

SCHOOL PRACTICES FOR HELPING CHILDREN MEET LANGUAGE ARTS STANDARDS

Preliminary Findings from McREL's Study of High-Performing, High-Needs Schools

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ABSTRACT

This study examined use of school practices in relation to school-wide performance on state standards-based assessments. The study is one part of McREL's larger study of high-performing, high-needs districts in which high-needs schools performing above the state average are compared to high-needs schools not performing above the state average. The comparison allows the identification of school-level practices and policies that support high performance in high-needs schools. Teacher surveys and interviews were used for data collection. Results indicated that high performance was associated with a focus on academic learning goals and more frequent ability re-grouping for instruction. Performance was not associated with test preparation time. In one district, high performance was associated with more frequent use of community volunteers to individualize instruction. Community context factors are identified and discussed as plausible explanations for the significant relationships and directions for further research are proposed.

INTRODUCTION

Researchers at the Mid-continent Research for Education and Learning (McREL) are conducting a multi-site, multi-year study of high-performing, high-needs (HPHN) schools. The purpose of the study is to build upon existing knowledge to guide improvement of low-performing schools. McREL's study extends the tradition of identifying and learning from effective schools to the current context of standards-based reform. The following overarching research question guided McREL's study of HPHN schools:

How do policies and practices in high-performing, high-needs schools compare with those in schools with similar demographics but lower performance profiles?

Several component studies are being conducted to support the main study. Each of these examines the role of a particular aspect of schooling in raising student achievement. These studies examine teacher learning (Lauer, 2001), resource allocation (Reichardt, 2002), leadership, and practices that address mathematics standards. The present study focuses on school practices that address language arts standards.

Specifically, the present study examines use of school practices previously found to be effective in helping at-risk students become proficient readers. Much of the prior research on effective practices in high-needs schools was conducted prior to or during the early implementation of standards-based reform (e.g., Briggs & Thomas, 1997; Heistad, 1997; Taylor, Pearson, Clark, & Walpole, 2000). This study builds on the tradition of effective schools research by addressing critical issues, such as the use of test preparation practices and feedback from state assessment results, in the current context of standards-based reform and public accountability for performance.

The primary audience for this report is researchers. The report presents a review of prior relevant research and describes the methodology used, including sampling procedures, sample characteristics, and the means of data collection and analyses. Next, the results of the study are summarized. Finally, implications of the results for refining or confirming principled knowledge about effective practices for helping students meet standards are discussed along with suggested directions for next steps in research.

PRIOR RESEARCH

BEAT-THE-ODDS PRACTICES IN READING/LANGUAGE ARTS

Flexible Ability Re-grouping

Several studies of practices in the beat-the-odds¹ schools have shown that higher student achievement is associated with flexible, small ability grouping (Briggs & Thomas, 1997; Heistad, 1997; Taylor et al. 2000). Small-group reading instruction in grades one, two, and three is vital to helping

¹ "Beat-the-odds" is a term used to describe schools where the student population is predominantly at-risk for poor academic achievement because of language, socioeconomic status, or other related factors, but is performing above predicted or state average levels of achievement.

struggling readers succeed. Teachers use flexible grouping to meet individual instructional needs by explicitly teaching word identification strategies and phonics and coaching students on the application of this knowledge while reading appropriately difficult texts (Heistad, 1997; Taylor et al., 2000). In a study of four exemplary high poverty elementary schools in Texas, one of the principals explained the rationale and process of ability grouping:

Grouping is based upon an individual placement test through Reading Mastery and each student reading [aloud] to teachers. No student is locked into a group or class. . . the key is to reach them where they are and to move them forward. (Briggs & Thomas, 1997, p. 15)

Time-on-Task

Increased instructional time in core content areas is another practice that research suggests is especially important for students at-risk (Creemers, 1994). Results from a 1998 study of top-performing, high-poverty schools, in particular, support this claim. In this study (Education Trust, 1999), completed surveys were analyzed from 366 top-performing, high-poverty schools defined as (1) schools in which 50 to 100 percent of students were from low-income homes and (2) schools whose school-wide performance placed the schools in the top levels of achievement on state assessments. This study found that instructional time in reading and mathematics was extended to help students meet standards in the vast majority of the top-performing, high-poverty schools. In research on reading, per se, children in beat-the-odds schools spend more time daily engaged in independent reading than students in low-performing, high-poverty schools (Taylor et al. 2000). Taylor et al. found that in the most effective and moderately effective schools, students read, on average, 27–28 minutes daily, which was significantly more than the 19 minutes of daily reading in the least effective schools.

STANDARDS AND ACCOUNTABILITY

Instructional Coherence

Instructional coherence is one potentially positive outcome of systemic standards-based reform. According to Newman, Smith, Allensworth, and Bryk (2001), instructional coherence involves a common instructional framework that specifies learning goals and defines the components or strands in a curriculum. The framework specifies and aligns the content, tools, and methods of teaching and assessment and the expectations and climate for learning both vertically across grades and horizontally within grades. The framework's value "ultimately depends on the educational legitimacy of the aims for students" (Newmann et al., 2001, p. 40). Achieving coherence does not involve narrowing expectations to low-level skill attainment; it does not mean that it is "acceptable to deny students opportunities for individual expression, higher order thinking or in-depth understanding of a variety of subject areas" (Newmann et al., p. 40). Between 1994 and 1997, Newmann et al. studied Chicago public schools that primarily served communities with high rates of poverty and social stress. This study found a strong association between improved student achievement and increased instructional coherence.

Some research supports the view that standards-based reform helps create instructional coherence. Teachers and whole faculties report that instructional coherence is achieved by implementing standards (McREL, 2000). Standards provide common learning goals. Grade-level benchmarks help faculty clarify expected progression across grades so repetition is avoided. Instructional time becomes more purposeful and focused on academic learning and coherent across grade levels. Results of the Education Trust (1999) study of top-performing, high-poverty schools support these contentions about standards-based reform. In addition to the extended instructional time results reported previously, over 75 percent of respondents reported using standards to assess and analyze student work and design curriculum and instruction.

