

Achieving Literacy

Differentiated Instruction Through One-to-One Teaching

In this article, the authors discuss the necessity of one-to-one assistance at particular points in time for all kinds of children and even adults. They present the rationales for a short (12-20 weeks) period of one-to-one teaching for the most challenged literacy learners and the value of such intervention to schools and children. They also acknowledge that one-to-one teaching co-exists very importantly alongside effective small group instruction and strong classrooms with investments in teachers a primary goal.

Does One-To-One Teaching Really Matter?

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One-to-one teaching is not a new concept in education. Think about historical settings with governesses and rural one-room schoolhouses. Also consider current practices with private tutors and reading clinics offering instruction to the privileged. Even within schools, teachers often work with individual children in a number of settings such as music, sports, speech and language therapy, special education, and second-language learners. You might be surprised by a complete listing of all of the one-to-one instructional settings occurring within your own school district.

There are many other professions that also provide assistance for the special needs of individuals. Think about the number of times you have benefited from one-to-one assistance. We take

for granted the individual treatment provided by our doctors, especially when we face identified health challenges. At different points in our lives, we may need short-term individual support from a physical therapist, a counselor, or even a lawyer! Why, then, should a brief period of one-to-one teaching for the most vulnerable literacy learners at the onset of their schooling encounter resistance? Why is Reading Recovery implementation questioned because it calls for one-to-one teaching?

Of course, the answer is generally related to cost. One-to-one teaching sounds expensive. There is, however, an economical side to effective early intervention. In Reading Recovery, children complete their series of lessons in a short time, usually 12–20 weeks, and then their places are taken

by other children. We have evidence that most children who complete their Reading Recovery lessons continue to progress with their classmates without additional intervention outside of good classroom instruction. Strong Reading Recovery implementation, then, can accomplish a huge savings when compared to the costs associated with retention, special education, and compensatory education services for years to follow.

The potential long-term savings in costs resulting from Reading Recovery's short-term, one-to-one instruction, however, are not obviously and immediately visible at the time school district program decisions are made. It is a matter of taking a visionary view of cost. Financial experts recommend that we diversify our personal investments by ensuring that we have both short- and long-term investments. Learning to read in first grade is a long-term investment. The visionary view acknowledges that early investments will greatly reduce later spending. And we all know that the savings will not only be in dollars. We cannot begin to calculate the true cost for children who face a future of illiteracy.

Research Supports One-To-One Teaching

Research supports the effectiveness of one-to-one tutoring and indicates that one-to-one instruction may be essential for children who are at high risk. The Pinnell, Lyons, DeFord, Bryk,



Reading Recovery successfully served a diverse population of students enrolled in a wide variety of school settings.

and Seltzer study (1994), for example, identified significantly stronger reading achievement for Reading Recovery students over those students receiving small group literacy instruction. Similarly, the U.S. Department of Education's Institute of Education Studies (2003) found that one-to-one instruction was effective for at-risk readers. Both the Dorn and Allen (1995) and Harrison (2002) studies identified a need for the lowest-achieving students in particular to receive one-to-one instruction. Table 1

below highlights key studies that have identified the need for one-to-one instruction.

Reading Recovery results support the effectiveness of one-to-one instruction for the lowest-achieving first graders across the United States year after year. As an example, the National Data Evaluation Center (NDEC) 2002–2003 data analysis report (Gómez-Bellengé, 2004) confirms that Reading Recovery successfully served a diverse population of stu-

dents enrolled in a wide variety of school settings.

In 2002–2003 across all U.S. sites, 77% of the students who received a full series of lessons successfully completed their program signifying that they had caught up with their higher-achieving peers (see Table 2, next page). A closer look shows that Reading Recovery supports literacy achievement in all student groups, with little difference in the performance among ethnic, racial, and eco-

