Inside the Black Box of High-Performing High-Poverty Schools

A report from the
Prichard Committee for Academic Excellence
Lexington, Kentucky

By Patricia J. Kannapel and Stephen K. Clements
With Diana Taylor and Terry Hibpshman

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High academic achievement by students in high-poverty schools is generally not the case in Kentucky or throughout the nation. But some schools do succeed at helping all their students achieve, regardless of their background or socioeconomic conditions. This study, conducted for the Prichard Committee for Academic Excellence with funding from the Ford Foundation, looks at a group of these high-poverty, high-performing schools in Kentucky to determine how they break the usual pattern of low achievement. It is hoped that the lessons from these exceptional schools will be helpful for other educators who face similar challenges.
Acknowledgments

Staff at the Kentucky Department of Education were instrumental in helping us get this study off the ground; we wish to acknowledge specifically the assistance of Gene Wilhoit, Pat Hurt, Lou Spencer, and Steve Schenck. Audit team leaders Martha Cessna, Pearl Jean Hughes, Pat Marshall, Joe McCorkle, and Jack Musgrave organized and performed their work with great professionalism and skill. Audit team members, too numerous to mention here, also contributed enormously to this project. Superintendents, principals, and staff at the study schools welcomed us into their schools and facilitated our work at a very challenging time of year. Consultants Beverly Moore and Joan Mazur provided valuable assistance in analyzing data and formulating initial findings. Peer review panel members Jane David, Melissa Evans-Andris, and Art Thacker gave valuable input into research design and the final report. Finally, we would like to thank the staff of the Prichard Committee for supporting this work, including Robert F. Sexton, Cindy Heine, Pam Shepherd, and Michelle Whitaker.

Researchers

Patricia J. Kannapel is a consultant in educational research and evaluation specializing in the study of school reform and school improvement programs in Kentucky and across the United States. She co-directed a longitudinal study of the implementation of the Kentucky Education Reform Act in four rural school districts for AEL, Inc. She is conducting ongoing research for the Consortium for Policy Research in Education at the University of Pennsylvania, and for the Partnership for Kentucky Schools (Lexington, KY), including research on professional development and state intervention in low-performing schools. Kannapel has a M.Ed from the University of Louisville and a Ph.D in Anthropology from the University of Kentucky.

Stephen Clements helps implement a federal Teacher Quality Enhancement Grant for Kentucky’s Education Professional Standards Board in Frankfort. He is also affiliated with the University of Kentucky’s Department of Educational Policy Studies and Evaluation, where he was a regular graduate faculty member from 1998 to 2003. Clements’ academic background is in political science; he received an MA (1991) and Ph.D (1998) in that field from the University of Chicago. He has authored or co-authored numerous publications on Kentucky’s teacher workforce, school accountability and curriculum changes, and other topics.

Support provided by:

Diana Taylor, a writer, editor, and consultant who specializes in public policy issues.

Terry Hibpshman, a researcher with Kentucky’s Education Professional Standards Board with many years of experience analyzing data and conducting research in the areas of teacher training, teacher workforce participation, educational program performance, and educational measurement.
Executive Summary

Although public schools are responsible for educating all students, they historically have had greater success educating middle-to-upper income and white students than poor and minority students.

Nearly all the worst-performing schools in Kentucky and across the nation are high-poverty schools. But there are also striking exceptions to the pattern of low income/low performance. There are enough schools that defy the trend to prove that the background of the student body does not have to determine achievement results.

The research detailed in the following pages adds to growing evidence on high-performing, high-poverty schools by looking closely at the practices of a small number of such schools across Kentucky. Using the standardized school audit instrument developed by the state Department of Education, researchers sought to answer two questions:

1. What common characteristics that seem to contribute to high student performance are shared by a set of high-performing, high-poverty schools?

2. What characteristics and practices differentiate a set of high-performing, high-poverty schools with a small achievement gap from similar high-poverty schools that are neither high-performing nor have a small achievement gap?