Adopting a Sense of Urgency and Focus

In the context of standards-based reform, feedback from the results of assessment and accountability systems can create a sense of urgency, suggest focus, and spur school improvement. The improvement efforts, in turn, reduce gaps in achievement between schools serving high- and low-socioeconomic communities (Ragland, Asera, & Johnson, 1999; Waters, Burger & Burger, 1995). For some, these examples of achievement-gap reductions are the outcomes originally intended for systemic, standards-based reform. One of the original intentions was to help ameliorate inequities in opportunities to learn and achievement (O'Day and Smith, 1993). Traditionally, curricula and instruction were two-tiered, designed to teach high level knowledge and skills to college-bound students and basic skills to all other students. In a standards-based system, instead, as Lachat (1999) wrote: "Standards may help to clarify that the purpose of schooling is not to sort people into artificial and often limiting groups, but to make knowledge and skills essential to success in today's society accessible to all"(p. 7).

Multiple studies of effective schools find that focus is a key factor of success (Lezotte, 1991; Purkey & Smith, 1983). Making reading a priority, for example, is a distinctive feature of schools most successful in helping at-risk students become proficient readers (Taylor et al., 2000). With reading a priority, leadership and structures in the most effective schools support use of common assessments and a collaborative model for deploying teaching personnel to identify and meet students' learning needs (Taylor et al.). Focus provides a common purpose for members of the school community, creating commitment and direction.

Other observers, however, report that improvement efforts spurred by standards and directed by a well-articulated focus have narrowed the curriculum and caused teachers to overly emphasize test preparation (Center for Educational Policy Analysis, 2001; Ketter & Pool, 2001). For example, in writing courses designed to help students meet proficiency standards after repeated failure, Ketter and Pool claim that the only skills the students learned were how to take and pass the state writing exam. Thus, there are trade-offs; the test-preparation instruction resulted in 89 percent of the students passing the writing exam, but narrowed the students' learning to only one type of written response. These results, however, are based on one particular context, namely, in Maryland where the state writing assessment is high-stakes, required for high school graduation. More research is needed examining the impact of standards and related assessments and accountability systems on learning opportunities and outcomes for students.

SUMMARY AND PROPOSED RESEARCH

To summarize, prior research on beat-the-odds schools and classrooms, instructional coherence, and the impact of standards-based reform revealed common supportive practices for raising reading achievement in high-poverty schools. These practices include flexible ability re-grouping, increased time-on-task, a focus on reading, and use of common learning goals and assessments to guide improvement efforts. Some of the prior research, however, is limited by absence of comparison groups. For example, the Education Trust (1999) study did not include schools with similar demographic characteristics that were not performing well; and thus it remains unclear whether the findings, such as extended instructional time and use of assessment results to design curriculum and instruction, were unique to the top-performing schools. In addition, generalizations from other findings (e.g., Ketter & Pool, 2001) are limited by the context of their study sites being in high-stakes test environments. Continued research is needed to help clarify what trade-offs and supports occur for students and teachers when different practices are adopted in high-needs schools.

In this study, we examine school practices for helping students meet state proficiency standards in language arts in two Midwestern states. We sought to verify or dispute the potential of standards-based reform for promoting instructional coherence and use of school practices effective in helping students meet language arts standards in high-poverty schools. Specifically, this study addressed the following research question:

What is the relationship between the following school practices and school-wide performance on standards-based assessments of reading/language arts?

- Use of standards as learning goals and making reading a priority,
- Daily reading,
- Flexible, small, ability grouping for instruction,
- Other practices for individualizing instruction, and
- Test-preparation.

To examine relationships between school-level practices and performance, we used a multiple case study design that held constant level of school poverty while allowing contrasts between practices in schools with different levels of school-wide performance (Yin, 1994). Methods of data collection included teacher interviews and surveys. Relationships between level of school-wide performance and practices were explored through a combination of inferential statistical analyses and content analyses and constant-comparisons of interview data.

METHODOLOGY

PARTICIPANTS

Two school districts were recruited for the study based on meeting two selection criteria: (1) elementary schools in the district served children from low-income homes, and (2) at least some of these schools had school-wide performance on standards-based, state assessments above the state average. The

selected districts are situated in mid-size cities in Midwestern states and serve communities with populations of 102,121 (District A) and 73,990 people (District B) (U.S. Census Bureau, 2000).

Ten elementary schools from District A and 18 elementary schools from District B participated in McREL's study of high-performing, high-needs schools. For the present study, only schools meeting our criterion for high-needs designation were included. This criterion was having 50 percent or more students eligible for free or reduced-price lunch. A total of 15 schools met this criterion: six from District A and 9 from District B. Low-need schools (defined as having less than 50 percent students eligible for free or reduced-price lunch) were not included in the present study.

Participating schools were further categorized into two levels of need and two levels of performance. Both need and performance were measured over a three-year period to ensure that the conditions making the schools appropriate for the study were fixed rather than the product of natural fluctuations. The two levels of need were (1) extremely high-needs (EHN), defined as having 75 percent or more students eligible for free or reduced-price lunch, and (2) high-needs (HN), defined as having 50–74 percent students eligible for free or reduced-price lunch.

Levels of performance were defined in relation to the state median percent of students, school-wide, performing at or above proficiency on state standards-based assessments. To ensure a broad measure of academic performance, performance levels were defined using assessments from more than one subject area. To categorize schools in the District A, we used the state fourth-grade reading and writing results over a period of three years (mathematics data were not available for all three years). To categorize schools in District B, we used the state third-grade communication arts (including reading and writing) and fourth-grade mathematics results for a period of three years. The average percent of students performing at or above proficiency across content areas per year was computed. This served as the measure of school-wide performance used to categorize schools as high- or low-performing.

