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## California early literacy learning as an effective alternative to reading recovery for school-wide literacy instruction

Jeanette Lynn Campbell

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CALIFORNIA EARLY LITERACY LEARNING  
AS AN EFFECTIVE ALTERNATIVE TO READING RECOVERY  
FOR SCHOOL-WIDE LITERACY INSTRUCTION

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A Project  
Presented to the  
Faculty of  
California State University,  
San Bernardino

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in  
Education:  
Reading/Language Arts Option

---

by  
Jeanette Lynn Campbell  
December 1998

CALIFORNIA EARLY LITERACY LEARNING  
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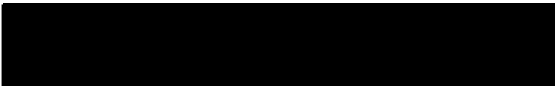
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by  
Jeanette Lynn Campbell  
December 1998

Approved by:

  
Joseph Gray, First Reader

11/17/98  
Date

  
Patty Lynch, Second Reader,  
Coordinator of Children's Programs,  
Fontana Unified School District

## **ABSTRACT**

The increased interest in cost effective literacy intervention has given rise to evaluation of the literacy instructional programs currently available. Reading Recovery, while widely used by many districts, has come under fire for both the tremendous cost involved as well as the questionable reporting of success rates. Although Reading Recovery trains its teachers in strategies and methods that have proven successful, the program does not extend to the classroom teachers. Upon returning to their regular classrooms, the students receive no support in practicing the skills learned from their Reading Recovery instructor. Another major concern arises when evaluating Reading Recovery. A full-time teacher is allowed only 16 students during the entire school-year. It is a very expensive program that serves a very small number of students.

A highly effective and more affordable alternative to Reading Recovery is the California Early Literacy Learning program, or CELL as it is commonly known. CELL is a strategy-based program. It focuses on training all primary teachers at a school in effective literacy instructional methods similar to those used in Reading Recovery. Staff development is provided by Literacy Coordinators, selected from the staff itself, who go through intensive training in the CELL strategies. These Literacy Coordinators, in addition to providing the staff development for the teachers



at their school site, are also coaches and mentors. They teach in their own class for one-half of the school day, and observe and coach during the other half. CELL requires few materials other than what is necessary to properly teach literacy, regardless of the program the school takes part in. CELL has proven successful, cost-effective, and is able to bring literacy intervention skills to many teachers across many different grade levels.

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## CHAPTER ONE

### INTRODUCTION

The Reading Recovery program is based on theories by Marie Clay and first began in New Zealand in the late 1970's. It is an early intervention program designed to help the lowest of a school's first grade readers learn to read at grade level. "Reading Recovery gives children a chance to succeed before they enter a cycle of failure" (Reading Recovery in California, 1996, p. 7). Reading Recovery instruction is formulated to teach basic reading and writing skills to a school's lowest first graders in hopes to bring them up to grade level and avoid retention or additional special services in later grades. At the program's core is the belief that "early, effective intervention is especially urgent for those children who experience difficulty acquiring early literacy skills like phonological awareness and letter-sound correspondence" (Good, Simmons, & Smith, 1998, p. 52). Students get 30 minutes of individualized instruction with a teacher specially trained in Reading Recovery methods. In these methods, reading is viewed as a "psycholinguistic process in which the reader constructs meaning from print. The fundamental principles underlying the tutoring system are that reading is a strategic process, reading and writing are interconnected, and children must engage in reading" (Center, Wheldall, Freeman, Outhred, & McNaught, 1995, p. 240) on a

regular basis in order to make connections when dealing with written print. Decisions regarding the exit of students from the program are based on either the attainment of a reading level comparable to the class to which they will be returned or completion of a maximum number of weeks in the program (usually 16-20). A full-time Reading Recovery teacher can tutor 16 students during one school year, and a part-time teacher may have up to eight students.

On the reading theories continuum, I fall somewhere between skills-based and whole language and I agree with the Reading Recovery methods in that students need to read on a continuous basis to learn to read better. Only through practice and repetition can students improve their reading ability. As Frank Smith (1997) states, "children who read a lot tend to be very good readers. It's not that they need to be good readers in order to be able to read a lot, but the act of reading brings about the mastery required" (p. 116). I believe students should be taught the skills necessary to become fluent because the more options students have when encountering new and different words, the higher their confidence and success rate. "Reading is an enabling process that spans academic disciplines and translates into meaningful personal, social, and economic outcomes for individuals" (Good, Simmons, & Smith, 1998, p. 45).

Reading Recovery has at its core beliefs that include the instruction of both reading and writing. In the daily lessons taught to the students, the children receive help to

"develop their own effective strategies for literacy acquisition" (Reading Recovery in California, 1996, p. 5). This program is "designed to move children in a short time from the bottom of their class to the average, where they can profit from regular classroom instruction. The goal of Reading Recovery is accelerated learning" (p. 5). Upon exiting the program at the end of 12-20 weeks of instruction, the "children have developed a self-extending system that uses a variety of strategies to read increasingly difficult text and to independently write their own messages" (p. 5).

Each Reading Recovery lesson focuses on both reading and writing. There are seven components in each 30 minute lesson: "rereading familiar books, taking a running record, letter identification and word making and breaking, writing a story, rearranging a cutup story, introducing a new book, and attempting a new book" (p. 19). The 30 minute lessons, and the components found within the lessons, are individualized for each student. During the reading and writing activities, "the teacher provides just enough support to help the child develop the effective strategies that independent readers use. This teacher assistance supports the process through which children learn to predict, confirm, and understand what they read" (p. 19). These lessons, and particularly the components that comprise them, are the heart and soul of the Reading Recovery program. When the lessons are used in the situation of one-to-one tutoring, they become even more powerful. "By working from a knowledge base unique to each

student, Reading Recovery teachers move well beyond the traditional skill and drill approach associated with remedial reading programs. The flow of the lesson changes in response to the child" (p. 21).