The schools were selected based on the following criteria:

- 50 percent or more of students on free/reduced lunch
- State accountability index (a combination of academic and non-academic indicators) of 80 or higher in 2003
- State academic index (a composite of academic test scores) of 75 or higher for minority students and students on free/reduced lunch
- Progress on the state test over time
- An achievement gap of fewer than 15 points between low and middle income students and between white and African American students
- A range of types and locations of schools, such as urban/rural and geographic areas

The audits were conducted by state-trained teams that spent a week in each of the schools and prepared a report on their findings. The project researchers visited the study schools, interviewed the audit team members after the audits were completed, and conducted follow-up interviews with the school principals. In addition, audit results for the eight study schools were compared to audit results for eight low-performing schools that previously had been audited by the state. Findings in this report are based on the audit results and comparisons as well as what the researchers and audit team members observed during their school visits and on what the principals said during the interviews.

Of 26 eligible schools, eight elementary schools were chosen for the study:

- Brodhead Elementary, Rockcastle County
- Cuba Elementary, Graves County
- Drakesboro Consolidated Elementary, Muhlenberg County
- Lincoln Elementary, Jefferson County
- Lost River Elementary, Warren County
- McFerran Preparatory Academy, Jefferson County
- Morgan Elementary, Paducah Independent
- Oak Grove Elementary, Whitley County
The Findings

Audit results and comparisons. The eight study schools generally received high ratings on the audit, scoring highest in the areas of school culture and student, family, and community support. When audit results were compared to those of low-performing, high-poverty schools, the eight study schools scored significantly higher on:

- Review and alignment of curriculum
- Individual student assessment and instruction tailored to individual student needs
- Caring, nurturing environment of high expectations for students
- Ongoing professional development for staff that was connected to student achievement data
- Efficient use of resources and instructional time

Common characteristics. The eight schools shared a number of characteristics, including:

- High expectations that were communicated in concrete ways. Principals held high expectations for faculty and staff, who held high expectations for themselves and the students. There was a strong belief that all students could succeed academically and that faculty and staff were capable of making this happen.

- Relationships. The caring, nurturing atmosphere in each of the schools related closely to high expectations. Respectful relationships were observed among adults, between adults and students, and among students.

- Academic, instructional focus. All eight schools had a strong focus on academics, instruction, and student learning.

- Student assessment. All of the schools paid close attention to their performance on state assessments, but the results from the state test were just a starting point. Each school had a system in place to regularly assess the progress of individual students and to plan or change instruction to meet the students’ needs.

- Leadership and decision-making. Leadership styles varied greatly at the schools, but all shared a collaborative decision-making process. None of the schools had an authoritarian or dictatorial leader, and faculty and staff were involved in making most key decisions.

- Faculty work ethic and morale. The faculty and staff worked very hard to meet their students’ needs, regularly analyzing data on individual students and planning appropriate instruction or interventions. They helped families and students find transportation, clothing, health care, and other services, and they worked after school and on weekends to provide help with tutoring, portfolios, assessment preparation, or parent programs. They did this work with enthusiasm and dedication; there were no reports of overload or teacher burnout.

- Teacher recruitment, hiring, and assignment. A contributing factor to the high morale and overall success of the schools was the careful and intentional manner in which teachers were recruited, hired, and assigned.

The research also turned up some unexpected findings. These included:

- Leadership. The audits of the eight high-performing schools showed little difference
in the area of leadership from state-conducted audits of low-performing schools.

- **Planning and school-based decision making.** Although the eight schools performed well overall on the audit, they did less well following the state-recommended planning process (known as the Comprehensive School Improvement Plan) and tended to score lower on implementing school-based decision making.

- **Technology.** Most of the schools did not use technology as effectively as they might have, either in the classroom or for other purposes.

- **District role.** The role played by the schools’ districts was quite varied, and, in many cases, the district influence was less direct than had been anticipated.

### Observations

The small number of schools involved in the study, and the fact that they were examined at a particular point in time, precludes the development of firm recommendations for policymakers and practitioners who want to accelerate the learning of all students. In addition, since only elementary schools were included in the study, it would be difficult to make generalizations about all schools. However, some observations are worthy of further discussion:

- **Individual student assessment.** In addition to analyzing state test scores for the entire school, faculty regularly assessed the progress of each student and planned instruction accordingly.

- **Choosing, cultivating, and using personnel.** The study schools used all the resources and ingenuity available to attract qualified applicants for vacancies or to develop the personnel they had in the district or the school. A critical characteristic that school or district leaders looked for or cultivated in personnel was the willingness to work with and believe in all students. School leaders also deployed teachers based on their instructional styles and strengths as best fit their school’s needs.