High-performing schools (HP) were defined as having above the state median percent of students, school-wide, performing at or above proficiency on the state standards-based assessments indicated above for two of the three most recent years. Low-performing schools (LP) were defined as having below the state median percent of students, school-wide, performing at or above proficiency on the assessments indicated above for two of the three most recent years² In District B, there was one school we categorized as moving because its performance was above the state median for one of the most recent three years.

Across the two districts, 186 teachers participated in the present study. They taught regular classrooms or provided special instruction as Title I, Special Education, or Reading teachers. In addition,

² For example, at the time of data collection, the state median school-wide percent of students performing at the level of proficient or above in reading was 60 percent for the state in which District A was located and 36 percent for the state in which District B was located. In both states, proficiency is defined as demonstrating comprehension of fiction and nonfiction multi-paragraph reading selections by identifying main ideas and details, defining a problem or solutions, making inferences, and summarizing and drawing conclusions with factual support. Given the cognitive demands of this level of proficiency, children must be fluent readers of grade-level texts with a well-developed basic vocabulary to be successful.

Literacy Coordinators at four schools were interviewed in District A. All teachers taught in kindergarten, first-, second-, third-, or fourth-grade classrooms or children in multiple elementary school grades. No counselors or specials teachers (e.g., teachers of music, physical education, or art) were included in the present study.

Tables 1 and 2 show demographic features of each school and the distribution of teachers by school category. Table 1 shows the student enrollment, percentage of students eligible for free or reduced-price lunch (FRL) and percentage of minority students for each of the District A schools by school category.

Table 1. District A Sample of Schools and Teachers

Category & School ID #		Student Enrollment	Percentage FRL	Percentage Minority	Number of Teachers
High Performing Extremely High Need (HPEHN)	A1	399	83	82	11
	A4	319	60	70	10
High Performing High Need (HPHN)	A5	317	60	65	5
	A6	449	58	58	9
Average or Total		362	59	64	24
Low Performing Extremely High Need (LPEHN)	A2	281	84	86	10
	A3	458	90	88	9
Average or Total		370	87	87	19
District Sample Average or Total		371	73	74.8	54

As can be seen in Table 1, there are four high-performing schools — one categorized as extremely high needs, and three categorized as high needs. There were two low-performing schools, both categorized as extremely high needs. The average percentage of minority students for these six schools is 74.8 percent. The minority population in District A is primarily Hispanic. In 1999, 10 percent of the district’s student population was Limited English Proficient (Escamilla, Aragon, Grassi, Riley-Bernal, Rutledge, & Walker, 2000).

Table 2 shows by school category, the student enrollment, percent FRL, and percent minority for each of the District B schools. As can be seen in Table 2, there are two high-performing, extremely high-needs schools and one moving, high-needs school. In addition, there are three low-performing, extremely high-needs schools and three low-performing, high-needs schools. In contrast to District A schools, the District B schools have relatively low percentages of students from minority groups (40 percent or less). The minority population in District B is primarily African American.

Table 2. District B Sample of Schools and Teachers

Category & School ID #		Student Enrollment	Percentage FRL	Percentage Minority	Number of Teachers
High Performing Extremely High Need (HPEHN)	B1	353	87	40	18
	B2	263	89	11	6
Average or Total		308	88	25.5	24
Moving High Need (moving HN)	B3	295	53	6	11
Low Performing Extremely High Need (LPEHN)	B4	341	96	10	17
	B5	321	91	10	15
	B6	276	78	2	14
Average or Total		313	88	7.3	46
Low Performing High Need (LPHN)	B7	441	72	5	14
	B8	463	64	5	19
	B9	361	63	10	18
Average or Total		422	66	6.7	51
District Sample Average or Total		346	77	11	132

DISTRICT READING CURRICULA AND PROGRAMS

At the time of the study, District A used a McMillan-McGraw Hill textbook series for the elementary grades, and District B used Scholastic. Both series have curriculum-based unit assessments, and both districts pace the use of the series by requiring that the unit tests be administered and results reported at designated dates over the course of the academic year. McMillan-McGraw Hill supplements the textbooks with skills workbooks for students who need more practice. Scholastic is comprised of literature sets in six books, each with 5–6 stories that are leveled.

Since 1998, District A began piloting, and later adopted district-wide, Lindamood-Bell™ as supplemental instruction to the McMillan-McGraw Hill textbook series in the regular classroom and as a pull-out intensive instructional program for children identified as not reading at grade level. Lindamood-Bell™ is an explicit instructional approach to developing reading with three components: (1) systematic, multisensory teaching of phonemic awareness; (2) development of symbol imagery and sequencing for spelling, sight word recognition, and multisyllabic word identification; and (3) development of active reading comprehension strategies through visualizing and verbalizing (Lindamood-Bell™, n.d.). Professional development in Lindamood-Bell™ for all teachers at each school had been or was currently being conducted during the time of this study. In the regular classrooms, teachers provide 30 minutes a day of supplemental instruction using “pure form” Lindamood-Bell™ to teach vowel sounds and letters, spelling rules, symbol imagery, and/or visualizing and verbalizing strategies. In addition, regular classroom teachers encourage use of Lindamood-Bell™ processes (e.g., symbol imagery) when students are completing spelling and vocabulary exercises in the McMillan-McGraw-Hill workbooks.

In District B, Guided Reading was adopted district-wide as the main instructional program for teaching reading in the elementary schools. The purpose of Guided Reading is to help children learn how to use reading strategies independently and successfully. Fountas and Pinnel (1997) define guided reading as the “context in which a teacher supports each reader’s development of effective strategies for processing novel texts at increasingly challenging levels of difficulty” (p. 2). The teacher’s guidance and support is embedded in the task of reading so children are able to use and develop strategies on-the-run while enjoying the story and constructing meaning. This takes place during small-group time involving children who are able to read texts of similar levels of difficulty. Guided reading also involves ongoing observation and assessment that informs the teacher’s selection of texts, interactions with individual students, and decisions about what teaching points to present about phonics, sentence structure, and other print and language concepts in the small group session. In addition to district-wide adoption of guided reading, schools are staffed with trained Reading Recovery teachers to provide early intervention to first graders who are identified through testing as at-risk for reading difficulties.

