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The Literacy Groups Project: Investigating the Use of Reading Recovery Techniques with Small Groups of Grade 2 Students

The two-year Literacy Groups Project provides evidence that grade 2 students can be helped to attain average grade-cohort reading levels by the use of a small-group pull-out program if certain criteria are met. Students were tested using running records at the beginning and end of the study to provide data for quantitative comparison. Additional context was provided by videotaping lessons and interviewing teachers. Major changes took place from the first disappointing year of the project to the second more successful year. First, students were assigned to groups according to a narrow range of Reading Recovery reading levels rather than being randomly placed. Second, the material was found to support fully even highly trained and experienced teachers newly engaged in adapting Reading Recovery techniques to effect accelerated learning in a small-group setting, rather than expecting teachers to follow general program guidelines. In this case, while they were supported in their beliefs about how best to help struggling readers, resource teachers were provided with a commercial reading program, with lesson ideas and multiple copies of leveled student reading materials.

Le projet sur deux ans de « Literacy Groups Project » (une initiative d'alphabétisation) démontre qu'un programme impliquant un nombre peu élevé d'élèves retirés du groupe peut aider certains à atteindre un niveau de compétence en lecture qui représente la moyenne de la cohorte, en autant que certains critères soient respectés. Des données pour une comparaison quantitative ont été obtenues par l'évaluation des élèves au début et à la fin de l'étude. Des enregistrements de leçons et des entrevues avec les enseignantes ont fourni d'autres données. Entre la première année du projet, plutôt décevante, et la deuxième année plus réussie, des changements importants ont eu lieu. D'abord, plutôt que des distribuer les élèves en groupes au hasard, on les a divisé en groupes homogènes selon leur capacité de lecture selon les niveaux de Reading Recovery. Deuxièmement, le programme s'est avéré très utile même pour les enseignants très qualifiés et expérimentés qui adaptaient les techniques de Reading Recovery pour accélérer l'apprentissage de la lecture dans de petits groupes. Cette marge de manœuvre libérait les enseignants de l'obligation de suivre les lignes directrices du programme. Ainsi, on appuyait les enseignants dans leurs croyances quant à la meilleure façon d'aider les élèves qui éprouvent de la difficulté à apprendre à lire, tout en leur fournissant un programme de lecture commercial avec des suggestions de leçons et plusieurs copies de matériel pédagogique de divers niveaux pour faire lire les élèves.

Look at that one over there. He's got a *Goosebumps* book under his arm but he can't read it. He just wants so badly to be like the other kids. (A grade 2 teacher)

My daughter is in grade 2 and can't ride her two-wheeler. She refuses to be seen out on the street so I'm trying to teach her in the backyard. She wants to be like her friends who learned to ride in grade one. I'm beginning to understand the problems of grade 2 non-readers. (A school trustee)

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There is now little doubt that children who lag behind their peers in developing literacy skills must be assisted in the primary grades. Remediation after grade 3 (some say after grade 1) seems to have little effect (Juel, 1988). Success in school is founded on reading and writing, and therefore the challenge is to find the best intervention approaches for students in the early years. This approach has the great advantage of being not only financially prudent, but also morally justifiable. Every child can and must learn to read and write: the sooner the better.

Literacy Groups Project

One school division in Manitoba, Canada is trying to find a cost-effective, pedagogically sound approach to adapt Reading Recovery techniques for use with a small group of struggling grade 2 students. Spiegel (1995) concludes that Reading Recovery offers 15 characteristics that are "touchstones for the evaluation and improvement of any program ... [and] are not exclusively the property of Reading Recovery ... [they] do not require one-on-one tutoring" (p. 95). These characteristics are:

1. Intervention should take place early.
2. Reading instruction should focus on comprehension of connected text, not the fragmented study of isolated skills.
3. Children should spend time reading.
4. Both the teacher and the child should be aware of the goals of the instruction.
5. Children must have the opportunity to learn.
6. Children should be given materials to read at their instructional level.
7. Children should be taught strategies and how to transfer those strategies to new situations.
8. Writing should be an integral part of a beginning reading program.
9. A beginning reading program should have phonemic awareness as part of the curriculum.
10. The intervention program should be congruent with the classroom reading program.