One aspect of Reading Recovery that is particularly note-worthy is the ongoing instruction and feedback the teachers receive while they are instructing the students. Unlike teachers in regular classrooms who receive little more than an occasional inservice during the school year:

teachers-in-training teach children while being observed by their colleagues and get feedback on their practice.

Reading Recovery teachers-in-training become literacy experts with highly developed observational skills and a repertoire of intervention strategies that can be tailored to meet the individual needs of students.

(p.8)

This training and feedback, given constantly during the school year, can be a great help to the teachers. All teachers, regardless whether they are involved in the Reading Recovery program or not, need to be able to discuss problems and areas of concern when it is relevant to them, not just at two or three inservice days during the year when the problem is no longer urgent and the need for feedback no longer seems important.

Although I believe the methods used in Reading Recovery are fundamentally sound and will increase the success rate of beginning readers, I question the expense, the success rates

and how long the increase in reading level lasts after the student is exited from the program. According to Center et al. (1995):

Single-case analysis suggested that, 12 months after discontinuation, about 35% of Reading Recovery students had benefited directly from the program, and about 35% had not been "recovered." The remaining 30% would probably have improved without such an intensive intervention, since a similar percentage of control and comparison students had reached average reading levels by this age. (p. 241)

Even though Reading Recovery (RR) does help some first graders increase their reading ability, it is a very expensive program. In addition to the teacher's salary, health and welfare benefits must be paid also. According to the annual salary publication by the Fontana Teacher's Association (1998), the actual salary and benefits paid per Reading Recovery teacher at my school site is \$75,000. With one part-time and two full-time teachers, this equates to \$187,500 to help a maximum of 40 first graders. Using this figure, the cost averages out to \$4687.50 per student, and some of these students will not reach the desired reading level before being exited from the program. "The point has been made that only 60 to 75% of first grade children who are targeted for intervention through RR do in fact achieve average levels of functioning and can be successfully discontinued from the program" (Kepron, 1998, p.90). I

believe this is a tremendous amount of money to spend on less than 40 success stories when there are many more students who could benefit from extra help in reading. This money could be spent in other ways to benefit all below grade-level readers or even targeted solely on a larger number of first graders who need additional help.

I have seen Reading Recovery teachers in action and the program is very powerful. The one-to-one tutoring gives much more attention to the student than traditional classroom instruction. The Reading Recovery teacher also moves at a rapid pace, keeping the student focused on literacy activities with little chance to become distracted. The program is also adapted for each student's individual needs. This allows the teacher to focus on a particular child's needs, rather than what is best for the most group members as is usually done in the classroom setting.

While acknowledging the power of Reading Recovery, the expense of the program must be considered. My school site is on the multi-track calendar, and the Reading Recovery program reached only 2 tracks. The first graders on the other two tracks were not afforded the chance for this extra help. It would be a financial impossibility to service all tracks, so some students suffer merely because their parents enrolled them in tracks three or four rather than tracks one or two.

While Reading Recovery does not promise success for each student, a survey was taken of the program that "tracked" nearly 1,000 children. Of those children, approximately 75



percent successfully achieved the target average level of literacy for their class and completed the program" (MacGilchrist, 1994, p. 6). At my school site, of the maximum number of 40 students we can service, approximately ten will not reach the exit level of the program if this formula holds true. According to these percentages, about \$46,875 is spent each school year on students who will use the Reading Recovery services and not exit at grade-level reading ability.

There are several alternatives to the expensive Reading Recovery program that use some similar strategies, but with more concentration on the correlation between outside intervention and classroom teaching and at a reduced cost. Programs like the California Early Literacy Learning (CELL) focus on early reading intervention.

Recently, the administrators at my school site gave the option of continuing Reading Recovery to the staff. The staff members, teachers from kindergarten to fifth grades as well as resource and special education teachers, voted not to keep the Reading Recovery program we had. It was decided to spend the money on some other form of literacy intervention. I believe my school could use that money to set up some other type of reading program that would service all tracks, especially our bilingual track. Currently, the bilingual track has no opportunity to send students to Reading Recovery. This creates an unfair disadvantage to these students. If we had some sort of reading clinic that was

staffed year-round, all students who needed help could be serviced. Ideally, the clinic would be able to help any qualifying first graders, and possibly have room to help students from other grades at-risk of being non-readers. One key element to this option would be instructing all teachers at our school site in the early literacy project known as California Early Literacy Learning (CELL), which is "designed to provide access to good first teaching for all children" (Reading Recovery in California, 1996, p. 10).

### **GOALS AND OBJECTIVES**

There were several goals and objectives in mind when this paper was being researched and written. The main goal was to assist teachers and administrators in deciding how to change or enhance the methods of teaching literacy either for an individual school site or for an entire district. In making a decision of this magnitude, the school site or district needs to consider several factors. Overall expense of the program, success rate, grade-level applicability, the number of students that can be serviced, and ease of implementation all must be taken into account.

In presenting both the positive and negative aspects of Reading Recovery, readers can become aware of the pluses and minuses and weigh whether to keep, adopt, or change the program.

Another goal of this paper was to influence the administrators at a school site to adopt California Early Literacy Learning (CELL). This literacy intervention program meshes proven instructional methods similar to those used in Reading Recovery with the idea that for literacy intervention and instruction to have continued success for the students, the entire school site must be retrained in these methods.

A goal aimed at the teachers is to address the students' need for continuous support at all grade levels in order to avoid losing the gains in literacy learned in the early primary grades. CELL schools currently provide training in literacy for their teachers by two or three inservice days a year. They first retrain the teachers, then use inservice days to constantly support these methods. Each school site also has Literacy Coordinators on hand to support the teachers as well as the students.

A secondary goal was to bring to light the rather upside-down approach districts and school site administrators have been taking in regards to the latest standardized test scores across the state of California. Rather than letting the current focus on raising standardized test scores drive the literacy instruction of a school, placing the focus on providing a sound literacy instructional program will increase the student's score across many grade levels.