Table 1. Research Support for the Effectiveness of One-To-One Instruction

Study	Findings/Comments
Bloom (1984)	Benjamin Bloom and his students found striking differences in achievement favoring children in tutoring settings.
Dorn and Allen (1995)	Dorn and Allen studied the implementation of Reading Recovery and a specially designed small-group model. They concluded that Reading Recovery was the most effective for the lowest children who need individually tailored lessons.
Harrison (2002)	Harrison also studied the implementation of Reading Recovery and a specially designed small-group model. Her conclusions were similar to those of Dorn and Allen: (a) the lowest-achieving children need a one-to-one setting, (b) small-group instruction is more beneficial for children needing less supplemental help, and (c) children served in small groups tend to need longer interventions, usually for the full school year.
Pinnell et al. (1994)	This study, funded by the MacArthur Foundation, was a well-designed, large-scale experimental field study comparing four delivery systems including Reading Recovery and small groups. Reading Recovery children performed significantly better than all other treatments on all measures. Researchers concluded that differences were related to the combination of individual instruction, the lesson framework, and teacher training.
Snow et al. (1998)	The Committee on the Prevention of Reading Difficulties in Young Children acknowledged that additional support is needed for young children (citing first grade), including supplementary tutoring by skilled professionals.
U.S.D.E. Institute of Educational Sciences (2003)	Based on the Institute's gold standard for research (outcomes found effective in randomized controlled trials), one-to-one tutoring by qualified tutors for at-risk readers in Grades 1–3 was found to be an effective approach.
Vellutino et al. (1996)	This team of researchers found that early and intensive individual tutoring, in most cases, is a more effective intervention procedure than small-group instruction.
Wasik and Slavin (1993)	These researchers studied the effectiveness of five tutorial programs including Reading Recovery and concluded that one-to-one tutoring was a potentially effective way of preventing children's literacy failure.

conomic groups. Seventy-five percent of African American and Hispanic children achieved success in Reading Recovery, which is within two percentage points of the total population of children who received the short-term reading intervention. With regard to economic factors, 77% of students who qualified to receive partially subsidized lunch successfully completed Reading Recovery, matching the total population. Children qualifying for free lunch scored only slightly lower, with 73% successfully completing Reading Recovery.

When Reading Recovery results are disaggregated according to types of schools, children in urban schools surpassed the performance of the total population, with 79% successfully completing the program. In high-poverty schools in both rural and urban settings, 76% of the children achieved reading success as a result of Reading Recovery.

The achievement levels of Reading Recovery students are also documented by classroom teachers' perceptions and other external indicators.

Although 89% of all children who later discontinued successfully from Reading Recovery were perceived as low readers by their classroom teachers in fall 2002, only 8% of those same students were still seen as low readers by spring 2003. Out of the approximately 81,000 students who were discontinued from Reading Recovery in 2002–2003, only 146 (less than .002%) were subsequently placed in a learning disability program during first grade due to reading difficulties. Similarly, only 249 (.003%) of these children were retained in Grade 1.

Low-achieving children who do not receive Reading Recovery services in the fall often qualify for Reading

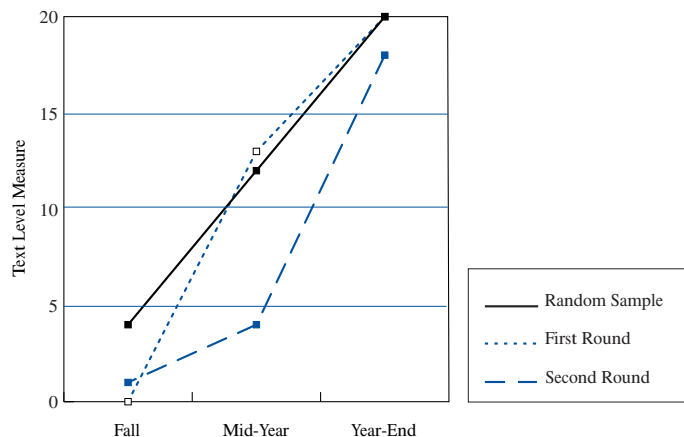
Table 2. National Data Evaluation Center 2002–2003 Reading Recovery Results

Student Group With Full Series of Lessons	Percentage of Student Success
All Children	77%
African-American Children	75%
Hispanic Children	75%
Children Who Receive Free School Lunch	73%
Children Who Receive Partially Subsidized School Lunch	77%

Recovery in the second round of instruction provided during their first-grade year. While these children scored higher than first-round Reading Recovery children, they do not make the necessary accelerated progress in the first half of the year with classroom instruction alone. Many of these children have been served in small groups before receiving Reading Recovery service, and all of them have been served by classroom literacy instruction. While many have made some literacy gains, their performance on reading and writing tasks is generally far below their peers even though their literacy scores were initially higher than those of the first

intake of children into Reading Recovery. The 2002–2003 national data, for example, showed an average gain of only 3 text reading levels (from Level 1 to Level 4) between fall 2002 and midyear for children who became second-round Reading Recovery students. The average midyear text reading score of first-round Reading Recovery students, by comparison, was slightly above that of the random sample non-Reading Recovery students. These results are illustrated in Figure 1 and provide direct evidence of the effectiveness of Reading Recovery's one-to-one instruction.