The Literacy Groups Project is based on Reading Recovery techniques and is taught by certified Reading Recovery teachers who are also resource room specialists. (In Manitoba a resource teacher is one who works with students referred by the classroom teachers as having learning problems. Students are removed from their regular classroom and given more individual or, in this case, small-group attention in a resource room setting.) The project features all of Spiegel's (1995) characteristics of effective early intervention programs, with the notable exception of number 10. Many of the grade 2 programs were so traditional that the resource teachers offered a different and much more effective reading program.

Reading Recovery is an early intervention program designed to assist even the least able grade 1 students to learn to read as well as their classmates. It involves trained Reading Recovery certified teacher-tutors. They participate in a year-long course followed by ongoing peer counseling and continuing contact sessions with teacher leaders to ensure that they are maintaining Reading

Recovery's approach. Tutors work with individual children for 30 minutes a day for a period of 12 to 20 weeks. Each session has a similar agenda:

1. Rereading familiar books.
2. Rereading a book introduced previous day while the teacher assesses with a running record of miscues.
3. Writing about the story.
4. Working with sounds and letters.
5. Reading a new book.

The Reading Recovery program was begun in New Zealand 16 years ago by Clay (1985) to address the reading and writing difficulties of the bottom 20% of grade 1 students. Involvement in Manitoba began in 1994: the Western Canadian Institute of Reading Recovery was located in Winnipeg from 1994 to 1999. Reading Recovery has shown favorable results in a number of settings. For example, Gregory, Earl, and O'Donoghue (1992) in Scarborough, Ontario reported successfully discontinuing (a term that means students who were successfully raised to grade level) 90% of children who were placed in the program. Although not a panacea, Reading Recovery seems to offer a good chance for struggling grade 1 readers to accelerate their progress to the average band of their classmates (Begoray, 1996).

Despite general acclaim, however, Reading Recovery has been criticized (Barnes, 1997; Center, Wheldall, Freeman, Outhred, & McNaught, 1995; Dudley-Marling & Murphy, 1997; Hiebert, 1994; Rasinski, 1995). The most frequent complaint is that Reading Recovery is a relatively expensive program to implement. Tutoring one on one demands significant teacher release time once the teacher is certified. Teachers and tutored students also require approved books and materials: a further expenditure. Cost-benefit analysis favors the Reading Recovery program (Dyer, 1992; Wright, 1992) in the long term; however, many school boards are still having great difficulty securing funding for initial costs. Nevertheless, Manitoba, a province with modest resources, has now fully implemented Reading Recovery (Huggins, 2000, personal communication). Schools expect to reduce the future cost of special services and programs for students who might need support throughout their schooling if they are not successfully assisted in the primary grades.

Reading Recovery has been criticized by other measures as well. The ethical problem of devoting so many resources to so few children looms large. In addition, the Reading Recovery program has been condemned for its lack of impact on an entire age cohort (Hiebert, 1994): to be fair, it is not designed to do this, but rather to assist those with the most severe reading delays. Reading Recovery has also been denounced for failing to evolve and for distracting educators from other worthy interventions. Shanahan and Barr (1995), for example, suggest that Reading Recovery should consider group teaching as an important avenue of pursuit and that "research should consider the impact of Reading Recovery introduced at different times of student development" (p. 992). This suggests interventions with a more social-collaborative base that use small groups and foster school community or parental involvement (such as perhaps Slavin's *Success for All*, 1991). Social constructivism suggests that learners in groups will build language and knowledge about language concomitantly, learning more together than they could if isolated.