There are several objectives specific to both administrators and teachers regarding the CELL program. Administrators need to be aware of the procedures in applying

to become a CELL school. The administrators also need to be informed about the books and materials required to run the program as well as the number of staff meetings and inservice days necessary. An objective particular to teachers includes the amount of training required in order to successfully implement the CELL program.

### **LIMITATIONS**

There are several limitations of this paper. Each school site must assess their literacy programs according to its individual needs. Finances, as always, are the first and foremost concern. Whether the school qualifies for Title I financial support, or can find other sources of money such as grants, plays a major factor in funding literacy intervention or instruction programs.

Another consideration in selecting a literacy program is school population. A smaller school could benefit from having only Reading Recovery, but school sites with over 1,000 students must find programs that service more than 16 students per teacher each year in order to be cost-effective.

The cultural diversity of schools today must be taken into consideration. Many of the lowest students have primary languages that are not English. In adopting a literacy intervention program, the needs of these students are as important as those students who speak English only. In order

to be as successful as possible, the literacy program should have methods that will transfer easily to students who do not speak English.

## CHAPTER TWO

The literature pertaining to Reading Recovery (RR) points out many areas of concern. While there is no disagreement that there can be immediate gains in reading levels attributed to RR, questions have arisen that have led many to examine the cost-effectiveness of the program. Some of the main areas being evaluated include: the true costs associated with the program, the differences in reported success rates, the lack of coordination between RR and classroom teachers, the needs of a few students versus the needs of the many, the actual gains made through the RR program, and cost-effective alternatives.

### TRUE COSTS ASSOCIATED WITH THE PROGRAM

The actual costs of the program are currently being debated. According to Hiebert (1994):

The fundamental argument is that the current heavy investment in remedial programs that attempt to correct inappropriate strategies will not be necessary if children are put on the right path initially. Although one-to-one instruction is the most cost-intensive form of intervention, RR advocates have argued for adoption

of the program on the basis of its cost-effectiveness.

In theory, the costs of RR will be recouped by a decline in remedial services over subsequent years. (p. 15)

In an analysis Hiebert conducted in 1992, it was "established the cost per student of the RR tutoring was \$2063. This calculation was obtained by taking the average teacher salary and dividing it by 16, which is the number of students served by one full-time RR teacher" (p. 22). While this amount of \$2063 is generally accepted as the basis for comparison, this calculation considers only the teacher's salary. Other necessary amounts are not addressed in this figure. No amounts are factored in for the teacher's "health and welfare benefits, additional RR training days and substitute teachers, instructional materials, Teacher Leaders in the district, conference fees, or travel expenditures" (Shanahan & Barr, 1995, p. 986). When taking these other costs into account, "the cost per pupil increases at least another 80% above the amount frequently cited from the 1992 survey" (p. 986). When evaluating the actual costs that must be incurred when providing the RR program, the costs climb dramatically. Using the previous "amount of \$2063 as the teacher's base salary, assuming the maximum allowance of 16 students, and adding the other expenditures, the actual cost per pupil is \$4128" (p. 987). These figures are all 1992 dollars. Although the maximum number of students in 1998 is still 16 students for each full-time teacher, the costs associated with that teacher's salary and related expenses have risen

dramatically. The 1992 salary (\$33,000) was based on a teacher with a minimum of five years' elementary teaching experience, a master's degree, and a RR teaching credential. Many first and second year teachers make that amount today, with no additional experience or education above the basic credential.

### **DIFFERENCES IN REPORTED SUCCESS RATES**

When looking at the above amounts, it is important to consider the actual number of students who take part in the RR program and the actual number of successful readers emerging from it. Many of the students who enter the RR program either do not complete it or are not successfully discontinued. A number of evaluations of the success of the RR program have been undertaken. A common complaint in these critiques is that the success figures often "contain only those students who had been successfully discontinued from the program. They exclude about 30% of children who were either removed or not successfully discontinued from the program, thereby inflating the reported effectiveness of the intervention" (Center et al., 1995, p. 243). Another study done in 1992 states that "taking into account the number of RR students either not completing the program or being unsuccessfully exited, only 62% of the total students served would be found to complete the program successfully"



(Shanahan & Barr, 1995, p. 965).

Students served but who do not complete the program represent about 26% of the total children involved in the program. These students may begin the program too late in the school year to complete the required number of lessons, or may leave the school in which they are enrolled in the program. Most evaluations of success rates do not include these students. In order to be tested, the students have to complete a specified number of RR lessons, usually 60. Because these students do not finish the required lessons and are not tested, they are not counted as part of the cohort being served by RR. For many program evaluators, this presents a problem. These students are receiving the service. The school is not reimbursed the money spent on these students because they did not finish the required number of lessons to be tested. "It would be better to take into account all students receiving this instruction. That approach would provide a more accurate estimate of the cost per student being serviced" (Pinnell, DeFord, Lyons & Bryk, 1995, p. 273). Using the same figures as above, the cost of \$4128 per student for 16 students serviced would become \$6605 for each successful student ( $\$4128 \times 16 \text{ students} / 10 \text{ successful students}$ ). This figure is again in 1992 dollars. The actual amount in 1998 would be much greater than the \$6605.

## LACK OF COORDINATION BETWEEN RR AND CLASSROOM TEACHERS

When discussing RR, "a basic notion of this program is that at-risk children can learn at an accelerated rate and catch up with their peers and thus profit from regular classroom instruction" (Pinnell, Lyons, DeFord, Bryk & Seltzer, 1994, p. 9). One problem with this premise is there is no guarantee just because a student can read the small, repetitive books used in RR lessons, they will be able to read text in their classroom. Kepron (1998) notes that:

Mastery of skills in isolation is an important first step, but the child must also be helped to develop the ability to generalize, or to transfer those skills to dissimilar but related tasks in those settings in which he is required to function during most of the school day. (p. 90)

There is no doubt that the RR program successfully teaches some reading skills to most of the students receiving the intervention, but there is no assurance that the children are getting support with similar strategies from their classroom teacher. "There is no standard mechanism for maintaining congruence between the RR and regular classroom programs" (Spiegel, 1995, p. 93). In RR, the students use short books and the teachers work one-to-one with the students using lessons and promptings that move at a rapid pace. The students take the books home and reread the stories, often with help from their parents. In their classroom, they must

be able to read many different types of texts and often are asked to read them cold and with little help. While RR helps students become more proficient readers in the RR setting, RR "appears to be a (sic) exclusively supplementary program that assumes no responsibility for the students' regular classroom reading instruction. RR does not address the complex issue of how to improve poor reading instruction" (Pikulski, 1994, p. 34).