Figure 1. Progress on Text Level Measure 2002–2003 (Gómez-Bellengé, 2004)



Moreover, anecdotal evidence from Reading Recovery districts, some of which have conducted informal local studies, also supports Reading Recovery as a one-to-one intervention over small-group instruction for the lowest children. Many children served by small groups prior to Reading Recovery do not perform at midyear as well as those completing their fall Reading Recovery programs. Again, it is important to remember that assessment scores for these children were initially higher than those who were first served in Reading Recovery.

Cautions

While it is clear from the research that Reading Recovery as a one-to-one intervention makes a difference in literacy achievement for children of all sub-groups, practical issues have the potential to change our focus. These issues are related to small-group instruction, high-stakes assessment, and instructional quality.

Administrators are often pressured to serve more children and thus think that small-group instruction is equally effective. This thinking does not show a clear understanding of the value of intensive short-term individual intervention. The accelerated progress that Reading Recovery children make in 12 to 20 weeks can only be achieved with one-to-one teaching.

Some researchers suggest that small-group instruction is just as effective as one-to-one teaching (Elbaum, Vaughn, & Moody, 2000). Yet educators must be cautious about interpreting such reports. To appropriately interpret studies that compare Reading Recovery with group interventions, we must examine the design of the study, the size and selection of student samples, entry scores, dura-

tion of service, type of intervention, training of teachers, and types of measures used. Also, when studying Reading Recovery interventions, we must examine the integrity, quality, and age of the implementation; the level of Reading Recovery coverage; level of administrative support; and the quality of classroom support. Some arguments in favor of small groups over Reading Recovery, for example, have based their conclusion on studies with only four Reading Recovery children who were taught by teachers who had not been trained as Reading Recovery teachers (Elbaum et al., 2000). As consumers of research, educators need to question such claims.

To design studies that validly compare small-group and individual treatments is a complex challenge (Shanahan, 1998). Many variables can influence the outcomes. The only large-scale, carefully designed experimental study that compares Reading Recovery with small-group teaching is the study cited earlier by Pinnell, Lyons, DeFord, Bryk, and Seltzer (1994). As stated previously, this study found significantly stronger reading performance for Reading Recovery students when compared to that of students receiving instruction in small groups.

A second issue many school leaders face is the temptation to shift all of the instructional support to children in grade levels targeted for high-stakes, state-mandated assessments. Such decisions promote remediation rather than prevention. By not addressing children's needs early, literacy confusions continue to grow, thus requiring longer periods of remediation; this can increase dramatically the number of children who will need extra help. Only early one-to-one pre-

By not addressing children's literacy needs early, confusions continue to grow and thus require longer periods of remediation, and can dramatically increase the number of children in need.

ventive intervention will both reduce the need for other interventions and allow for more targeted interventions in later grades.

As teachers of these low-achieving children, the challenge of powerful one-to-one teaching is ours. Reading Recovery teachers must maintain the highest quality of individual teaching possible. They must be committed to their own continuing professional development and hold high expectations for each child as a unique individual. Excellent Reading Recovery teaching requires both strong Reading Recovery implementation, as described by the *Reading Recovery Standards and Guidelines in the United States* (Reading Recovery Council of North America, 2004), and effective leadership for Reading Recovery teaching.

Reading Recovery teachers must take seriously their role as skilled observers, identifying and following the child's understandings as he or she constructs a literacy processing system. They work with a sense of urgency for the accelerated progress of even the lowest achieving child—by using teacher leader and colleague expertise and by fully participating in ongoing development through continuing contact sessions.

What Are the Benefits of One-To-One Teaching?

One-to-one teaching brings unique benefits to children, to teachers, and to schools/systems. Table 3 highlights some of those benefits. You will be able to extend each list from your personal experience.

And, of course, the enhanced self-esteem and self-efficacy of initially low-achieving children yields an immeasurable benefit to children, teachers, administrators, parents, and the greater community.

What About Small Groups?