To address these concerns—specifically expense, ethics, and social constructivist pedagogies—small-group interventions, some based on the Reading Recovery approach, are also being investigated by a variety of researchers. *Early Intervention in Reading* (Taylor, Short, Frye, & Shearer, 1992) and *Maintenance Literacy Groups* (Dorn & Allen, 1996) are two examples of these attempts. Early Intervention in Reading (EIR), for example, replaces Reading Recovery in grade 1 with literacy work undertaken by groups of five to seven students working with classroom teachers, aides, and parent volunteers. They listen to stories, read summaries from classroom charts with the instructor on subsequent days, and graduate to reading books as their skills grow. EIR focuses also on repeated reading, writing sentences based on the stories, and using phonics, especially segmentation and blending based on story words. EIR continues to modify its approach by building on regular classroom assignments with students who need additional help, rather than providing them with completely separate lessons. In addition, some districts also provide EIR classroom assistants rather than placing the whole burden of the lesson on the classroom teacher. Although it does not provide the dramatic gains of Reading Recovery, EIR nevertheless is effective and relatively inexpensive (Long, 1995). Maintenance Literacy Groups (MLG) were designed to follow Reading Recovery. The MLG program was chosen as the basis of the Literacy Groups project in year 1; however, the students chosen for the project did not necessarily receive the Reading Recovery intervention in grade 1 as the Arkansas students did. MLG also features students in groups of five. Lessons emphasize familiar reading, guided reading of new stories with group members taught to prompt (does that make sense? does that look right?), word-building, and oral and written retellings with a teacher modeling the process. MLG was designed to be a short-term transitional program for discontinued Reading Recovery students beginning grade 2.

The effectiveness of Reading Recovery techniques has also attracted interest from publishers. Houghton Mifflin's (1996) *Early Success: An Intervention Program* is an example of a reading and writing program based on the Reading Recovery lesson framework (rereading familiar books, new book preview and reading new book, writing and working with words). These materials were used in the Literacy Groups project in year 2. Lessons in Early Success are meant to be used with pull-out groups of children in grades 1 and 2 "whose literacy development is delayed for a variety of reasons" (p. 6). Early Success offers teachers' manuals with detailed day-by-day lesson plans available for adaptation. Teachers trained in Reading Recovery (as were the teachers in the Literacy Groups project) would recognize familiar approaches. The teachers were in effect being scaffolded in their own development of a small-group, guided reading approach by the suggestions made in the manual, which were then shaped by their own understanding of Reading Recovery techniques favorable to reading growth. Indeed, another example of Reading Recovery techniques gathered into a book, but *not* presented as a program, would be Fountas and Pinnell's *Guided Reading* (1996). They describe guided reading as a "context in which a teacher supports each reader's development of effective strategies for processing novel texts at increasingly challenging levels of text with support" (p. 2). Early Success is, however, a program with techniques

described, but also shaped into lessons. It also has a list of "Suggestions for Further Reading" (p. 33), which prominently features Reading Recovery books and materials. More important, the Early Success package also provides multiple copies of 30 leveled storybooks for use by small groups of children. In addition, during year 2 more classmates of the intervention students were taking home leveled books as part of a home reading program.

Research has long supported the idea that working in groups has a number of advantages (Bruffee, 1984; Clifford, 1981; Ede & Lunsford, 1990; Johnson & Johnson, 1987; O'Donnell et al., 1985; Slavin, 1985). However, grouping the lowest-achieving students together may exacerbate their problems: some scholars wonder whether group instruction is suitable for those who have great difficulty learning to read (Slavin, 1987). As Shanahan and Barr (1995) suggest, however, research is needed to look at group interventions at later periods of development.

Due to the great success of Reading Recovery, but with an eye to its financial burden, the school division trustees funded the Literacy Groups project for two years. Resource teachers, frequently overburdened with requests for assistance, were also looking for ways to intervene in order to foster the reading and writing acquisition of early years students in grade 2. These teachers were searching for ways to use their Reading Recovery training outside the confines of the grade 1 tutoring program. A small-group approach, if it could be successfully discovered and implemented, would be one more way to deal with struggling readers and writers. The research project, however, was decided on by divisional office senior administrators at the insistence of the board of trustees.

Procedure

The Literacy Groups project evaluated the achievement of students involved in a small-group, resource teacher intervention by using the school division's norms for student progress in text reading. That is, Reading Recovery's Level 16 was seen as a normal achievement at the end of grade 1, and Level 23 by the end of grade 2. The goal was to raise struggling learners to average grade 2 reading levels.

In year 1 in each of the two schools, five students were chosen at random from an initial pool of 10 to be in one intervention group. As a result, reading levels in each of these two groups of five students varied up to six levels. In year 2 five students were chosen as the focus of research at one school and four at the other for a total of nine. They were grouped with others not in the research project who were similar in reading level for the intervention (no more than three levels in any one group of three or four students). Videotaping documented classroom events further and contextualized teaching approaches.

