

# Research on the Effects of Literacy Collaborative on Teaching and Student Learning

The Literacy Collaborative program has been evaluated through *internal evaluations*, *third-party outside studies*, and *collaborative projects conducted with researchers at other universities*. Positive effects of the program have been found on teachers and students, including improved teaching and increased student growth and achievement in literacy.

Six large-scale quantitative studies of the effects of the Literacy Collaborative on both teaching and student learning have been conducted or are currently in process. In addition, three survey studies of teachers and students have provided evidence of teacher perceptions of the Literacy Collaborative program and of student attitudes toward reading and writing. Some of the Literacy Collaborative research has been reviewed by the Comprehensive School Reform Quality Center (CSRQ) in Washington, D.C. This review is available in CSRQ's online catalog, [www.csrq.org](http://www.csrq.org), under "Our Reports." The Literacy Collaborative website also has full research reports that can be downloaded. See [www.literacycollaborative.org](http://www.literacycollaborative.org), "Research and Evaluation," "Research and Evaluation Studies."

## Current Projects:

- A pilot project to examine the language and literacy development of bilingual and ELL Spanish-English speaking students enrolled in five Literacy Collaborative schools in Georgia in which 70% of the students are Latino and 50% are considered to be English Language Learners. This project, currently at an exploratory stage, is a collaboration between Literacy Collaborative and English-as-a-Second-Language researchers at Stanford University.
- A project to develop a performance assessment to evaluate the skills of literacy coaches. This project, led by Dr. Anthony Bryk, president of the Carnegie Institute for the Advancement of Teaching and Learning, is a collaboration between Literacy Collaborative at Lesley University and Ohio State University and Stanford University.
- A four-year qualitative and quantitative value-added "Teacher Quality" study of 17 Literacy Collaborative schools, funded by the U.S. Department of Education's Institute of Education Sciences (IES). Directed by Dr. Anthony Bryk, president of the Carnegie Foundation for the Advancement of Teaching, this project is a collaboration between researchers at Stanford University, University of Chicago, and Literacy Collaborative (2004–2009).
- A matched-controls longitudinal study of six Literacy Collaborative schools and five control schools in Georgia that have very high ELL student populations. This outside evaluation is being conducted by the Center for Research in Educational Policy (CREP) at the University of Memphis (2007–present).

## Completed Projects:

- A three-year quasi-experimental evaluation of Literacy Collaborative and several other early intervention programs implemented in Indiana, conducted by the Center for Education Evaluation Policy (CEEP) at Indiana University (1998–2004).
- A match-control, classroom-impact study conducted by the Education Development Center (EDC) in Newton, Massachusetts, measuring improvements in teaching in 55 grade 3–6 classrooms in 17 Literacy Collaborative schools as compared with improvements in 34 classrooms in nine non-Literacy Collaborative schools (2003–2004).
- A comparative longitudinal study conducted by Dr. Terry Tivnan of the Harvard Graduate School of Education and Dr. Lowry Hemphill of Wheelock College in Boston that examined the effects of Literacy Collaborative and three other literacy programs implemented in high-poverty schools in Boston (1999–2000).
- A seven-year longitudinal study of reading growth and achievement in 52 Literacy Collaborative schools conducted by Literacy Collaborative researchers (1996–2003).
- Three surveys conducted by Literacy Collaborative researchers of student attitudes and teachers' and literacy coordinators' perceptions of the effects of the Literacy Collaborative program on their students (2000–2003).

In addition, there is a large amount of research literature on the effectiveness of Reading Recovery, which is a safety net provided to struggling 1<sup>st</sup> graders in Literacy Collaborative schools that have adopted the Primary (K–2) program. (All Primary Literacy Collaborative schools must have Reading Recovery.)

