because changing teachers' practices requires clarity and elaborateness on the part of the design team (Cohen & Ball, 2007), and the other is the need to guarantee effects, the core requirement of treatment integrity (Coburn, 2003).

In schooling improvement the aim has been to scale up through guaranteeing high fidelity, and consequently bemoaning adaptation. But adaptation is an inherent property of teachers' responses to new ideas. Datnow and Springfield (2000) note that even with externally developed reform designs, a process of fitting the design to local circumstance takes place at both school and district level. Lefstein (2007) argues that the partial implementation of the National Literacy Strategy in England was determined by the pedagogical beliefs of the teachers, because teachers cobble new ideas onto existing practices that reformers are trying to supplant.

This sort of mixed implementation is quite generally seen as problematic and is not limited to the schooling improvement literature. Davis and Sumara (2003) voice this typical frustration in teacher professional development. In their study teachers used the vocabulary of constructivism to plan, justify and reflect on their teaching. But what they did often bore little relationship to the core original constructivist frameworks. Partly this is because in interventions ideas are not adequately articulated (Cohen & Ball, 2007), but it is also because of the ways teachers reconstruct and reframe their practices in idiosyncratic ways.

So, our idea of fitting an intervention to local circumstances seems to be in tension with these needs to be very specific. And there is also a related tension associated with teacher learning within schooling improvement (Coburn, 2003; Newman, Smith, Allensworth, & Bryk, 2001). It is between importing a set of procedures in a way that risks undermining local autonomy and efficacy and

a more collaborative development of common procedures which risks losing instructional specificity.

The research literature on schooling improvement has become ambivalent about these issues. Reviews point out on the one hand that a high degree of program prescription (specificity) is important (Borman, 2005). Reviewers also argue that approaches in which professional development focuses on joint problem solving around agreed evidence, such as student achievement outcomes, are more likely than highly prescribed programs to result in sustainable improvements in student achievement particularly (Borman, 2005; Coburn, 2003).

These tensions may be solvable if we distinguish between the degrees of prescription or predetermined specificity of the content and the specificity of a process that can still lead to a specific content but is derived from a relatively more open-ended starting point. The distinction here means we can talk of fidelity to a program and/or fidelity to a process which can still deliver a high degree of program specificity which has been localized. The object then would be to develop fidelity to a common program which has been strongly contextualized by developing a highly focused collaborative context. The issue for researchers would then also include examining the suitability and effectiveness of the process where different types of local adaptation occur and where there may very well be differences in both short-term and long-term outcomes for students and teachers with different ways of developing the content.

And that is in many respects what Reading Recovery has done. In terms of the individual program, it closely specifies a process which is deeply theorized and there is a framework of activities, both relatively open-ended and versatile and those that are relatively fixed and closed (see McNaughton, 2002). The closed tasks include a sound segmentation task, and the more open-ended tasks include reading a text with guidance or composing a written text. All of these tasks are specified as part of the process of Reading Recovery, but the individual content is not prescribed. That is, what texts are actually used and what guidance during reading is given, which sounds are actually taught, what letters are actually controlled in writing, are not prescribed. The content is developed through the processes such as Roaming Around the Known, the assessments, and the responses to the activities. In terms of the process, Reading Recovery has high treatment integrity and fidelity.

This process also has sustainability in each sense of the term, with new learners, new teachers, and across contexts to which it has been scaled up. The process looks similar, is effective, and continues to be effective across educational systems in several countries with local contexts varying in terms of cultural and social identities of children, age of entry, types of books, teacher qualifications, etc. All of this contextual variation apparently does not threaten the integrity of the process. How did Reading Recovery achieve this? Among other things, through a systemic design which creates layers of ongoing professional development as well as a sophisticated analysis of what needed to be constant in

the design (the assessments) and what might be altered (the topics and language of texts or the timing of the entry into Reading Recovery).

There is a general challenge here for reforming or improving teachers' practices, which applies to both Reading Recovery and schooling improvement. Teachers are like other learners and experts and they construct and reconstruct their ideas, and that process needs to be better understood. But rather than seeing it as inherently problematic, what may be better is to see their active reconstruction as a dynamic, albeit risky, resource. In both Reading Recovery and schooling improvement there are balances to be struck. My way of approaching this problem in the context of schooling improvement starts with developing a model of needed expertise.

Teaching is a form of expertise. Experts are deeply knowledgeable about what they do, how they do it, and why they do it. Their knowledge and skills are about particular practices of literacy using particular forms of guidance and assessment tools in particular settings. General models of expertise identify how experts are goal focused and intentional; they are strategic, being able to adapt to circumstances; and they are keenly aware of the effectiveness of their performances in the sense of being in control by being able to monitor, check and modify (Ericsson & Smith, 1991; McNaughton, 2002).

These general attributes give experts the twin features of being technically adept as well as innovative and adaptable, although Darling-Hammond and Bransford (2005) differentiate between the relative weighting of these attributes in their distinction between teachers as "routine experts" and "adaptive experts." The former develop a core set of competencies that they apply with greater and greater efficiency, while the latter continuously add to their knowledge and skills. These latter experts are innovators; they change core competencies and expand the breadth and depth of their expertise.

By adding the idea of a professional community to the general model we get a framework for describing how one develops as an expert. An expert is one who has deep immersion in the traditions of the community of practice; expertise in the rules, procedures, and standards of that community (Olson, 2003). Theories of communities of practice applied to educational communities (e.g., Rogoff, Turkanis, & Bartlett, 2001; Wenger, 1998) point out that both longevity and innovation require participants moving from peripheral participation to central experts but also becoming involved in inventing and adapting customs and traditions. In both schooling improvement and Reading Recovery, there is need to see teachers as adaptive experts who will be able to innovate and adapt given a deep and well-articulated knowledge base.

CONCLUDING COMMENTS

The original Reading Recovery model has been through iterations as revealed by comparisons between the earlier articulations (Clay, 1979) with the latest statements (Clay, 2005). The differences can be seen in refinements of both theoretical ideas as well as specific features of the process designed for teacher and learner. The new ideas and features are systematically introduced by levels throughout the system. Within those iterations, in its applications across contexts, it applies with high-integrity core features, particularly in its process. The iterations themselves signal an important feature of Reading Recovery—the potential to adapt and innovate, although as noted above there are balances to be struck between routine application and adaptation. Schooling improvement is grappling with these questions, too.

Reading Recovery is a very successful intervention which has designed and tested concepts from which other educational enterprises can learn. In this paper, the applicability of three concepts to schooling improvement studies in New Zealand has been discussed. The exercise in drawing these parallels is partly one of reflection, exploring explanations of processes with known effectiveness. In that exercise there are possibilities for further refinement of ideas for both schooling improvement and Reading Recovery.

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