DATA COLLECTION INSTRUMENTS AND PROCEDURES

Teacher Survey

In both sites, the teacher survey required teachers to provide demographic information and answer questions for each of the different component studies. These include questions about their professional development experiences, allocation of time as a resource, and practices in language arts and mathematics. The survey was simplified for use in District B based on findings from District A, including making the language arts and mathematics practice items parallel and reducing the number of these items. In addition, questions about practices found in prior research to be school-level factors associated with performance as opposed to classroom-specific factors (e.g., number of minutes each day that students read on their own) were taken off the teacher survey and included instead in the teacher interview. Finally, some practice items (e.g., use of tutors and community volunteers) were added to the teacher survey for District B based on interim reviews of research on effective practices for helping at-risk students meet standards (Barley et al., 2002). Teachers responded to most items about practices on the survey with quantities (e.g., number of weeks), “yes”/“no” responses, or on a 4- or 5-point Likert scale representing frequency or emphasis.

Teacher Interview

The present study focused on responses to three interview questions, teachers were asked (a) to tell the story of their school’s efforts to improve student learning and to identify what worked best, (b) how many minutes daily students spend reading independently, and (c) how they match books to individual students.

Principals at each school, or a site coordinator identified by the principal, were contacted to schedule and administer the teacher survey. Following informed consent, teachers completed the surveys during a designated faculty meeting time. Site visits were also scheduled through principals for conducting interviews with teachers and teacher leaders at each school. At District A, surveys and interviews were completed May 2001. At District B, surveys and interviews were completed May 2002.

DATA ANALYSES

Within each district, comparisons between schools were conducted across different levels of school-wide performance while holding level of need constant. Thus, for example, high-performing, extremely high-needs schools were compared to low-performing, extremely high-needs schools. Comparisons were conducted to examine (1) content differences in the interview responses and (2) statistically significant differences in practice emphases and frequencies of use.

RESULTS

Results are presented in relation to each of the five school practices examined in this study. In each subsection, data sources and analyses are identified, followed by a summary of results.

USE OF STANDARDS AS LEARNING GOALS AND MAKING READING A PRIORITY

In the interview, participants were asked to tell about efforts to improve learning in their school and to identify what worked best. Responses to these two questions were analyzed using a constant comparison process to determine whether use of standards as learning goals or making reading a priority distinguished high-performing from low-performing schools.

In District A, all four teachers interviewed at the high-performing, extremely high-needs school consistently told the same story: Low scores on the state assessment made the faculty realize that change was needed, brought the faculty together as a team, and prompted their decision to “get rid of the fluff” and focus on reading and math. The story as told by the Lindamood Bell™ Facilitator/ESL Coordinator is quoted below:

When we got the lowest scores on the state assessment, I think one of the lowest in the state, we just said to ourselves, close the doors. We went into the library one day, all the teachers got together and we just thought, ‘This has got to stop.’ We’ve got to pull together, we’ve got to stop thematic units. We’re going to have to stop doing field trips — all the fun, fluffy stuff. And go back to straight grades, no more multi-aging, go back to straight grades, and content focus on reading and math, mostly. That’s what we decided — focus was to be on literacy.

Three of these teachers were asked what worked best to improve student learning. One teacher said what worked best was “unity at the school, all the teachers are on the same page in terms of discipline, academics, everything. Students now face consistency with consequences for their behavior.” Two of the three responses identified leadership as key. One teacher said what worked best was “outstanding principal that sets high expectations for teachers and students.” The other said what worked best was “just having a new principal. I think he has totally got everybody in shape. He got the parents in shape, the kids in shape.” She also indicated that this principal based decisions about curriculum on research evidence. “He will go for it [an innovation] if it has proven successful — if it’s been researched because he always asks that. Has it been researched? Has it been successful? And if it hasn’t, he usually says, “No we need to stick to our curriculum.”

Standards was mentioned once in stories of change at the high-performing, extremely high-needs school. As indicated in the following statement, the move to standards-based teaching and the resulting success brought about stronger commitment to new practices and teamwork. The Lindamood Bell™ Facilitator/ESL Coordinator reported:

We started teaching strictly to standards and everybody just, I mean, the first year our scores went up — and it was without Lindamood Bell™ — that’s when we were all, every teacher, just so motivated and excited because we knew that what we were doing was working when we would just focus on standards and curriculum.

Thus, in District A, the story of change and improvement in the high-performing, extremely high-needs school involved a wake-up call from state assessment results, teaming, and a focus on standards and curriculum in literacy. In contrast to this consistent story, faculty at the low-performing, high-needs school told two different stories. One story told by three respondents was about implementing Lindamood Bell™, greater coherence in curriculum, higher expectations and leadership.. The other story told by two respondents was about becoming more data-oriented. The first story is presented below. This teacher reported that when she arrived 5 years earlier, she had no reading curriculum. She added,

Implementation of Lindamood Bell provided a common language among all of us. We don’t each teach differently; common teaching is a big plus and added, ‘We got a new series 3 years ago and that helped.’

Now kids are on task using learning times to learn due to expectations. Teachers have a definite goal. The leadership had a lot to do with it. The principal had a vision and was capable of getting staff on board.

Lindamood Bell program has been a big boost. In this school we have high expectations. We’ve raised the bar.

The two other respondents told a different story about becoming more data-oriented:

In the last two or three years, we’ve become more data-oriented. When the principal came, we became more organized. We articulate with one another. We pay attention to assessments, look at them prior to assessments to determine focus. Reading and writing go hand in hand; 6-trait writing; compare students’ work, compare rubrics.

