A study examined school factors and teacher factors contributing to primary grade students' reading growth and reading achievement. It investigated school and classroom variables in effective schools as compared to moderately effective and less effective schools and also looked at classroom practices of accomplished teachers as compared to less accomplished teachers. Fourteen schools in Virginia, Minnesota, Colorado, and California with from 28% to 92% of students qualifying for subsidized lunch participated. In each school two teachers in each of Grades K-3 and two low and two average readers per teacher served as subjects. Principals participated by asking teachers they judged as average or better to participate; they also completed a questionnaire on school reading practices and were interviewed. Teachers were observed for an hour of reading five times from December through April. Teachers also completed two weekly time logs of instructional activities in reading/language arts and a questionnaire of school and classroom practices related to reading. A subset of teachers were interviewed. A case study was written on each school according to a common outline. School effectiveness was significantly related to strong links with parents, systematic assessment of pupil progress, and strong building communication and collaboration. In all four of the most effective schools, teachers mentioned that reading was a priority in their building as a factor contributing to their success. Teachers in the most effective schools spent 134 minutes a day on reading instruction compared to teachers in the moderately and least effective schools who averaged 113 minutes a day on reading instruction. (NKA)
Beating the Odds in Teaching All Students to Read: Lessons from Effective Schools and Accomplished Teachers

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Introduction

To help schools in reach the goal of "all children reading by grade 3, numerous research reviews on reading have recently appeared. Researchers and professional organizations have synthesized research on learning to read (Snow, Burns, & Griffin, 1998), effective school reform programs (Herman, 1999), early reading interventions (Hiebert & Taylor, in press), and effective classroom practices for the primary grades (Learning First Alliance, 1998; Morrow, Tracey, Woo, & Pressley, 1999). Recent studies have looked at effective schools (Puma, Karweit, Price, Ricciuti, Thompson, & Vaden-Kiernan, 1997; Stringfield, Millsap, & Herman, 1997) and effective primary grade teachers (Wharton-MacDonald, & Hampston, 1998). What is missing from this wealth of valuable information is research which has looked at school and teacher factors contributing to children’s reading success within the same study. To fill this gap, we conducted a national study of effective schools and exemplary teachers as part of CIERA’s scope of work.

The purpose of this study was to examine school factors and teacher factors contributing to primary grade students’ reading growth and reading achievement. To accomplish this, we investigated school and classroom variables in effective schools as compared to moderately effective and less effective schools. We also looked at classroom practices of accomplished teachers as compared to less accomplished teachers.

Method

Fourteen schools in Virginia, Minnesota, Colorado, and California with from 28 to 92 percent of students qualifying for subsidized lunch participated. In each school 2 teachers in each of grades K-3 and 2 low and 2 average readers per teacher served as subjects. Principals participated by asking teachers they judged as average or better to participate in the study. They also completed a questionnaire on school reading practices and were interviewed.

Teachers were observed for an hour of reading instruction 5 times from December through April. Teachers also completed 2 weekly
time logs of instructional activities in reading/language arts and a questionnaire of school and classroom practices related to reading. A subset of teachers were interviewed.

This summary focuses on grades 1-3. Children were tested in November (grades 2-3) and May (grades 1-3) on words correct per minute, retelling of a passage, and words in isolation. Grade 1 children in November were tested on letter names, phonemic awareness, and words in isolation.

A composite of students’ gains in reading (words correct per minute, reading words in isolation, and retelling at a child’s reading level) and a school’s grade 3 reading achievement was used to establish school effectiveness. Four schools were most effective (with a mean poverty level of 59% of students on subsidized lunch, and a mean grade 3 standardized reading test percentile of 51), six were moderately effective (with a mean poverty level of 69% of students on subsidized lunch, and a mean grade 3 standardized reading test percentile of 40), and four were least effective (with a mean poverty level of 45% of students on subsidized lunch, and a mean grade 3 standardized reading test percentile of 43).