### **IES-Funded Value-Added Study of Literacy Collaborative (2004–2009)**

This value-added study was conducted by Dr. Anthony Bryk, president of the Carnegie Foundation for the Advancement of Teaching, in collaboration with researchers at Stanford University, University of Chicago, and Literacy Collaborative. The study examined improvements in teaching and student literacy learning over four years in 17 Literacy Collaborative schools in the South, Midwest, West, and Northeast. It also tested whether a new web-based Professional Development System (PDS2), which has a searchable library of classroom videos and expert commentary, enhances the professional development work that literacy coordinators conduct with teachers. Teachers were observed in their classrooms three times per year and the quality of their instruction evaluated with an extensive quantitative rubric. Students were tested twice per year with DIBELS and Terra Nova. Results of this study have been presented at the 2007 National Reading Conference (NRC) and the 2008 and 2009 Annual Meetings of the American Education Research Association (AERA). These results showed the following:

- A value-added analysis of student DIBELS and Terra Nova data showed *large and statistically significant increases in student growth over the baseline*. Comparison of student scores with a baseline of scores from before the program was implemented showed that the *rate of student growth increased by 18% in Year 1 of Literacy Collaborative implementation, by 29% in Year 2, and by 38% in Year 3* (Biancarosa, Bryk, & Dexter, 2009).

- Analyses of the classroom observation data showed that, on average, *the quality of literacy teaching improved substantially in the 17 Literacy Collaborative schools in the study*. The rate of individual teacher improvement correlated with the number of professional development and one-to-one coaching sessions the teachers participated in (Hough, Bryk, Pinnell, Kerbow, Fountas, & Scharer, 2009).
- An analysis of teacher survey responses at the beginning and end of the study showed that teachers reported more professional communication with other teachers in their school after three years of program implementation as compared with at the beginning of program implementation.

The study also included extensive interviews with the 17 literacy coordinators about their experiences as coaches and professional developers and about their use of the web-based PDS2. As a result, Literacy Collaborative is currently expanding its use of web-based tools for training and ongoing support of Literacy Collaborative schools. More results from this study can be found on the website of IIS—Information Infrastructure Systems Research and Development:

[http://www.iisd.org/program\\_inquiry/publications.shtml](http://www.iisd.org/program_inquiry/publications.shtml)

### **Longitudinal Study of Two Districts in Georgia (2007–ongoing)**

The Center for Research in Educational Policy (CREP) at the University of Memphis is conducting a longitudinal study of six Literacy Collaborative schools and five non-Literacy Collaborative schools in Georgia. Both schools have high rates of student turnover and large percentages of low-income students, students from Spanish-speaking homes, and English Language Learners (ELL students). Data from all 11 schools include student scores on the Georgia Criteria-Referenced Competency Test (CRCT), classroom observations, teacher and principal surveys, and interviews with the literacy coordinators in the LC schools and the reading specialists in the non-LC schools. Though student results are not yet available, results from classroom observations showed that the LC schools used more small-group instruction and less whole-class instruction, and placed more emphasis on reading fluency and on writing strategies than the control schools (Grehan et al., 2009).

A survey of the roughly 100 teachers in the LC schools showed that 81% agreed that Literacy Collaborative had a positive effect on their students' learning, 82% agreed that students were more enthusiastic about reading, writing, and learning because of Literacy Collaborative, and 96% agreed that their school should continue with Literacy Collaborative. Some of the verbatim written comments included the following:

“I have seen more growth in the students I have taught using the Literacy Collaborative model than any other way I have taught, both in reading and writing. I could not go back and teach any other way!”

“It supports all learners and is highly beneficial to our school’s population of low SES students and ELL learners.”

“I think that our teacher have a much better understanding of the process of how students learn to read and write because of the model, and I think that we are better able to support our students as a result.”

“Literacy Collaborative allows teachers to know every child’s strengths and weaknesses. In LC classrooms teachers know what every child needs and there are many opportunities to meet those needs throughout the framework.”