- **Dealing with the poverty issue.** Faculty did not make an issue of the fact that many of their students were “in poverty.” Disadvantaged students appeared to be treated in fundamentally similar ways as advantaged students.

- **Alignment of curriculum, instruction, and assessment.** The entire school community appeared to be on the same page with regard to what was being taught, what performance expectations were, and where each teacher’s focus fit into the broader curriculum of the school. Teaching was part of a larger collaborative effort, not a solitary activity involving individuals who decided on their own what to teach and when to teach it.

Despite the absence of specific policy recommendations based on the findings, researchers involved in this project believe that policymakers should focus their discussions on how best to replicate the characteristics of the study schools in elementary schools throughout Kentucky.
Introduction

Public schools are responsible for educating all students. Yet they have always been much more successful educating middle-to-upper income white students than poor and minority students. This “achievement gap” is visible in national statistics, and is also evident across Kentucky. (Appendix A, located in the companion document, includes a further discussion of achievement gaps.)

The pattern of low income/low performance has always had exceptions: schools where most minority and low-income students perform at high levels. Some 20 years ago, a body of research on effective schools documented what such schools were doing that contributed to their success. More recent research has also tried to identify characteristics of “high-flying schools”—high-poverty and high-minority schools that have high student performance. In Kentucky, the Kentucky Association of School Councils has used state test results to identify high-performing, high-poverty schools and schools with small minority achievement gaps. It is true that nearly all the worst-performing schools in Kentucky and across the nation are high-poverty schools. However, there are enough schools that defy this trend to prove that the background of the student body does not have to determine achievement results.

This research adds to growing evidence on high-performing, high-poverty schools by looking closely at the practices of a small number of such schools across Kentucky. The schools were examined using a standardized school audit instrument developed by the Kentucky Department of Education. Kentucky’s scholastic audit is typically conducted in low-performing schools that fail to meet state academic goals. This study used the same process to scrutinize a small set of high-performing, high-poverty schools across the Commonwealth. We supplemented the audits with additional interviews and document analysis. Results of the audits were compared with state-conducted audits on low-performing, high-poverty schools. In this way, we hoped to identify systemically how the two kinds of schools differed and to draw some conclusions about practices that are effective in helping all students succeed.
Research Design

Neither Kentucky nor any other state routinely accumulates enough data about what takes place in classrooms, schools, districts, and communities to explain why different groups of students perform differently. Statistics on such things as per pupil expenditures, teacher certification levels, attendance, assessment results, and free and reduced lunch percentages reveal useful information about schools and districts. But they do not capture what schools may be doing in terms of curriculum, instruction, deployment of teachers, leadership, the elements of a learning environment, and other features that might make a significant difference in overall student performance.

The Kentucky Department of Education has worked since the 1990 passage of the Kentucky Education Reform Act to develop a process for intervening in schools with consistently low academic performance. This work, over time, led to the development of a scholastic audit process in which trained teams from outside a school district spend an intensive week at a school, use a systematic process to identify weaknesses at low-performing schools, and make recommendations for improvement. The auditing process, which began in 2000, has served as the basis for important school improvement planning in many Kentucky schools. (A further discussion of the Kentucky Department of Education’s auditing process can be found in Appendix B.)

Although we acknowledge that the audit process is not perfect, nor was it developed through a social scientifically validated process, we believe that it represents a type of systematic inquiry into many conditions of teaching and learning at individual schools, and provides an opportunity to compare results (with discretion) across various kinds of schools. Therefore, we developed this research project with the idea that we would use the scholastic audit process to help see “inside the black box” of a small set of high-performing, high-poverty schools in Kentucky. We later added components to the research to supplement the audit process.

Research Questions

The questions we sought to answer with this research were:

1. What common characteristics that seem to contribute to high student performance are shared by a set of high-performing, high-poverty schools?

2. What characteristics and practices differentiate a set of high-performing, high-poverty schools with a small achievement gap from similar high-poverty schools that are neither high-performing, nor have a small achievement gap?

We developed this research project with the idea that we would use the scholastic audit process to help see “inside the black box.”

We did have some hypotheses at the beginning of this project about the characteristics that these schools might have and which of those characteristics would distinguish them from high-poverty, low-achieving schools. Based on the Effective Schools and “high-flying” schools research mentioned earlier, we expected the study schools to be characterized by strong principal leadership, high expectations for students, a safe...
and orderly environment, a focus on academics, and frequent monitoring of student progress. These characteristics correspond closely to the following standards on Kentucky’s scholastic audit: curriculum, classroom assessment, school culture, and leadership. More information on the standards is provided in the sections that follow.