Students are chosen for RR based on their reading level after one year's experience with printed language. If they can not learn in the previous classroom environment, there is a good chance they will continue to have difficulty making progress after they are exited from RR and returned to the classroom on a full-time basis. When planning an early intervention program, Pikulski (1994) noted that:

the students' total program of reading instruction should be considered. Tutoring and extra-time pull-out programs can be effective, but for maximum impact, early intervention programs should try to ensure that students are receiving excellent and coordinated instruction both in their classrooms and in the special intervention program. (p. 38)

The many different programs available, while helpful, can often be detrimental to overall classroom reading instruction. "Not only do popular remedial programs fail to encourage change in classroom instruction, they may, by their very presence, discourage change" (Marling & Murphy, 1997, p.

463). The necessity of programs such as RR and other reading interventions shows that some children are not learning to read in the classroom situation. Having pull-out programs may "relieve the teacher of the need to question unsuccessful teaching practices currently in use in their classrooms" (p. 463). RR is widely regarded as a "systems-based intervention which demands not only changes in child behavior, but also behavioral and organizational changes on the part of teachers and administrators" (Center et al., 1995, pp. 257-258). In order to help justify the cost of the program, the schools implementing this system need to make changes in the classroom as well as providing the pull-out service for the students. Without these changes, it becomes questionable whether the RR student can remain successful after exiting the program and returning to the classroom.

#### **NEEDS OF FEW STUDENTS VERSUS THE NEEDS OF MANY**

Because of the expense involved and the fact that the maximum number of students that may be serviced by one full-time RR teacher is 16, concerns are raised as to whether RR is the best way to allocate a school's resources. "School systems, especially those with high concentrations of poverty, need to consider the effects of reform efforts on all students in their schools" (Hiebert, 1996, p.27). While RR does lead to some first-graders becoming grade-level

readers, far more first-graders are left struggling with little or no help outside the classroom. As Rasinski (1995) points out:

what about those students who struggle in reading but receive no help in achieving independence because the lion's share of resources was given to RR, and RR can help only a limited number of first-grade students? Is it appropriate to bring some students up to independence level while allowing others to flounder for a lack of resources? (p. 277)

When school systems begin to consider providing remedial services to their students, "the search for effective instruction must compare instructional treatments on a cost basis as well as the level of effectiveness of the program" (p. 277). While there is little debate the RR program's one-to-one tutoring can be successful for the very limited number of students it can service, "we need to ask if the additional gains made by the one RR student more than outweigh the less robust gains made by the several students" (p. 269) that could be helped by providing small-group instruction rather than the cost prohibitive RR program. This issue is also addressed in one of the goals of RR which states that the object of RR is to "bring hardest-to-teach children to a level of literacy achievement where they can be full participants in classroom literacy programs. It is not designed to serve or directly affect the entire age cohort" (Pinnell, Lyons & Jones, 1996, p. 23).

Another concern of the RR program is whether all of the students receiving the intervention actually need the service. The RR program was designed in New Zealand for students in the school systems there. In that country: children begin school on their fifth birthday. If, after one year of reading instruction, they are having difficulty, they enter RR. Children in the U.S. have spent a year in a half-day kindergarten program, the curriculum of which emphasized the learning of letters and sounds but not reading and writing. (Pinnell, Fried & Estice, 1990, p. 292)

In New Zealand where the program originated, the students have a full year's exposure to reading instruction before they are identified as being in the lowest 15-20% of their first grade class in reading ability and therefore eligible for RR tutoring. In the U.S., children are selected for RR who have had "little or no previous academic tuition" (Shanahan & Barr, 1995, p. 963). Because New Zealand children have one full year of formal reading instruction before assessment for reading disabilities takes place, the educators there are able to get a much clearer picture of each student's abilities and needs. In this country, kindergarten focuses heavily on social interaction and the development of both fine and gross motor skills. Reading instruction is often limited to learning the alphabet and teaching the students how to write their names. "U.S. RR teachers, on average, work with students who possess

considerably less knowledge about the reading and writing of text than their New Zealand counterparts" (p. 964), yet the selection of students for the RR services remains based on the New Zealand standards. Many students who are chosen to receive RR instruction in our schools may have merely not had enough experience with reading. At the beginning of first grade, some students may simply not be mature enough to pick up on the classroom reading instruction. For many children, first grade is the first time they have had interaction with text for the purpose of reading it. Many students come to first grade not knowing their alphabet, yet they are tested for their reading ability and given expensive intervention. These reasons should be accounted for when deciding who will receive the expensive services of a RR teacher. As Shanahan and Barr state:

about half the children who were low achievers at the beginning of first grade (the lowest 20%) were not among the low achievers at the end of the year--even though no special interventions were provided. Similarly, in an evaluation study of RR, it was found that about 30% of the low achieving students not included in the program made substantial gains anyway. (p. 964)

Many students below grade-level at the beginning of the year will make the needed progress despite not being provided with the expensive, one-on-one services that RR provides. Some students who do not need the tutoring to succeed are serviced, while others who truly need some kind of



intervention go without help because the school's funds are spent tutoring only 16 students per teacher.