### **Indiana Early Literacy Intervention Grant Program (1998–2004)**

In Indiana, the state Department of Education contracted with the Center for the Evaluation of Educational Policy (CEEP) at Indiana University to evaluate several programs that were funded by the state’s Early Literacy Intervention Grant Program (ELIGP), including Literacy Collaborative. Comparing schools that had adopted the Literacy Collaborative with schools that had not adopted any programs, CEEP found the following:

- Literacy Collaborative schools, on average, showed substantially larger increases in passing rates than schools with no interventions, particularly in high-poverty schools.
- Literacy Collaborative schools, on average, had lower special-education referral rates than schools with no special programs.
- Literacy Collaborative schools, on average, had modestly lower 2<sup>nd</sup> grade retention rates, particularly in urban schools.

In their summary report, CEEP wrote that “of the individual ELIGP-funded interventions included in prior CEEP evaluations, Literacy Collaborative has most consistently demonstrated success on student outcomes” (Plucker, Simmons, and Ravert, 2005, p. 35).

### **Education Development Center Grade 3–6 Classroom Impact Study (2003–2004)**

In 2003–2004, EDC conducted a study of the literacy instruction provided in 55 grade 3–6 classrooms in 17 Literacy Collaborative schools as compared with instruction in 34 classrooms in 9 non-Literacy Collaborative schools. In the Literacy Collaborative schools, 73% of the students were low-income and 16% were ELL students. Classrooms were observed three times over 18 months using a quantitative rubric that rated the extent to which each teacher followed the Literacy Collaborative instructional framework, and the overall quality of literacy instruction each teacher provided. The findings were as follows:

- Literacy Collaborative teachers who followed more closely the Literacy Collaborative framework, on average, demonstrated higher quality teaching than Literacy Collaborative teachers who followed the framework with less fidelity.
- On average, quality of instruction in the Literacy Collaborative schools improved over 18 months, while no average improvements were seen in the non-Literacy Collaborative schools.

EDC concluded that “this study demonstrates that Literacy Collaborative is indeed a powerful intervention: Literacy Collaborative classrooms grow in quality of instruction at a faster rate than comparison group classrooms, where growth rate is flat” (Education Development Center, 2004, p. 29).

### **Boston Public Schools (1999–2000)**

In 1999, all Boston elementary schools adopted one of four literacy interventions to improve literacy instruction and achievement—Literacy Collaborative, Success for All, Building Essential Literacy, and Developing Literacy First. The students in all the schools were primarily low-income and African American or Latino. The comparative effects of these programs were evaluated by Dr. Terry Tivnan at the Harvard Graduate School of Education and Dr. Lowry Hemphill at Wheelock College in Boston (Tivnan & Hemphill, 2005).<sup>1</sup> Their findings were as follows:

- In all the schools, students entered 1<sup>st</sup> grade with age-appropriate skills in letter identification, simple word identification, and decoding, but below grade-level skills in phonemic awareness and vocabulary. During 1<sup>st</sup> grade, students made substantial growth in some literacy areas, but showed limited growth in vocabulary and comprehension skills.
- There were no major differences in overall program effects, but Literacy Collaborative students did score the highest in writing. The authors attributed this finding to the greater emphasis on writing in Literacy Collaborative classrooms:

[LC] teachers learned techniques not only for modeling their composing strategies with children...but also for helping children edit and revise the texts they produced when attempting to write independently. Frequent teacher help in editing and revising, evident during classroom observations, appeared to give LC first graders a stronger understanding of sentence structure and writing conventions than was evident for students who only observed teachers employ these conventions in modeled writing. LC’s emphasis on learning to read and spell a core group of high-frequency words also appeared to give LC study children a ready stock of words to use when composing independently and thus the confidence to compose longer and more sophisticated texts” (p. 435).