The Intervention

During year 1 teaching in the resource room followed the usual Reading Recovery sequence of reading a familiar book, the teacher introducing a new book, reading a new book, working with words and writing, and taking books home for further practice as prescribed by Maintenance Literacy Groups. Students read familiar books independently and were monitored in turn by the

teacher. The group then listened as the teacher introduced one book by telling the story, directing the students' attention to the illustrations while focusing on several of the key words students would encounter. Next, students read chorally while the teacher monitored individuals for accuracy and inflection, stopping the reading when necessary, usually when the group stopped at an unfamiliar word (indicating that no one could continue). Students also read on their own. Writing and working with words was done individually using a variety of materials such as magnetic letters, whiteboards and pens, and computer printouts of sentences cut into strips. Teachers worked on such skills as phonemic awareness, spelling, capital letters, word spacing, and punctuation by moving from student to student.

In year 2 teachers used ideas from the lessons as prescribed in *Early Success: An Intervention Program* (Houghton Mifflin, 1996) in the teacher's manuals. These lessons were scheduled for 30-minute classes with activities such as rereading for fluency, reading the new book of the week, working with words, and writing sentences. However, activities followed Reading Recovery techniques as deemed appropriate by the teachers as outlined in year 1 above. For example, in working with words, Early Success might suggest "Take two letters and make *at*. Add a letter to make *art*" (Level 2, p. 37). These Reading Recovery-trained teachers were able to choose which ideas would be most helpful for the group based on their observations during the lesson. In addition, the Early Success program provided the multiple copies of leveled books that would solve the materials problem of year 1. Finally, it gave teachers a framework that could assist them in learning how to instruct a guided reading group.

In year 1 the intervention took place over 11 weeks for a total of 32 hours of instruction in each school. In year 2 School A's intervention lasted 28 weeks for a total of 42 hours, and School B used 14 weeks and totaled 24 hours in the resource room. Each child's text reading level before the intervention was compared with final text reading levels.

It was our hope that Reading Recovery methods could be used with small groups to effect significant gains in literacy. Reading Recovery has, after all, "instructional elements that have consistently been associated with high levels of literacy attainment" (Hiebert, 1994, p. 24), and its methods have been recommended by various scholars (Fresch, 1995; Pikulski, 1994; Spiegel, 1995) as worthy of duplication in any reading program.

Setting and Participants

The school division contains primarily middle-class neighborhoods, and both parents and school trustees demand high levels of student performance.

Both schools in the study, however, have a mix of middle-class, single-family dwellings and low-rental, multiple-dwelling housing. Children in the intervention were from a low to middle socioeconomic group. None was from an identifiable ethnic minority. All spoke English as a first language. All small-group work was done in the resource room.

Participants were the lowest-achieving grade 2 students in each school. They were nominated by classroom teachers and verified by resource room teachers using running records to establish text-reading levels. None of these

students was reading at grade level according to norms established by the school division.

In year 1 School A students' initial reading scores were Level 0 to Level 3, whereas the reading ability of School B students ranged from Level 3 to Level 8. In year 2 School A students read from Level 6 to Level 9, and School B students read from Level 5 to Level 10.

Teachers Involved

The two teachers who delivered the small-group intervention in both year 1 and year 2 were highly experienced resource room teachers who were also certified Reading Recovery teachers. They worked for part of each day delivering Reading Recovery to grade 1 students. They also assisted students from kindergarten to grade 6 in all subject areas as they received referrals from classroom teachers.

Students in the intervention were drawn from a variety of classrooms. Classroom teachers' experience ranged from one year to 30 years. Interview data indicate that the students' regular classroom teachers in year 2 all saw themselves as whole language practitioners who taught literacy skills embedded in literature-based lessons. However, observation revealed that these settings were more remarkable for their diversity than for any similarity. Some students were in rooms where reading programs were based on small-group learning opportunities and a variety of appropriate reading materials including leveled books and works of children's literature; others were seated in rows and taught using whole class approaches and one set of basal readers. Thus there was not necessarily any congruence between classroom and intervention as advised by Spiegel (1995).