My first couple of years here, I was kind of shocked because there wasn’t a lot of testing of what students were or were not able to do in house. We didn’t do quarterly tests. Those were implemented a few years ago, and I think that’s helped focus teachers and students to do well. Now we’re more data driven in the district. We do the quarterly report, we do an item analysis to look for strengths and weaknesses of students. And then we have to come up with a remediation plan to deal with those particular weak areas.

In none of the five stories, however, is the content of the focus or vision identified. Faculty had a common language, “a definite goal,” and the principal had a vision, but no one identified the goal. One

respondent implied that helping students do well on quarterly tests was the focus of their improvement efforts. In contrast, three of the four respondents from the high-performing school clearly identified the focus at their school as a focus on “academics,” “reading, writing and math,” and “literacy.”

In District B, focusing on academic learning appeared to distinguish high and low-performing schools. In District B, teacher stories of change and improvement from the high-performing, high-needs schools told of creating an orderly school, improving academic learning and test scores, engaging in professional development in language arts, and using the school improvement process. Five of the six teachers interviewed at the high-performing and moving, high-needs schools told of changes in reading and writing and none told of changes in mathematics. To illustrate, two of these stories are presented below:

Staff had written grant 2 years ago to pay for training — working in communication arts, writing in particular — all staff do PD during the summer and throughout school year — mostly on teachers time — to do Writers Workshop and Write Traits — 5 days per year for 2 years — goal is to raise test scores.

Improvement plan includes reading and writing, Pre-k had *Reading to be Ready* grant and guided reading practices, 4–6 leveled reading, writers workshop, 6-trait writing, step up to writing program implemented in January.

In contrast, teachers from the low-performing, high-needs schools in District B told of changes across the content areas, all at once or shifting content focus from one year to the next. When they mentioned changes in language arts, they also reported changes in mathematics. Teachers from two different low-performing, high-needs schools told of shifting the content focus of their professional development each year, for example, “Got monies for PD, coaching days, enhance libraries, writers workshop. Year 1 focused on writing, year 2 math and year 3 reading.”

Also in District B, adopting a constructivist philosophy was reported by teachers in two of the five low-performing, high-needs schools, but not mentioned once by teachers in the three high-performing or moving, high-needs schools. Below is the story of change and improvement from two teachers, each from one of the low-performing, extremely high-needs schools. Their stories illustrate the emphasis on a constructivist philosophy and child-centered practices and suggest a departure from foundational development:

The principal changed the philosophy in the school to constructivist, focus on what students know. Project Construct leads to a lot of investigative math, also do Guided Reading, moved to Accelerated School, last year added Reading Recovery.

Child development grant — three years, inservice training. Believe it was successful; not sure if it was school-wide. Class meetings for students to give them a voice, gives opportunity for problem solving, issues can be discussed. A lot of behavior social issues dealt with. . . . teaching values through literacy.

In contrast, at the high-performing, extremely high and high-needs schools, focus was on how to make student learning better, not on what students already know or how literature addresses values. It is important to note, however, that learning academics in the high-performing schools was never to the exclusion of creating and maintaining an orderly environment. The first story of change and improvement below is from a teacher at one of the high-performing, extremely high-needs schools, and the second explanation is from a teacher at the moving, high-needs school:

We're focused on the same thing. Love and Logic provide consistent discipline. We're supportive of each other. Also grant for K-3 *Reading to be Ready* and Writing Traits.

Six to seven years ago we became an Accelerated school, focus on the child, how to make learning better.

To summarize, results of data analyses in this section addressed the question of whether standards were used as learning goals and reading was a priority in high-performing, high-needs schools. Contrasts between stories from high-performing and low-performing, high-need schools revealed that high performance was associated with a focus on developing foundational literacy. In the District A high performing schools, foundational literacy was defined by content standards in reading and mathematics. In the District B higher performing schools, foundational literacy was defined by professional development and early intervention programs in reading and writing. .. In District A, feedback in the form of state assessment results in one high-performing school was the trigger that made faculty realize change was needed. One Lindamood Bell™ Facilitator/ESL Coordinator reported that her faculty decided to focus on reading and mathematics and start teaching strictly to the standards. Generally, however, teachers did not identify standards as learning goals.

The focus on improving literacy was not solely on academic focus. The high-performing schools in both districts had worked to create orderly environments. High-performing schools concurrently adopted discipline models (e.g., Love and Logic) and had principals who set high expectations for both teachers and students and got everyone on the same page in terms of discipline and academics. In District B, in contrast to this emphasis on an orderly learning environment, some of the low-performing schools appeared to emphasize values clarification and giving students a voice. In District B, two of the low-performing schools had adopted a constructivist philosophy, but none of the high-performing schools had adopted this philosophy.

Teachers also said that leadership was key to their school's improvement. Direction from leadership, however, varied with school-wide performance. Shifting the school philosophy to constructivism and having a vision that was not easily named by staff were two examples of leadership associated low school-wide performance. Setting high expectations for teachers and students and sticking to the curriculum were examples of leadership associated with high school-wide performance. These patterns are intriguing and suggestive; yet, at this point in our research, they are only preliminary. Continued research is needed to identify school practices truly associated with raising student achievement rather than random fluctuations. Limitations of the present findings and plans for future research are discussed further after summarizing findings from the survey data on daily reading, flexible grouping, other practices for individualizing, and test preparations.

DAILY READING

Prior research found increased instructional reading time associated with higher student performance (Education Trust, 1999; Taylor et al., 2000). In the present study in District A, teachers were asked on the survey, “During the school day, how many minutes are scheduled for students to read on their own?” Although teachers in the higher performing schools reported more minutes of daily reading ($M = 35.7$ minutes for the high-performing, extremely high-needs school and $M = 27.5$ minutes for the high-performing, high-needs schools), their averages were not significantly greater than the average in the lower performing schools ($M = 22$ minutes for the low-performing, extremely high-needs schools).