### **ACTUAL GAINS MADE THROUGH THE RR PROGRAM**

Another issue that shows the need to balance the cost of the program versus the success of the students serviced is the length of time the RR students maintain their grade-levels in reading. A common claim of RR proponents is that "follow-up studies indicate children continue to make progress comparable to that of average groups of students" (Pinnell, Fried, & Estice, 1990, p.291). Another claim is that "in theory, the costs of RR will be recouped by a decline in remedial services over subsequent years" (Hiebert, 1994, p. 15). These savings are believed "to include savings due to the reduction of special education referrals, retention, and remedial services because the children had been successfully served by RR in first grade" (Pinnell, Lyons & Jones, 1996, p. 24). These arguments are frequently used to justify the high costs of the RR program. One problem with this is that "many children who score poorly on early tests make accelerated progress even without intervention and about 30% of the low-progress students allocated to RR had failed to benefit significantly from the program" (Center et al., 1995, pp. 242-243). If the costs are to be considered worthwhile for the program, the



increased reading levels should be proven to last past the time spent in intervention with the RR teacher. Center et al. found:

single-case analysis suggested that, 12 months after discontinuation, about 35% of RR students had benefited directly from the program, and about 35% had not been 'recovered.' The remaining 30% would probably have improved without such an intensive intervention, since a similar percentage of control and comparison students had reached average reading levels by this stage.

(p.241)

When comparing a group of RR students to a control group, it was found that on "standardized tests of achievement measuring text comprehension, there did not seem to be major differences among the groups some months after program discontinuation" (p. 245). According to Shanahan and Barr (1995):

there are several ways to assess the stability of program effects. One way is to determine whether the group participating in the intervention program maintains its advantage over a control group in the years following the intervention. Another is to compare the rate of progress of children following intervention with that prior to and during intervention. The progress of children is usually accelerated during the period when they receive support. Findings from past studies tend to show diminished levels of learning

of experimental groups over comparison groups once support has ended. (p. 978)

Shanahan and Barr also found that "during the period from discontinuation to assessment in the following school term, RR children made negligible progress" (p. 979).

A longitudinal study was done by the Columbus, Ohio, RR site. This study is the "primary data source for RR's claim about 'potential for savings' " (Hiebert, 1996, p. 27). This study was done to:

provide evidence on maintenance of tutees' literacy levels through grade 4 in the United States. It tracked the performances of the cohort of students who received the RR tutoring at the OSU site in 1985-86 from grade 1 to grade 4. Their performances were compared to those of students who began first grade at comparable achievement levels but who received regular Chapter 1 as first graders. (Hiebert, 1994, p. 16)

This study shows that RR students maintain their achievement level through the first grade, but in second and third grades, their achievement levels begin to drop below those of students who had never received RR services. Hiebert points out that although the OSU longitudinal study supposedly includes comparisons up to the fourth grade, and "at least seven cohorts of tutees have reached grade four or higher, there are no data reported on these groups. There are no additional reports on the maintenance issue either from the Columbus site or others" (1996, p. 27). This leads to

questions regarding the validity of the study. Shanahan and Barr believe because of the "failure of children to maintain their initial achievement advantage over their peers through third and fourth grades, the promise of the intervention may not be realized" (1995, p. 980). Literature often cites this longitudinal study as validation that the sum of the gains of RR last at least until the fourth grade. However the report, for some reason, does not provide the fourth grade data.

Kepron (1998), however, notes that:

Practitioners still have to be concerned that, based on available evidence, treatment effects of successfully discontinued RR students tend to diminish and even to disappear over time and that failure rates rise to match those of control children by grade 4. The rates of retention also closely resemble those of students who served as matched controls and never received RR intervention. (p. 90)

### **COST-EFFECTIVE ALTERNATIVES**

When the number of students who receive RR intervention and do not exit at grade level is considered, often 25% to 40% of the total children serviced, the justification of continuing the funding for the RR program comes into question. For the children who do not qualify for RR intervention, or those who go through the program and

continue to struggle with reading, there are many consequences extending beyond the end of first grade. At this point, Slavin (1996) has found:

Most of the children will already have realized that they have failed at their most important task--learning to read. Accordingly, they likely will have lost much of their earlier motivation, enthusiasm, and positive expectation. Schools will be paying for years--in special education and in remedial instruction costs--for failing to ensure that students succeed in the early grades. (p. 4)

An alternative to the RR program is California Early Literacy Learning (CELL). "CELL is a staff development program designed to support elementary teachers and strengthen their teaching of reading and writing. Research-based teaching methodologies are organized into a framework for classroom instruction" (California Early Literacy Learning, p. 1). This program is designed to be used in the classroom, and includes active participation from children in all ability groups, not merely those students who are below grade level. The framework for instruction has been designed "to help each child and the whole class move together toward the goal of independence" (p. 1). CELL is based on the premise that oral language is the foundation for early literacy learning. Knowledge of language increases with oral communication. With CELL, this takes place when:

literature is read aloud and the themes are studied

across the curriculum. Skills development is also emphasized across each of the framework elements. Emergent readers must have the opportunity to develop phonemic awareness and to practice phonological strategies and decoding skills. These skills are best acquired in the context of meaningful activities and should be given extensive practice by reading quality literature and engaging in authentic writing activities. (p. 2)

CELL uses teacher inservices to train classroom teachers to involve all students in all aspects of reading and writing instruction during the regular class day. Unlike Reading Recovery, "CELL coordinates classroom instruction, early intervention, and special education" (p. 4). The teacher is trained to provide the reading instruction in the classroom, using the same content areas all other students are covering. CELL also "aligns teaching methods used within and across grade levels. Achievement gains are enhanced when transition from grade to grade is accompanied by teachers who use the same teaching methods" (p. 5). Ideally, this will reduce the drop in grade-level reading ability that accompanies more expensive programs like Reading Recovery. A study taken shows "scores in the 22-31 national percentile range before CELL instruction. Year end scores following the first year of CELL implementation showed a dramatic increase in all three areas tested to the 44-50 percentile range" (p. 12). This increase was for all students, not merely the lowest

first graders, and at a much smaller cost than that of the RR program. The structure of CELL has built-in provisions for long-term support through many grade levels for all students, regardless of their ability when entering school. This on-going support, taken into account with the much lower cost of the program compared to RR, gives another option for schools who want to provide a cost-effective alternative to RR and yet still provide reading instruction and intervention that is successful in teaching their students to read.