Results

Both quantitative and qualitative data were gathered and assessed. Reading levels were established by resource teachers at the beginning and end of years 1 and 2 by using running-records assessment. In addition, sample lessons were videotaped and transcribed in each year of the study. Teachers were also interviewed. Notes were taken at meetings of resource teachers with divisional personnel in charge of reporting progress to superintendents and trustees.

Quantitative Assessment

As is often the case in educational contexts, the requirements of parametric tests could not be met. Therefore, the relationship of pretest and posttest scores to the school division's reading norms were established using a randomization test (Edgington, 1987).

In year 1, although students made some gains (see Table 1), these were not statistically significant ($p<.43$). For example, student B10 began the year at Level 3, 13 levels behind the average grade 2 student. Although progress of four levels was made to Level 7, this child was in fact now farther behind, because this school division expects other grade 2 students to progress seven levels in the same time period. Average grade 2 achievement is at Level 23. So Student B10 finished 16 levels behind the norm. None of the students achieved parity with their school division's grade level cohort.

In year 2, however, significant gains ($p<.002$) were realized (see Table 2). Student B6, for example, began at Level 5 but gained 19 levels, finishing at

Table 1
Year 1 Gains in Reading Scores at Schools A and B

	Pretest	*Posttest*	*Pretest Minus Norm*	*Posttest Minus Norm*	*Gain on Norm*
A1	0	2	−16	−21	−5
A2	3	12	−13	−11	2
A3	0	6	−16	−17	−1
A4	1	12	−15	−11	4
A5	3	5	−13	−18	−5
B6	6	20	−10	−3	7
B7	8	18	−8	−5	3
B8	4	14	−12	−9	3
B9	5	10	−11	−13	−2
B10	3	7	−13	−16	−3
	3.6	11.7	−12.4	−11.3	1.0

$p<.43$.

Level 24, which is one level beyond the school division's grade 2 norm. Students not only made gains, but their learning was accelerated so that although they all began well below the norm (see Figure 1), all but one student met or surpassed the average for grade 2 by the end of the study.

Qualitative Assessment
Follow-up interviews were conducted with the six regular classroom teachers of the 10 treatment group children at the end of year 1. Once again, results in favor of the small-group intervention on the basis of the opinions of the classroom teachers were marginal. A small majority of children in the program,

Table 2
Year 2 Gains in Reading Scores in Schools A and B

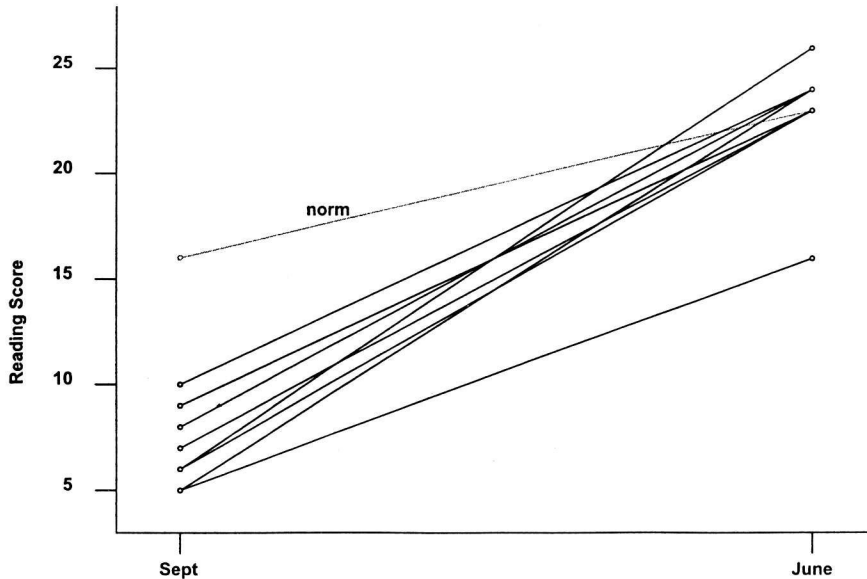|	*Pretest*	*Posttest*	*Pretest Minus Norm*	*Posttest Minus Norm*	*Gain on Norm*
A1	10	24	−6	1	7
A2	6	23	−10	0	10
A3	7	23	−9	0	9
A4	7	23	−9	0	9
A5	9	23	−7	0	7
B6	5	24	−11	1	12
B7	5	16	−11	−7	4
B8	6	26	−10	3	13
B9	8	24	−8	1	9
	7.0	22.9	−9.0	−0.1	8.9

$p<.002$.