A case study was written on each school according to a common outline. The writer of each case study had been integrally involved in the data collection.

Based on the observations, questionnaires, interviews, and case studies the following school-level variables were constructed: strong or weak links to parents, strong or weak building communication and collaboration, systematic evaluation of pupil progress, and having or not having research-based early reading interventions in place in the building.

Teacher observations were read by 2 experts in elementary school supervision and reading. Forty-one percent of teachers were identified as demonstrating quite a few of the elements of effective instruction, 32 percent were identified as demonstrating some of these elements, and 27 percent as demonstrating few of these elements.
Based on the observations, logs, questionnaires, interviews, and case studies, the following teacher (classroom-level) variables were constructed: level of home communication, student engagement, time on task, time spent in small or whole group instruction, time spent in independent reading, and teacher's preferred interaction style (telling information, engaging students in recitation, coaching children as they are attempting to respond). In grades 1 and 2 frequently observed approaches to word recognition instruction (phonics in isolation, coaching in word attack as children were reading, sight word drill) were determined for each teacher, and in grades 1-3, frequently observed approaches to comprehension instruction (asking literal-level oral questions after reading, asking higher level, oral questions after reading, having students write in response to what they had read) were determined for each teacher.

Results

School Factors

School effectiveness was significantly related to strong links to parents, systematic assessment of pupil progress, and strong building communication and collaboration.

Based on the interviews and questionnaires, the most effective school reported more efforts to link to parents than the moderately and least effective schools. Efforts included having an active site council on which parents served and conducting focus groups, phone survey, or written surveys to find out about parents needs and concerns.

All 4 of the most effective schools had a system in place in which children were regularly assessed, this data was shared, and grouping changes as well as instructional decision made based on this assessment data. All 4 schools mentioned the importance of this systematic evaluation in their schools' success. Two schools used words-correct-per-minute to assess reading growth and 2 used informal reading inventories.
Collaboration within and across grades was reported in all 4 of the most effective schools as a reason for their success. Some of the manifestation of this included teaming, peer coaching, program consistency, and seeing all children as everyone's responsibility. All 4 of the most effective schools used a collaborative model involving regular teachers plus Title I, reading resource, and special education teachers (as well as ELL teachers in the 1 school with ELL teachers) who worked together to provide small group instruction. In 3 schools, resource teachers came in to the classroom for 60 minutes a day. In 1 school, children went to resource teachers to work in groups of 2 or 3 for 45 minutes a day.

Three of 4 schools mentioned interventions as a reason for their success. In these schools, research-based interventions for grades K-3 were in place. Three of the most effective schools mentioned visits to schools with innovative programs as having been an effective ongoing professional development effort. Three schools mentioned the usefulness of year-long workshops or district-sponsored graduate-level courses which had been related to the early reading interventions put in place in their buildings.

Teacher Factors

Characteristics of classrooms in the most effective schools. Teachers in most effective schools communicated more with parents than teachers in moderately and least effective schools. The teachers in the most effective schools were more likely to call home at least once a month, send notes or newsletters home weekly, and send home travelling folders weekly.

Students in the most effective schools spent more time in small group instruction (60 min/day) than students in moderately (26 min/day) or least effective (38 min/day) schools. Teachers in the most effective schools mentioned small group instruction as another reason for their success. This ability-grouped instruction took place with systematic evaluation of pupil progress, flexible grouping, and early reading interventions in place so that children were not "doomed" to groups as in the past.
Children in most effective (28 min/day) and moderately effective schools (27 min/day) spent more time in independent reading than children in least effective schools (19 min/day). Teachers in the most effective schools mentioned time for students to read authentic texts as a factor contributing to their success.

More teachers in grades 1 and 2 in most effective schools were frequently observed coaching during reading to teach word recognition (53%) than teachers in moderately effective (17%) or least effective (13%) schools. More teachers in most effective (27%) and least effective schools (40%) drilled on sight words than teachers in moderately effective schools (0%). There were no differences across school effectiveness rating in the percent of teachers frequently observed teaching phonics in isolation (60% most effective, 61% somewhat effective, 60% least effective schools).