#### **SUMMARY**

In summary, while RR does lead to gains for many first-graders who take part in the program, the high cost per student serviced can not be overlooked. "No society has unlimited resources. Our search for effective instruction must compare cost as well as effectiveness. We need to consider other ways to achieve similar instructional effects at lower costs" (Rasinski, 1995, p. 277). Given the fact that the "net gain which is attributed to RR appears to be quite modest by a year or so after discontinuation" (Center et al., 1995, p. 243), and "RR is less effective and more costly than has been claimed, and does not lead to systematic changes in classroom instruction, making it difficult to maintain learning gains" (Shanahan & Barr, 1995, p. 959) other remedial reading programs may be more appropriate when

considering cost and the desire to help more students over a longer period of time. Intervention such as RR can help accelerate the reading progress of children, but if the regular classroom instruction does not respond to the needs of these and other students, the intervention may fail in the long run. "The problem lies, then, not with the early intervention, but with subsequent instruction that fails to capitalize on the gains made during intervention" (p. 980). In order to teach the students currently in the general classrooms to read, some changes need to take place with both the teachers and the site administrators. "The RR teacher training model is not powerful enough or appropriate to influence classroom practice" (p. 980). Rather than continue to fund the expensive RR programs in place today, the money could be allocated to retrain classroom teachers in their modes of reading instruction and also find a way of servicing more students per teacher in small group settings rather than one-to-one tutoring. This again brings to mind the CELL program. CELL combines the powerful and effective methods of Reading Recovery with the necessity of retraining all teachers at a school site in methods that work. With CELL, there is a:

major focus on providing long-term professional development to effect systemic change in how we provide children's first school experiences. California Early Literacy Learning is designed to use the powerful strategies of Reading Recovery and other research-based

teaching methodologies with all children in the primary grades. (Reading Recovery in California, 1996, p. 20)



## **APPENDIX**

### **CHOOSING A LITERACY INTERVENTION PROGRAM**

With the current emphasis in California on test scores and making extra effort to get every child to grade level in literacy, many districts and individual school sites are having to evaluate their literacy programs. Every attempt must be made to justify the expense of a program with the overall, school-wide results. When my own school faced this challenge, the staff decided to eliminate Reading Recovery. With just over 1,000 students and only 40 first graders (and no students second grade or above) being serviced, it became too difficult to justify the almost \$200,000 we were spending each year. No one argued that Reading Recovery was not successful, but we just could not spend so much money on so few students any longer. After making the decision to eliminate the only literacy program we had in place, I decided to search for an alternative that produced the "most bang for our buck" so to speak. It was during this quest that I discovered the program called California Early Literacy Learning.

### **WHAT IS CALIFORNIA EARLY LITERACY LEARNING?**

California Early Literacy Learning, or CELL as the program is more commonly known, is basically a staff

development program designed to help elementary teachers in grades pre-K through third grades strengthen their skills in teaching literacy. CELL uses instructional methods and strategies that have been proven through research to successfully teach reading and writing. In fact, most of the methods are very similar to those used by Reading Recovery teachers. The program is designed to help teachers meet the needs of each individual child, regardless of what ability level the students begin with or what primary languages the students have. CELL activities are designed in a way that encourages active participation from every child in the class, whether they are at grade level or not.

#### **THE CELL FRAMEWORK**

The CELL framework is designed to help teachers in the instruction of skills necessary for early readers and writers. The framework consists of the following seven main areas or skills, which CELL recommends teaching every day:

1. Phonological skills
2. Reading aloud
3. Shared reading
4. Guided reading
5. Independent reading
6. Interactive writing
7. Independent writing

Most teachers use some or all of these strategies

already, but CELL helps reinforce the methods, and helps teachers learn to make time for all seven skills to be taught every day. Rather than teach skills independently as so many teachers do, the basic skills are embedded in curricular instruction. With CELL, skills such as phonemic awareness, phonological strategies and decoding skills are learned in the context of activities meaningful to the students, making the skills more likely to become embedded in a student's skill base.

#### **WHAT YOU SEE IN A CELL CLASSROOM**

During my search for a literacy program, I was fortunate enough to visit a CELL school, West Randall in the Fontana Unified School District. During this visit, I met with the principal, Dr. Paul Jenkins, and two Literacy Coordinators, Becky Peterson-Baker and Anne-Marie Cabrales. During a tour of the primary classrooms, several things stood out. There was writing everywhere. This writing was done entirely by the students and covered every wall, door, and any other space that could hold papers for display. Any student I asked could read me anything I pointed to, because they or a classmate had written it through interactive writing. The writing touched on math and social studies as well as the traditional fictional stories common to the primary grades. These kids could not only write, but they could read it back,

whether it was their paper or someone else's, and get meaning from it.

Another thing I noticed about the CELL classrooms was the books. Non-fiction and fiction alike, the books were everywhere. Each book was leveled with different color stickers on the front. This enabled the students as well as the teachers to choose books quickly at the appropriate reading level for the student desiring text to read.

The most important detail in the CELL classrooms, the aspect that cannot be overlooked, was that every child was participating. Every child was reading. Every child was writing. It did not matter if the student was G.A.T.E. or would qualify for Reading Recovery or Resource intervention-- they were participating an equal amount of time, although at their own level.

### **BECOMING A CELL SCHOOL**

When considering instituting CELL at a school site, several factors need to be taken into account. First, the administrators contact Amie MacPherson of California Early Literacy Learning in Redlands, California, and request an application. This application details the fees involved and the dates of training for the current school year. When completing this application, the administrators pledge in writing to a three to five year commitment to the CELL program and answer four questions. The administrators are

asked to describe their school and the reasons for wanting to participate in CELL, detail any prior literacy training activities, specify the school and community demographics, and also give the reasons why they feel their staff is ready to participate in CELL.