Figure 1. Changes in reading scores in year 2.

they believed, were assisted beyond what could have been accomplished in the regular classroom setting. The teachers judged that six of the 10 children in the intervention group advanced more in the Literacy Groups than their counterparts in the classroom. Three students remained about the same, and one child continued to lag behind. Two classroom teachers noted that the intervention group students, in contrast to their counterparts in the classroom, were more aware of strategies they could use to be better readers and writers.

Student M: A Year 1 Success Story
Videotapes provided more data to the researcher, the resource teachers, and the parents about the small-group interactions between resource teachers and students. For example, despite the disappointing group norms, outstanding gains were made by Student M who improved her text reading performance from Level 6 to Level 20. Her classroom teacher reported that at the beginning of the year, M was persistent in the face of reading-writing difficulties, skilled at the use of the graphophonic cueing system, and knew her own ability (which she indicated by choosing books at her level). She was fortunate to have a classroom teacher who was aware of book levels for beginning readers and had appropriate materials in her room—a positive outcome of having Reading Recovery in her school.

After the intervention was complete, the classroom teacher reported that as well as reading at a grade appropriate level, Student M had made great strides in writing. She showed new self-confidence and took risks in producing lists of many topics and approached writing assignments without hesitation. However, the classroom teacher also reported that she had no information on the Literacy Groups instructional intervention in which M participated.

Student M's behavior in the small group shows that hers was often the dominant voice in Literacy Group. She may thus have shaped the lesson to

meet her own needs over those of her group mates. Her forceful personality seems to have influenced her reading progress positively. The following example from late in the intervention shows M's assertive posture and raises intriguing questions about the influence of small-group dynamics and social interactions on learning to read.

In this instance, the group of five is reading *Land of the Dinosaurs*, a Level 16 book:

> Group: A thing flew by. The children were (pause)
> Student M: Frightening. Frightened.
> Teacher: How did you figure out fright-
> M: Frightened.
> T: Frightened. Yes, how did you figure it out?
> M: 'cause I looked at the ending.
> T: You looked at the ending. Did anybody look at the picture to figure that word *frightened* out? Look at their, look at the children's faces.
> M: I didn't.
> T: You didn't, eh?
> ***
> All (M's voice leading): He had climbed on a dinosaur and it was (pause) /e/-eating
> Teacher: It was what?
> Group: Eating.
> T: No. Look at the letters. It's, I'll give you a hint. It starts off /e/ (long *e* sound). It was e-
> M: Enormous.
> T: Good going.

Not only does student M show metacomprehension, but also great self-confidence. She recognizes the difference between *frightening* and *frightened* and rejects the teacher's suggestion that the picture could also be used. She has enough conviction and self-confidence to voice the strategies she uses to decipher words and even to interrupt the teacher. By the end of the lesson, student M is leading the group in the oral reading. Only student M and one other group member were able to read Level 16 or above by the end of the intervention. The other three students were still clearly struggling with the text.

In year 2 students were grouped with others close to their own reading level. One resource teacher commented, "I believe the success occurred because their needs were similar." She also remarked that she wanted to be able to rely on her own background to use options in approaches to lessons and that she felt that using Early Success for guidance (especially in word-building) and materials (leveled books) offered her flexibility and leeway that the Maintenance Literacy Groups procedure had not. She would, for example, begin by working with words from the previous day. Students in pairs would be asked to prompt each other as she did in using letters and boxes to represent sounds. She would follow with familiar books, moving along to offer assistance in decoding. Students would then spell their word from the earlier practice. A preview of a new book would follow. They would then read chorally and on their own. Word-building suggested by the teacher's manual followed, and a brief oral retelling (e.g., "Tell me one thing the lion did") would finish the lesson.