In District B, the amount-of-daily-reading question was included in the interview. When examining extremely high-need schools (more than 75 percent free or reduced-price lunch), amount-of-daily reading did not distinguish schools by level of performance. Teachers at the high-performing and low-performing, extremely high-needs schools reported similar daily amounts of reading of 24 and 29 minutes, respectively. Comparisons between high-needs schools, however, were more consistent with prior research. Teachers at the moving, high-needs school reported 30 minutes daily reading compared to a reported average of 22 minutes daily reading from teachers at the low-performing, high-needs schools.

Although teachers in the present study in both districts reported more minutes of daily reading for students than the average of 19 minutes of daily reading found in the least effective schools in the Taylor et al. (2000) study, overall, the amount of daily reading did not distinguish between levels of school-wide performance. Thus, in contrast to earlier findings, the present findings indicate that amount of daily reading time was not significantly associated with school-wide performance.

In District A, teachers were asked in the survey what book leveling systems they used. Overall, 80 percent of teachers reported using their basal/textbook system. In addition, however, reported use of Accelerated Reader® varied with school-wide performance. As can be seen in Figure 1, more than 85 percent of teachers in the two high-performing categories of schools reported using Accelerated Reader®. In contrast, only 20 percent of the teachers in the low-performing, extremely high-needs schools reported using Accelerated Reader®. This pattern of responses was significantly different than expected by chance ($\chi^2(2, N = 35) = 17.58, p = .000$). Accelerated Reader® provides a way to match individual students’ level of reading proficiency to appropriately difficult text. In addition, it provides incentives to students to read a lot and offers practice and feedback answering comprehension questions. Such an instructional resource may be particularly fitting for schools using an approach such as Lindamood Bell™, which does not, as does Guided Reading, include a system for matching difficulty of texts to individual’s reading proficiency.

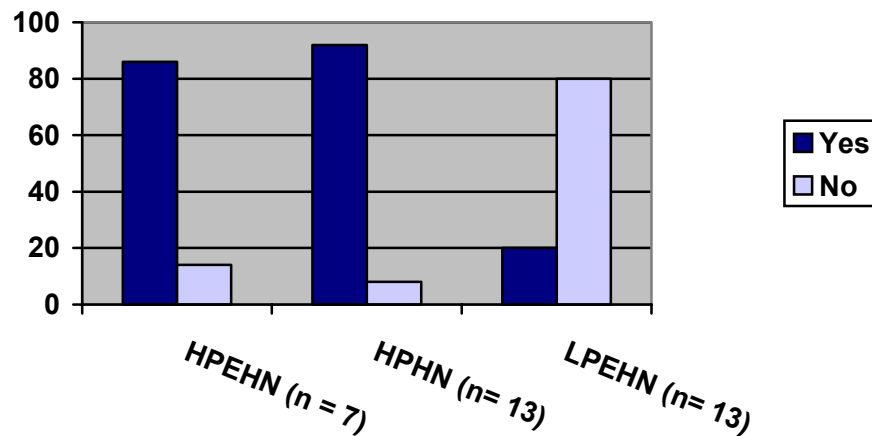


Figure 1. Use of Accelerated Reader® in District A (percentage responses)

In District B, one of the interview questions asked teachers how they matched books to individual students. No differences in responses were found in relation to different levels of school performance. Teachers across all the schools in District B said they used either running records and assessments (i.e., the Developmental Reading Assessment (Beaver, 2001) and the Scholastic Reading Inventory (SRI Interactive, n.d.), or the Guided Reading teachers’ assessment and their classroom and school sets of leveled books.

FLEXIBLE ABILITY GROUPING FOR INSTRUCTION

To examine flexible use of ability grouping, the survey in both districts asked how frequently same-achievement groups were reconfigured. In District A, there were no significant differences. Teachers, on average across school categories, reported reconfiguring same-achievement groups every five to six weeks. Table A-1 in Appendix A shows the mean number of weeks same-achievement groups were reconfigured across school categories in District A. In this district, ability grouping and regrouping for instruction in reading appears to occur outside classrooms. Literacy coordinators at each school assess and identify struggling students and then pull them out for intensive Lindamood Bell™ instruction. These coordinators, however, work closely with classroom teachers, sharing high expectations and responsibility for student learning. When probed about grouping practices in the interview, the Lindamood Bell™ Facilitator/ESL Coordinator at the high-performing, extremely high-needs school reported:

“That’s one strong thing about this staff is that we all communicate. All let each other know exactly what is going on with the students. We try to keep an open mind about them and try to get them in as many programs as we can and get them out as fast as we can. We have to go by the classroom work. If they can do that. . . if they can relate what they’re learning to the classroom in literacy or math, science or social studies . . . in the core curriculum, then we go through and we say, “This person’s ready.” Classroom

teachers will say, ‘You know what, Bobby’s been in Lindamood Bell™ half a year, he’s doing awesome in class. I think it’s time to test him out so he’ll be in class more.’”

In District B, the frequency with which same-achievement groups were reconfigured was significantly related to school-wide performance. As can be seen in Table 3, on average teachers in the higher performing schools (HPEHN and moving HN schools) reported reconfiguring same-achievement groups about every three weeks, whereas teachers in the low-performing schools (LPEHN and LPHN schools) reported reconfiguring same-achievement groups about every five weeks. For the extremely high-needs schools, the difference between high- and low-performing schools was significant ($t(27.46) = 2.03, p = .05$). For the high-needs schools, the difference was marginally significant ($t(12.09) = 2.06, p = .06$).

Table 3. Flexible Grouping: Number of Weeks Same-Achievement Groups Are Reconfigured in District B High- and Low-performing Schools

School Category by Performance and Need	Number of Teachers (and Schools)	Average Number of Weeks (standard deviation) to Reconfigure Same-Achievement Groups
High Performing Extremely High Need (HPEHN)	12 (2)	2.88 (1.89)
Moving High Need (moving HN)	7 (1)	2.71 (2.49)
Low Performing Extremely High Need (LPEHN)	21 (3)	4.5 (3.32)
Low Performing High Need (LPHN)	25 (3)	5.06 (3.19)
All District B Sample	65 (9)	4.22 (2.99)

Overall, present results related to flexible grouping strategies are consistent with prior research on effective school practices. In District A, faculty in the highest performing school try to place students in as many support programs as they can and “get them out as fast” as they can. In District B, reconfiguring same-achievement groups in reading/language arts occurred more frequently in high-performing schools than in low-performing schools (every three weeks compared to every five weeks).