### **Literacy Collaborative Annual Research Reports (1996–2003)**

In a series of annual reports, Literacy Collaborative researchers examined improvements in reading levels and Gates-MacGinitie reading scores in 52 Literacy Collaborative schools from 1996 to 2001 (Pinnell, 2000; Pinnell & Sharer, 2001; Scharer, Desai, Williams, & Pinnell, 2003). Their findings included the following:

- Across cohorts, average scores on the 2<sup>nd</sup> grade Gates-MacGinitie Reading Test rose from 40 NCEs (National Curve Equivalents) in 1996 to 49 NCEs in 2000 (on a scale of 0–99). The

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<sup>1</sup> Because all of the Boston schools adopted a literacy program, the study did not compare program effects with schools that did not adopt any program.

greatest gains were found in schools that had more than 50% of students receiving free or reduced price lunch.

- The percentages of 2<sup>nd</sup> grade students scoring in the lowest Gates-MacGinitie national quartile decreased from 46% in 1996 to 28% in 2001.
- Examining the reading skills of a single cohort of students from kindergarten to 2<sup>nd</sup> grade, 10% of the children entered kindergarten with grade-level reading abilities, which increased to 25% when the same cohort was in 1<sup>st</sup> grade and to more than 60% when the same cohort reached 2<sup>nd</sup> grade.
- The literacy abilities of entering kindergarteners was stable across the years, suggesting that second grade improvements resulted from improved K–2 learning, not from improved school-entry skills.

### **Literacy Collaborative Surveys (2001–2004)**

In addition to the major studies described above, Literacy Collaborative researchers have conducted several surveys of literacy coordinators and teachers in Literacy Collaborative schools. These surveys have shown the following:

- Eighty-five literacy coordinators were asked to list the most positive changes that had resulted in their schools from participating in the Literacy Collaborative program. The most common responses were: (1) improvements in their students' literacy behaviors, (2) improvements in their students' self-regulated learning behaviors, (3) improvements in their own teaching skills and those of other teachers in their schools, and (4) improvements in staff relationships (Bartlam & Boucher, 2001).
- Many of the literacy coordinators stated that the Literacy Collaborative professional development had made them more reflective in their teaching and more focused on the needs of individual students, and that they had increased their time spent on literacy instruction and activities. Many also reported that the Literacy Collaborative model had provided their school staff with a common language for communicating about the successes and needs of their students (Bartlam & Boucher, 2001).
- Seventy-six literacy coordinators and teachers in 14 Literacy Collaborative schools were asked what changes they had seen in their students in terms of reading, writing, oral language, and word study. The most common responses were improved oral language vocabulary, improved reading comprehension, improved writing traits, more independent learning behaviors, and improved attitudes about reading and writing (Bartlam & Boucher, 2003).
- Quotations from respondent surveys included the following: “Their attitude has changed the most. They truly enjoy reading and discussing what they have read” (p. 7). “The students have become far more independent. They are facilitating much of their own time and learning” (p. 7). “The children’s attitude toward writing is at an all-time high. They’re passionate about their daily Writer’s Workshop time” (p. 9). “The level of vocabulary the children can use simply was not happening before” (p. 11).

- In a 2004 case study of a high-performing Literacy Collaborative school, teachers described their students as “lovers of books” and as being “enthusiastic,” “engaged,” and “excited” about reading and writing (Caswell & Glover, 2004).

In sum, the studies above provide evidence that the Literacy Collaborative program can improve teaching, increase student literacy growth and achievement, and improve student attitudes toward reading and writing.

### **Evaluations of Reading Recovery**

There have been many evaluations of the effectiveness of Reading Recovery, which is a required part of the Primary level (K–2) Literacy Collaborative program. Research on Reading Recovery was reviewed in 2007 by the USDOE What Works Clearinghouse (WWC) as part of their review of research on 153 early intervention programs. Reading Recovery’s research received the highest rating of all the programs for showing evidence of positive effects on children’s “general reading achievement.” WWC also concluded that Reading Recovery research provided evidence of positive effects on the subcomponents of reading: alphabetic (phonemic awareness, phonics, letter identification), fluency, and comprehension and vocabulary. (<http://ies.ed.gov/ncee/wwc>)

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