The other resource teacher began with individual familiar reading while she did two running records on different students. Next came a preview of book illustrations of a book already read. Students each read aloud from their own copies of the same book. Word-building from the teacher's manual and then sentence writing followed.

Student B and Her Group: A Year 2 Success Story

In contrast with the markedly differing understanding levels encountered during year 1, year 2 students performed in more mutually supportive ways. In the incident discussed below, students wrote a sentence based on a book about insects, taking turns writing one word each. This occasioned group dialogue on what they had learned from the book (the resource teacher later commented that she had not heard any of the table conversation among the students). The students had agreed on the sentence "Insects are very interesting." While the writing progressed, however, with emphasis on correct spelling, the group of students without the teacher's input worked out a problem of interest to them all:

> (Student A begins to write *insects* on chart paper with the teacher watching. The rest of the students are at a table.)
> Student B: Insects are very interesting *animals.*
> Student C: Uh uh! They're *not* animals. Insects are *not* animals.
> Student D: Bugs.
> Student B: They are interesting bugs, then.
> Teacher: Now let's look at what she has up here now. She's got /inse/—what does she need? (to Student A) /c/ you need a /c/.
> Student B (overlapping teacher): Insects are interesting bugs. (She begins to suck her thumb and rest her head on the table).
> Teacher (to Student C): Come up and write our next word and do it fast. (She writes *are.*)
> Student B: The next word is *very!*
> Teacher: Let's read what we have so far.
> All: Insects are.
> Teacher (to Student D): Okay, do you know *very?* (He writes.)
> Student B: Very *interesting.*
> Student C: Interesting *bugs.*
> Teacher: Okay, I think we're going to work on *interesting* (turns chart paper to new page.)
> Student B: Insects and bugs are the same thing!

Student B in this lesson is reminiscent of Student M from year 1. She likes to talk and lead conversations. She is less dominant than Student M, however. In this exchange she is supported by her classmates as she constructs her understanding of insects and bugs while they work together on the writing of the sentence. Their similar level of comprehension makes this work more likely in a small group. Unlike Student M and her group who achieved only modest gains in year 1, Student B and her group all rose to grade 2 norms by the end of year 2. Once again, we see the impact of group dynamics on learning to read.

Discussion

Limitations of the Study

Although this investigation took place over two years, only small numbers of students and teachers were involved. This is to be expected given that the intervention was designed for the lowest-achieving readers in grade 2 who had not yet achieved grade 1 norms. However, more research needs to be done before it could be assumed that the approach adopted could be generalized to the entire grade 2 population of below-grade-level readers.

There was also no random assignment of students to the intervention in year 2 and no control group. Nevertheless, lack of such experimental controls may have contributed to the success of the work in year 2, as the groupings that took place involved all students in need of assistance working with other students at similar Reading Recovery levels. The resource teachers were vehemently in favor of such an approach.

Implications for Further Research

The school division decided to strengthen its Reading Recovery program in grade 1 to help ensure that no child leaves grade 1 as a nonreader. This will mean more Reading Recovery time and the addition of another half-time Reading Recovery teacher. They also wish to continue with the grade 2 program. Every year, however, grade 2 children transfer into the division who have not learned to read in grade 1. The division has also begun a home reading program based on leveled books, which resource teachers believe has helped to spread a benefit of Reading Recovery knowledge to the whole primary school population. Students in the year 2 intervention may also have felt like part of the group, as more of their regular classmates were also taking books home. This intervention also needs investigation.

Reading Recovery's fine divisions from Levels 1-20 make the introduction to reading gradual. Reading is tested using running records before the student is moved on. A small-group membership, which more closely approximates the one-on-one tutorial situation of grade 1 Reading Recovery, appears to help teachers more closely replicate the power of Reading Recovery. The groups were also more congruent with the Reading Recovery teachers' use of leveled reading materials and choice of activities in guiding reading development. The role of teachers' conviction in the success of any intervention should not be underrated. Further research of their interventions—for example, the role of scaffolding for new teaching approaches—needs to be conducted.