OTHER PRACTICES FOR INDIVIDUALIZING INSTRUCTION

In District B, the survey asked teachers to indicate how frequently they used different practices to individualize instruction in reading: use of paraprofessionals, pull-out programs, use of pull-in specialists, small groups, peer or cross-age tutoring, centers (e.g., listening centers, computer time), and use of community volunteers. One practice, use of community volunteers, differed significantly in association with school-wide performance.

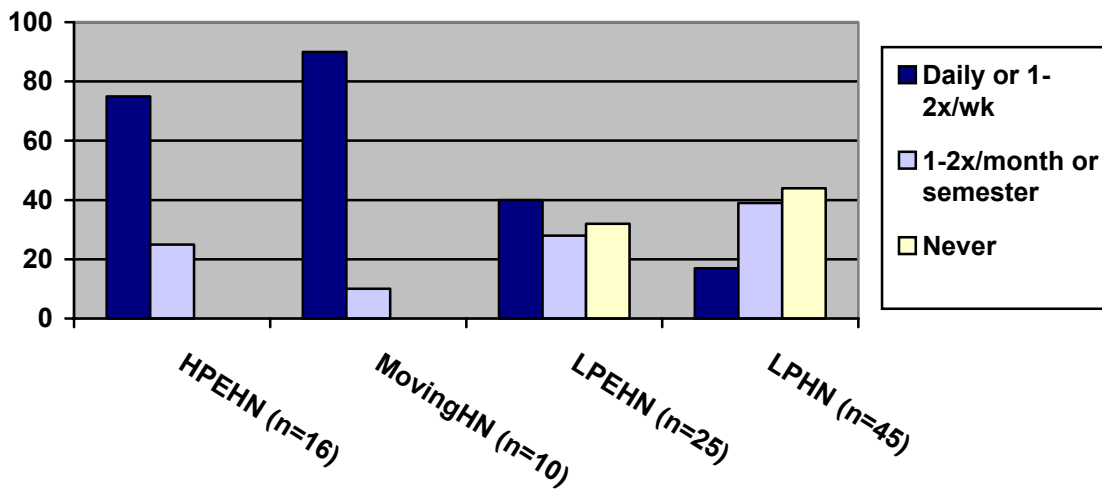


Figure 2. Frequency of Use of Community Volunteers Reported by K–4 Teachers in District B Schools (Percentage Responses)

Figure 2 shows use of community volunteers in reading to individualize instruction. Although over 70 percent of teachers in the higher performing schools (HPEHN and moving HN schools) reported using community volunteers daily or 1–2 times per week, only 40 percent or less in the lower performing schools (LPEHN and LPHN schools) did so. Moreover, none of the teachers in the higher performing schools reported “never” using community volunteers, whereas about a third of the teachers in the lower performing schools reported doing so.

Holding level of need constant, both comparisons showed that frequency of use of community volunteer was significantly associated with school-wide performance (HPEHN compared to LPEHN schools: $\chi^2(2, N = 41) = 7.38, p = .025$; moving HN compared to LPHN schools: $\chi^2 = (2, N = 55) = 24.45, p = .000$). Thus, District B survey results indicate that use of community volunteers, more than within classroom, teacher-sensitive practices, such as setting up and managing centers and using paraprofessionals, distinguishes high-performing from low-performing, high-needs schools.

TEST PREPARATION

Finally, to examine the possibility that high-performing schools overemphasize test preparation, the survey included items asking teachers about test preparation for state assessments in reading/language arts. One item asked how many hours were spent in test preparation. There were no significant differences across school categories in average number of test preparation hours for reading/language arts in either District A or District B. Mean number of test preparation hours by school category is provided in Appendix B. In their write-in comments, instead of reporting number of hours, teachers frequently reported that test preparation was “ongoing,” “all year,” or “daily.”

Another item asked directly when test preparation occurred. Provided response options included “just before the test” “regularly all the year,” or “no test preparation.” In neither District A or B were there significant differences between schools with different levels of school-wide performance. In all three categories (high-performing, extremely high-needs; high-performing, high-needs; and low-performing, high-needs schools), 60 percent or more of teachers reported “regularly all the year.”

To summarize, in both districts, the majority of teachers across all school types reported that preparation for state assessments occurred regularly, throughout the year. The non-significant findings for test preparation suggest that test preparation practices are not sensitive to school-level factors, nor reflective of variation in school-wide performance on state assessments.

DISCUSSION

In this study, relationships were examined between school-wide performance on standards-based assessments and practices shown to be effective in prior research. Prior research on beat-the-odds schools was conducted previous to or during the early implementation of standards-based reform (Briggs & Thomas, 1997; Heistad, 1997; Taylor et al., 2000). The present study was designed to examine whether previously identified school-level practices, such as a focus on reading and reading achievement, ample daily time for children to engage in reading, and flexible grouping strategies would also be associated with high performance in a standards-based environment.

Interview results indicated that a focus on academic learning goals, teaching strictly to standards, and creating orderly school environments characterized high-performing schools serving high proportions of students from low-income homes. These findings are consistent with other reports that top-performing, high-poverty schools use standards extensively to design curriculum and instruction (Education Trust, 1999). In the present study, the focus and high performance appeared to create excitement, motivation, and a shared sense of efficacy, accomplishment, and mutual support among teachers (“we know what we’re doing works,” “we’re supportive of each other”). Faculty and school leaders gave educational legitimacy to these academic goals and perceived them as attainable by all students. In District B, school-wide adoption of constructivist, child-centered approaches and shifting professional development from one content area to another each year were associated with low school-wide performance. These findings do not justify continuation of such practices without a more strict alignment to standards.