Of course, small-group instruction is a viable practice in classrooms and in many other educational settings. We are not arguing against appropriate small group settings for teaching and learning across a child's school years. However, we do have evidence that

for a small number of young children who are at high risk of literacy learning, one-to-one teaching for a brief period of time is essential for building an initial literacy foundation on which all future learning will be achieved.

Reading Recovery demonstrates what can happen when teachers are able to capitalize on individual strengths, one child at a time. Important differences are readily apparent between the kinds of teaching and learning interactions that can occur in individual instruction and in group settings (Clay, 2003).

When two or three children are taught in a group the teacher...has to choose a compromise path, a next move for 'the group.' To get results with the lowest achievers the teacher must work with the particular (and very limited) response

repertoire of a particular child using what he knows as the context within which to introduce him to novel things (Clay, 1993, p. 8).

As soon as a teacher must work with more than one child, the lesson can no longer precisely address the needs of each child. Even in small groups intended to be homogeneous, differences among children will emerge almost immediately. And management of behavior in small groups can become an issue (Hurry, 2000).

In a comprehensive literacy plan, schools and systems make commitments to high-quality classroom programs and to a variety of interventions across the school years. Within each of these plans, there will be appropriate and effective places for whole-class teaching, small-group instruction, and one-to-one intensive teaching. Our

Table 3. Benefits of One-To-One Teaching

Benefits to Children	Benefits to Teachers	Benefits to Schools/Systems
Instruction at an appropriate level, pace, and expectation	Close observation and monitoring of literacy behaviors of each child	Attainment of basic goal of teaching every child at his or her level of proficiency
Instruction based on child's current strengths and challenges	Maximum use of child's existing knowledge	Increased probability of meeting challenges of literacy mandates
Active participation and focused attention on literacy tasks	Selection of appropriate literacy tasks for each child	Mutual benefit for children and class teachers as child becomes successful
Skilled guidance with immediate feedback	Attention to confusions and timely intervention	Demonstration that low-achieving children can learn
Enhanced language and communication skills	Accountability for child to use what he knows	A comprehensive literacy plan that includes a safety net for the most vulnerable
Emotional support that fosters learning	Freedom from interfering factors of group dynamics	Cost savings for reduced needs in special education, retention, remedial efforts
Accelerated progress and quicker access to classroom instruction	Expertise that can be used in other professional roles	Skills of highly trained teachers of individual children that influence their other roles

argument is that the allocation of resources for one-to-one teaching for the most vulnerable is critical at the onset of literacy learning when the duration will be the shortest span of time required to bridge the achievement gap. Early prevention measures are cost-saving actions in the long-run.

We know from our experiences in education that not all one-to-one interventions and not all small-group programs yield positive outcomes for all children. We have to consider many complex factors that contribute to success in both delivery modes; it is not just a question of small-group versus individual teaching. It is also important not to confuse early intervention with subsequent instructional tutoring when the complexity of content and performance increases.

In addition to one-to-one teaching, researchers (i.e., Hurry, 2002; Invernizzi, 2001; Pinnell, Lyons, DeFord, Bryk, & Seltzer, 1994; Wasik & Slavin, 1993) suggest the following attributes related to successful interventions: a comprehensive model of reading (including key components of the reading process); the content and form of instructional delivery (instruction consistent with the model of reading); use of certified teachers; long-term teacher training; the knowledge, skill, and guidance of the tutor; and the consistency, frequency, and duration of the lesson. Reading Recovery meets rigorous standards for each of these related attributes.

Commitments

Administrators and teachers are searching for ways to ensure that all children are successful. They must also set priorities on the use of limited resources. The stakes are high. The

temptation for quick fixes has never been so strong. Commercial promises abound. It is time for caution. It is time to return to our understandings about what works for children and what we need to do to ensure that it happens. And it is time to hold on to essential tenets in order to avoid current pendulum swings.

Decision makers in districts and in schools must make commitments to both high-quality classroom programs and to high-quality interventions for those children who need something extra for a short period of time. These commitments will mean some short-term, one-to-one intensive intervention for a small number of first graders. Without this commitment, many of our children truly are left behind.

The answer to our leading question, “Does one-to-one teaching really matter?” is a resounding “Yes!” Both research evidence and practical experience tell us that it especially matters for young learners who are falling behind at the onset of literacy learning. The cost of a short-term, intensive intervention for this small number of children will more than offset future costs to schools and to society. If we know that this intervention will make a difference for this vulnerable group of young children, aren't we obligated to make it available?

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