### **STEPS IN IMPLEMENTING CELL**

After completing the application process, the first step in implementation is for the administrators to select the School-Based Planning Team. According to Dr. Jenkins, principal at West Randall, this team usually consists of eight members. There must be a site administrator, along with a teacher representing each of the primary grades, including preschool and resource teachers if there are any at the school site. Although not required, it is recommended that there be a reading specialist on the planning team. This reading specialist, who is usually a teacher certified in Reading Recovery, generally has more in-depth literacy training and can bring that perspective to the Team members.

The eight members of the School-Based Planning Team undergo a five days of training, spaced throughout the school year, to become familiar with the CELL program. The teachers on the School-Based Planning Team begin implementing the framework immediately after the first session. They receive feedback regarding their efforts at each subsequent session.

This format allows a school to begin partial implementation of CELL while they are receiving training. Dr. Jenkins likes to say CELL is an apprenticeship program. Teachers are learning as they are implementing the program. The teachers can get immediate feedback from well-trained instructors as concerns and questions come up.

Once the School-Based Planning Team has been trained, Literacy Coordinators are selected. The number of Literacy Coordinators needed for each site will vary. The ratio is one Literacy Coordinator for each 20 primary teachers, including preschool, special day and resource teachers. The Literacy Coordinator undergoes a minimum training period of five weeks. This training is done at a hotel in either Northern or Southern California, depending on where the Team members' school site is located. These five weeks are spaced out over the school year, with approximately one training session every six to eight weeks. Each training week is devoted to one topic, such as guided reading or interactive writing. The time between training sessions allows the Literacy Coordinators to try the skill in their school and reflect on the successes and challenges they encountered. At the next session, the Literacy Coordinators discuss their last topic before learning a new one. In addition to the five-week training periods, there are many interim training days and monthly guided meetings throughout the school year.

The Literacy Coordinators teach in their own classroom a half-day and serve as a coach and mentor to colleagues on the

instructional team for the other half of the school day. The Literacy Coordinators also plan staff development days and guided meetings for the teachers. These meetings address any problems, concerns or questions the teachers have in regards to the CELL program in general or may offer suggestions for strategies for particular students. The Literacy Coordinators carefully select the topics for these meetings during the time they spend in the classrooms coaching and observing the teachers.

The coaching and mentoring provided by the Literacy Coordinators are the backbone of the CELL program. Dr. Jenkins believes the coaching piece is the most important element of CELL and it is the only way to change the instructional strategies of teachers. Becky Peterson-Baker, a Literacy Coordinator herself, praises the power of coaching, when she says, "the one-to-one interaction and feedback from a peer, and the individualized help with specific problems from someone who really knows your school-site, your kids, and understands the methods you use to instruct your class cannot be matched by any other literacy program out there today."

Traditionally, inservice days for teachers, especially those in new instructional methods, bring about little change in the classroom. It is too easy for the teachers to ignore the new strategies. Some teachers try the methods, encounter difficulties and give up. It becomes simpler to revert to old methods, even if the teachers know the old methods are

not successful. With the CELL program, the Literacy Coordinators are not just trained to provide on-going staff development. They are mentors at a specific school site, working with the same teachers on a daily basis for the entire school year. When the Literacy Coordinators provide their guided meetings and staff development, the time is devoted to solving specific problems teachers are having. The meetings are individualized for the site's and the staff's needs. The Literacy Coordinators have the advantage of teaching at the site, so the staff, students, parents, and available materials are familiar to them. The staff development and guided meeting times are very individualized and specific. This provides the classroom teachers with on-going support. The CELL program is designed to make elementary schools self-sustaining through the training of Literacy Coordinators, and has proven to help long-term change in participating schools in literacy intervention strategies.

Before beginning school-wide implementation of CELL, several steps must occur. The School-Based Planning Team members are trained and begin providing instruction from the very beginning of a school's participation in the CELL program. The next step is the selection and training of the Literacy Coordinators. They teach and coach as they are learning the program. Then comes the first year of school-wide implementation. All primary teachers, including preschool and Special Education, begin training in the



program and implementing the methods and strategies in their classrooms. For most sites, this school-wide implementation will begin at about the beginning of the third year of involvement in CELL.

The year of full implementation is the year when great changes in the teacher's methods, strategies, and instructional delivery occur. Due to the change in the instructional delivery system, other things will change also. The teachers and administrators need to be aware that as the school day begins to focus more on literacy, the lesson plans will change out of necessity. According to Ms. Peterson-Baker, the goal of approaching teaching in a CELL school becomes "literacy all day, every day, not little blocks of time flowing in and out of the content areas. Literacy is integrated into every aspect of the curriculum. Teachers present science, math, and social studies with a literacy focus."

At the beginning of the school year, the Literacy Coordinators spend several weeks observing the teachers in their classes and begin to assess the needs of the individual teachers and students. This is done prior to the first staff development day of the year. The Literacy Coordinators then plan the staff development days and guided meetings that will be useful to the teachers and the students. Little time is wasted presenting ideas that do not deal with current concerns of the staff or administrators. Classroom observations are on-going and enable the Literacy

Coordinators to coach and support the teachers on a daily basis.

### **NECESSARY MATERIALS FOR A CELL CLASSROOM**

The actual implementation of CELL does not require many special materials. The CELL classroom needs books from all genres, regardless of the grade level of the students. In addition to books, CELL requires plenty of paper and pencils. CELL uses what classrooms already have, but shows the teachers how to use the materials more effectively. I met with Dr. Adria Klein, one of the training staff of CELL, who told me that "CELL does not dictate the materials, it dictates how they should be used effectively." She also feels the money spent on building a large and varied class library is not unique to CELL classrooms. Dr. Klein argues that "a class library is not solely a cost of having the CELL program. The funds spent on books is the same that would be spent by any school with a good reading program." CELL is a strategy-based literacy program rather than materials-based like so many other programs. When properly trained in CELL, the teachers should be able to teach using any language arts materials the district provides. Dr. Jenkins says that "if a school has been trained in CELL, they can effectively teach literacy using the daily newspaper."