Academic focus and high performance was *not* associated with excessive test preparation. School practices that did distinguish high-performing from low-performing, high-needs schools were flexible ability grouping strategies, use of Accelerated Reader® as an instructional resource supplying leveled books and incentives for student reading, and use of community volunteers to individualize instruction in reading. In District A, , teachers in high-performing schools widely reported using Accelerated Reader®, whereas teachers in low-performing schools did not. Whether this finding reflects simple differences in material resources and/ differences in human capacities principles knowledge about how and why to use leveled books and incentives is an issue for future research. In District B, flexible ability grouping, as measured by frequency of reconfiguring same-achievement groups, consistently distinguished high-performing from low-performing schools. Further, in District B, more frequent use of community volunteers to individualize instruction was significantly associated with higher school-wide performance.

The majority of teachers in the highest performing schools, at both the extremely and high-needs schools, reported, in reading, using community volunteers to individualize instruction daily or 1–2 times per week. These findings are consistent with other research on the efficacy of using community volunteers for helping at-risk students develop proficiency in reading. Use of community volunteers in helping at-risk students improve their reading achievement is as effective as use of professional tutors (Snow, 2002). In particular, Baker, Gersten, and Keating (2000) found that two consecutive years of tutoring from community volunteers in first and second grade resulted in greater growth rates in beginning reading for at-risk students compared to non-tutored at-risk students. An accelerated rate of development in these early years may be especially critical for at-risk students to be able to meet proficiency standards on state assessments in third or fourth grade.

In conclusion, the findings confirm and extend prior findings about the importance of focus and instructional coherence for academic success in schools serving high proportions of children from low-income homes. Instructional coherence around legitimate educational goals, however, does not guarantee high levels of academic performance school-wide. In District A, teachers in one low-performing school claimed to have instructional coherence, yet the school's performance was still low. Some schools may need to pay closer attention and respond successfully to challenging context factors that were not addressed in the present study. These challenges, such as language and other requisite skills and knowledge and factors related to parent levels of education, need to be addressed in future research.

The present findings must be interpreted in light of the limitations of the study. The sample sizes for both schools and teachers in the performance and need categories were often small. Ongoing research with other and larger samples is needed to verify or dispute the reliability of the present findings. Second, the findings are limited to analyses of interview and survey data, and thus, are suspect to biases due to respondent motivation to provide socially acceptable responses. Reducing such biases will be addressed in instrument revisions and added controls as McREL researchers continue to refine methodology for studying HPHN schools. Third, the present findings are based on reports of school improvement efforts that occurred over relatively short periods of time. Other research shows that five to seven years of implementation are needed before school reforms reliably raise student achievement (Borman, Hewes, Rachuba, & Brown, 2002; Haynes, 1998). Thus, our present findings, distinguishing high- and low-performing schools, may be premature.

The stability level of performance we have assigned each school remains uncertain. Over the next couple of years, the performance trajectories continue upward, go downward, or stay on the same course. Continued research is needed to develop confidence around findings that identify school practices truly associated with raising student achievement rather than random fluctuations.

Finally, the naturalistic design of the study prevents making causal conclusions. For example, even though there was a clear and strong association between school-wide performance and use of community volunteers in the present study, rival explanations could account for the differences in school-wide performance, such as, for example, factors related to level of parent education. Although the efficacy of using community volunteers is supported by high-quality quasi-experimental research (Baker et al., 2000; Elbaum et al., 2000), neither the present or cited research supports that claim that use of community volunteers causes improved reading achievement. The research present in combination with

cited prior research supports a recommendation to use community volunteers in reading. The success of the implementation, however, will depend on (1) local educators' understanding of the principles of this practice and (2) how they use their principled knowledge to make community volunteering effective in their unique context.

The potential for standards and related assessment and accountability reforms to spur school improvements by providing focus, incentives, and coherence was realized in one District A school. The majority of students in this school, at-risk for school difficulties related to poverty, performed at or above proficiency on tests requiring them to read unfamiliar passages and apply reasoning skills to summarize main ideas, identify problems and solutions, and draw and support conclusions and inferences. For their teachers, the successes were exciting, motivating, and built among them a collective sense of accomplishment and support. It is with such teacher dispositions that continuing success for children is made possible. The present study and similar beat-the-odds studies provide ideas to faculty and school leaders about which practices and approaches might be worth adopting or dropping to bring about success for greater numbers of students.

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APPENDIX A

Table A-1. District A Schools by Category Showing Average Number of Weeks to Reconfigure Same-Achievement Groups During Reading/Language Arts Instruction

School Category by Performance and Need	Number Teachers (and Schools)	Average # weeks (standard deviation) to Reconfigure Same-Achievement Group
HPENH	3 (1)	4.33 (4.04)
HPHN	14 (3)	6.07 (4.73)
LPEHN	13 (2)	6 (2.97)
Overall	30 (6)	5.87 (3.88)

APPENDIX B

Table B-1. Mean Number of Test Preparation Hours in Reading in District A

School Category by Performance and Need	Number of Teachers (and Schools)	Hours of Test Preparation in Reading (mean and standard deviation)
HPENH	5 (1)	13.6 (19.42)
HPHN	10 (3)	735 (997)
LPEHN	3 (2)	30 (26.46)
Total	18 (6)	417.22 (812.6)

Table B-2. Mean Number of Test Preparation Hours in Reading in District B

School Category by Performance and Need	Number of Teachers (and Schools)	Hours of Test Preparation in Reading (mean and standard deviation)
HPENH	12 (2)	101.21 (115.81)
Moving HN	4 (1)	50.5 (70.24)
LPEHN	24 (3)	79.88 (120.03)
LPHN	28 (3)	26.5 (26.05)
Total	68 (9)	59.95 (92.53)