Resource teachers reported great frustration in trying to adopt the Maintenance Literacy Groups approach in year 1. Interestingly, they found the lesson format more prescriptive than those lessons in the manuals of Early Success. They may also have resented the decision mandated by senior administration to adopt and research MLG. Because of the random assignment of experimental protocols, the students in each group were at a far greater diversity of reading ability than any resource room teacher would ever try to handle. This made the choice of a single book problematic as it would be too difficult for some and too easy for others. Teachers reported having to move on despite the fact that some students would be left behind. Books were also not available in duplicates for each student, and so teachers had to spend time making enlarged copies that the group could see from a distance.

Teachers also felt that they were trying to adapt the Reading Recovery program to fit a small-group approach in year 1 and were frustrated in their attempts to address each child's needs as they would have been able to do in a one-on-one tutorial. One resource teacher expressed the opinion that it would be far better to extend Reading Recovery one-on-one tutorials into grade 2. The lack of a flexible framework (MLG was seen as too rigid) to assist them in their efforts to guide the reading development of all members of a group, and still allow them to use their valuable Reading Recovery training, led them to look for published programs, especially those that would provide ideas and materials they could adapt.

Gathering of videotaped data was also reported as a problem at the end of year 1. Although it was valuable for the researcher and for parents, teachers judged the collection to be overly intrusive. Cutting back on frequency of collection in year 2 seemed to address this concern. The general frustration of resource teachers dealing with a mandated change in approach was undoubtedly exacerbated by taping sessions. Random assignment of students in year 1 to attempt an impartial test of the small-groups approach was also problematic as it countered the usual resource room approach.

This experimental procedure and the insistence on teachers following the ideas of Maintenance Literacy Groups (Dorn & Allen, 1996) was abandoned in year 2. Resource teachers were encouraged to choose a small-group intervention of their choice, which would be investigated for its effects. Early Success provided the techniques and materials most attractive to resource teachers familiar with Reading Recovery approaches but who are challenged for time. Other collections of Reading Recovery techniques that are not programs such as Guided Reading (Fountas & Pinnell, 1996) could also be implemented and investigated in this school division.

In both years 1 and 2 there was a disturbing lack of sharing of information between classroom and resource room—another symptom perhaps of overworked resource room faculty, but a worrisome echo of repeated criticisms that Reading Recovery fails to influence general literacy programs in schools. The face-to-face communication both with parents and with classroom teachers, based on viewing and discussing videotapes of actual events, suggests one way to improve reflection and strengthen further intervention attempts. Adding a sociocultural dimension to early reading interventions also deserves further research. The home reading program, where all children and not just resource room students take books home, may help everyone feel like a member of the reading club.

Conclusion

Reading Recovery is not intended for use in groups; however, the Reading Recovery-trained teachers involved in the Literacy Groups project report that Reading Recovery has greatly influenced their approach to teaching reading and writing to other struggling learners. They are able to make decisions on appropriate individual activities even during small-group, guided reading sessions.

Much research reported in the professional literature (Clay, 1985; Juel, 1988) shows that effective intervention in literacy after grade 1 is difficult. However, in year 2 of the Literacy Groups project, students achieved significant gains in

reading levels. Despite the rather small numbers of children in this study, a reasonable conclusion is that we have, in the case of Literacy Groups project, evidence that grade 2 students can be assisted to attain average grade-cohort reading levels by the use of a small-group pull-out program if certain criteria are met. These are, first, that students be assigned to groups according to a narrow range of reading levels. Second, that materials be found to support fully even highly trained and experienced teachers who use Reading Recovery techniques to effect accelerated learning. In this case, Early Success, with the ideas contained in its lesson plans and multiple copies of leveled student readers, provided such support. Reading Recovery teachers need assistance in applying their knowledge to a small-group setting (Dorn & Allen, 1996). Third and most important, teachers must be supported in their beliefs about student learning. For Reading Recovery-trained educators Early Success provided familiar theoretical foundation and instructional procedures. They were also able to make decisions based on their considerable knowledge of reading development to help individual children in the small-group format.

Prevention is better than intervention, and early intervention is better than later intervention. Although school divisions should continue to offer assistance to older children, this assistance must be further examined to ensure that it is as effective as possible. The best hope for the future, therefore, lies in focusing our efforts on the youngest students. Their future in school and in life depends on it.

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