## **EFFECTIVE ACROSS GRADE LEVELS**

CELL uses methods that are essential to good teaching, not just good teaching for first graders. Since all teachers are trained to use the same effective methods, gains made in one grade will carry up to the next. The teacher in the next grade will be using the same successful strategies, so there will be no drop in literacy achievement for the students. Even students involved in a pull-out program for extra intervention will be taught by proven methods. At the beginning of the year, it will no longer be an issue whether some of your students had a "good reading teacher" or not the grades before you get them.

The implementation of CELL helps alleviate the need for concerns in regard to aligning a school's curriculum to the State of California standards. The strategies taught and used in CELL will work in any subject area and across several grade levels. Every subject is taught with a literacy focus, whether the materials being used are language arts texts or social studies texts. CELL recognizes that to teach reading, students need to be exposed to reading in the content areas and other sources of non-fiction. Much of a student's vocabulary is built from exposure to a wide variety of non-fictional books. CELL stresses a balance between fiction and non-fiction selections in the classroom. This is an area usually addressed in intermediate grades, however CELL

believes it is simply good teaching and should be applied at all grade levels.

### **WRITING EVERY DAY**

A key to CELL is the belief that in addition to reading many genres, students must write every day. Two of the framework elements address the students' need to engage in writing activities on a daily basis. Interactive writing gives the students an opportunity to plan and construct text as a group with the teacher's assistance, develop letter-sound correspondence and spelling, and learn phonics all at the same time. CELL also addresses the need for students to learn to write on their own. Independent writing encourages writing for different purposes, encourages creativity, and gives the students opportunity to practice what they have already learned. Skills such as these should be given extensive practice by reading quality literature and taking part in authentic writing activities.

In the early primary grades, interactive writing is essential. With CELL, skills such as phonics are not taught in isolation. They are taught through the use of daily interactive writing. Interactive writing is used in all subject areas, including math. The students see the need to learn to communicate in writing, and gain confidence that they can not only write themselves, but can read what others have written.

## THE SUCCESS OF THE CELL PROGRAM

The CELL program has proven successful, as measured by student performance. The primary goal of California Early Literacy Learning is to increase the literacy achievement of children. This goal has been met, as proven by analysis of random samples taken from CELL schools. In order to gauge the success of the CELL program at a school:

as soon as possible after the opening of school, a random sample of each class (approximately six children) is administered the Observation Survey . . . by teachers and the Literacy Coordinator. Within the last three weeks of school, the Observation Survey is readministered to the same sample. During Fall, the Gates-MacGinitie Reading Test is administered to second graders. . . . Additional data available from the school (e.g., standardized test scores) are used to assist in this analysis. (California Early Literacy Learning, 1997, p. 11)

In a 1997 analysis done by Charles Mack Elementary in the Elk Grove Unified School District, a fully implemented CELL school, both Fall and Spring reading scores were compared for students in kindergarten through second grades. The results of this analysis showed:

Kindergarten students began the year as non-readers and reached a level equivalent to mid-first grade by the Spring testing. Achievement of first-graders increased

from upper Kindergarten to beginning second, and second-graders began the year just below grade level and scored high fourth grade in the Spring testing. These randomly selected children received no intervention or support services other than effective classroom teaching using the CELL framework. (p. 11)

Many other schools report similar findings in their test scores after implementing CELL. A school in Wyoming that implemented WELL (Wyoming Early Literacy Learning), completed a study :

where half of the staff participated in training and the other half served as a control group who received no training. Significant increases in text reading scores were reported in each grade level for teachers who participated in training compared to those who received no training. (p. 12)

### **COST EFFECTIVENESS**

Another positive impact CELL has on a school is the reduction in referrals to special education. Between 1992 and 1995, a comparison between CELL schools and non-CELL schools showed that while:

Non-Title I schools with neither Reading Recovery nor CELL support showed an increase in percentage of referrals from 2.6 to 3.7, . . . the demonstration school supported by Reading Recovery and CELL showed a

significant reduction in referrals to special education from 3.2 to 1.5. These data confirm both the effective combination of a balanced program of reading and writing instruction with a powerful early intervention and the cost effectiveness of schoolwide staff development in CELL. (p. 13)

In addition to the increases in reading scores in a school, the effect CELL has on special education cannot be overlooked. "The savings that would result in the reduced referral to special education would, by itself, cover the cost of all CELL training. This is a powerful measure of cost effectiveness" (p. 15).

### **SUMMARY**

When taken as a whole, the mentoring and coaching provided, the proven methods and strategies used, the ability for CELL to address the curricular needs of many grade levels, and the proven savings of special education costs, demonstrate that CELL is effective as a professional development program. The most important data are those that show good achievement gains in literacy in CELL schools.

After searching for a new literacy intervention program for my school, I can honestly say I found CELL to meet every

requirement I had in mind. It services a large number of students, is affordable when compared to our previous program, and most of all, it does what it says it will do. The teachers I met were as enthusiastic about CELL as they were three years ago when they began the program. The students were not only learning in language arts, they were reading and writing across the curriculum. Every student in every class was participating, regardless of current reading level or primary language. After reviewing the research and facts and figures, it all comes down to one simple statement: CELL works.



## RECOMMENDATIONS FOR FURTHER READING

Below, I have listed several books that deal with the subjects of guided and shared reading as well as interactive writing for those who are interested in reading ideas from some of the fields' most well-respected authors.

### **Guided and Shared reading:**

Becoming Literate: The Construction of Inner Control  
by Marie M. Clay

Bridges to Literacy: Learning from Reading Recovery  
by Diane E. DeFord, Carol A. Lyons, and Gay Su Pinnell

Guided Reading: Good First Teaching for All Children  
by Irene C. Fountas and Gay Su Pinnell

Reading in Junior Classes  
by Ministry of Education

The Whole Story  
by Brian Cambourne

### **Writing:**

Dancing with the Pen: The Learner as a Writer  
by Ministry of Education

Invitations: Changing as Teachers and Learners K-12  
by Regie Routman

Transitions: From Literature to Literacy  
by Regie Routman

What Did I Write? Beginning Writing Behaviour  
by Marie M. Clay

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