In comprehension, there were more teachers frequently observed asking higher level (aesthetic) questions in the most effective schools (37%) than in the moderately effective (7%) or least effective (0%) schools. There were no differences in the asking of text-based questions (37% most effective, 34% moderately effective, 45% least effective schools). There were no differences in the percent of teachers frequently observed asking children to write in response to reading (47% most effective, 24% moderately effective, 27% least effective schools).

*Characteristics of the most accomplished teachers across all schools.* There were many similarities and a few differences when we analyzed data by level of teacher accomplishment, irrespective of level of school effectiveness. Students with teachers identified as most accomplished spent more time in small group instruction (48 min/day) than students with teachers identified as moderately proficient (39 min./day) who in turn spent more time in small group instruction than students with the least accomplished teachers (25 min/day). Students with the most accomplished and moderately accomplished teachers spent less time in whole group instruction (25 and 29 min/day, respectively) than students with teachers identified as least accomplished (48 min/day).
We examined teachers’ approaches to word recognition instruction and found, when looking at teachers in grades 1 and 2, that more of the most accomplished teachers (45%) focused on coaching during reading of books to teach word recognition than least accomplished (0%) teachers. There were no differences across teacher proficiency in terms of teaching phonics in isolation (59% most accomplished, 73% moderately accomplished, 45% least accomplished).

There were more most accomplished teachers (38%) than moderately accomplished teachers (6%) who focused on drilling on sight words. Very little word recognition instruction was seen in grade 3.

In the area of comprehension, relatively little instruction was seen across grades 1-3. There were more of the most accomplished teachers (31%) frequently observed asking higher level (aesthetic) questions on stories than least accomplished teachers (0%). There were no differences across teacher proficiency in terms of the percent of teachers frequently observed asking text-based questions (48% most accomplished, 46% moderately accomplished, 19% least accomplished). There were more most accomplished teachers frequently observed asking children write in response to what they had read (50%) than least accomplished teachers (24%).

Teachers identified as most accomplished had higher pupil engagement (96% of students on task on average) than teachers identified as moderately accomplished (84% on task on average) who in turn had higher pupil engagement than teachers identified as least accomplished (61% on task on average).

There were more teachers perceived as most accomplished with a preferred interaction style of coaching (48%) as children were attempting to respond than moderately accomplished (21%) or least accomplished (6%) teachers. There were more least accomplished teachers (75%) with a preferred interaction style of telling children information than moderately accomplished (38%) or most accomplished (7%) teachers.
Results suggest that some classroom factors like frequency of communicating with parents, time devoted to small group instruction, time spent in independent reading, and approaches to word recognition and comprehension instruction are influenced by what is happening at the school level. Other practices, such as using a coaching style as opposed to a telling style when teaching children or maintaining high levels of student engagement, appear to be less influenced at the school level and may in fact be teaching abilities which require time and/or support from more accomplished teachers to develop.

Summary

In all 4 of the most effective schools, teachers mentioned the fact that reading was a priority in their building as a factor contributing to their success. The teachers in the most effective schools spent 134 minutes a day on reading instruction (including small and whole group instruction, independent seatwork, independent reading, and writing in response to reading) as compared to teachers in the moderately and least effective schools who averaged 113 minutes a day (in both levels of school effectiveness) on reading instruction.

It is clear from this study that a combination of sound building decisions and collaborative efforts as well as effective practices within individual classrooms contributed to the most effective schools beating the odds in terms of primary grade students' reading growth and achievement. However, further research is needed on how to help schools learn from effective schools and exemplary teachers so they too may "beat the odds" in teaching all children to read.
References


The complete report of this research study is available through CIERA. Please check the CIERA website at www.ciera.org for more information.1 The report is also appearing in The Elementary School Journal (in press).
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