**Study Sample**

The idea behind this project was fairly straightforward. The research team would select a sample of high-performing, high-poverty schools and send trained and experienced audit teams into each one, using the scholastic audit process to take an in-depth look at their performance.

With input and assistance from the Kentucky Department of Education, we defined high-performing, high-poverty schools as those that met the following criteria:

- State accountability index\(^1\) score of 80 or higher on the spring 2003 assessment (the goal for all Kentucky schools is to reach an accountability index of 100 by 2014)
- Percentage of students on free or reduced lunch at or above the state average (50 percent for elementary schools, 40 percent for middle schools, and 35 percent for high schools)
- Academic index (see footnote) of 75 or higher for students who participated in the free/reduced lunch program and for minority students
- Pattern of progress over time on the state test
- Achievement gap between free/reduced and non-free/reduced lunch students, and between white and minority students, of less than 15 points

Using the first two criteria alone, the Kentucky Department of Education provided a list of 74 elementary schools, 17 middle schools, and three high schools. After applying all of the criteria, the list was reduced to 26 elementary schools and seven middle schools (of these, three schools were actual middle schools; the other four were K-8 schools). Because there were no high schools and so few middle schools on the list, we included only elementary schools in this study, which enabled us to hold many contextual factors constant as we compared practices at the study sites. (Consult Appendix C for a list of the 26 elementary schools that met all of the criteria.)

Working now with a list of 26 elementary schools, we compiled a short list of about 15 schools from various regions of the state, as well as a mix of urban and rural schools and some schools that

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\(^1\) The accountability index is a composite score representing results from the Kentucky Core Content Test and the Comprehensive Test of Basic Skills, as well as non-academic indicators such as retention, attendance, and dropout rates. This differs from the academic index, which represents results of the Kentucky Core Content Test only.
served minority students. We began contacting these districts until we had nine schools that were willing to participate in the research. After one school had to drop out due to unforeseen circumstances, the final list consisted of the eight schools shown in Table 1. Table 2 shows state test results for the study schools.

All participating schools agreed to be identified in press releases about the research project. We assured the schools that, although the results of all audits would be used to compile a general report, the results of their individual audits would be shared only with them. We then left it to the schools to decide whether to share the audit results more widely. Several schools received coverage in the local media regarding their participation in the project.

We would note here the incredible level of cooperation these eight schools provided the research team and the Prichard Committee through their participation in the project, especially on such short notice and given the major intrusion into a school that even a friendly audit represents. The timeline under which the project operated required sites to be selected in February 2004 and audits to be conducted – if at all possible – in March and April. Given that 2004 state testing took place in most schools between mid-April and early May, only a narrow window of opportunity was available to conduct the audits. The willingness of these schools to be audited in mid-

### Table 1: Study Schools

<table>
<thead>
<tr>
<th>School</th>
<th>District</th>
<th>Area</th>
<th>Type</th>
<th>Enrollment</th>
<th>%FRL</th>
<th>% minority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brodhead ES</td>
<td>Rockcastle Co.</td>
<td>East</td>
<td>Rural</td>
<td>400</td>
<td>57</td>
<td>&lt;1</td>
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<tr>
<td>Cuba ES</td>
<td>Graves Co.</td>
<td>West</td>
<td>Rural</td>
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<td>52</td>
<td>5</td>
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<td>Drakesboro ES</td>
<td>Muhlenberg Co.</td>
<td>West</td>
<td>Rural</td>
<td>235</td>
<td>77</td>
<td>10</td>
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<td>Lincoln ES</td>
<td>Jefferson Co.</td>
<td>Central</td>
<td>Urban</td>
<td>286</td>
<td>89</td>
<td>70</td>
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<tr>
<td>Lost River ES</td>
<td>Warren Co.</td>
<td>West</td>
<td>Small city</td>
<td>653</td>
<td>61</td>
<td>30</td>
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<tr>
<td>McFerran ES</td>
<td>Jefferson Co.</td>
<td>Central</td>
<td>Urban</td>
<td>548</td>
<td>83</td>
<td>60</td>
</tr>
<tr>
<td>Morgan ES</td>
<td>Paducah Indep.</td>
<td>West</td>
<td>Small city</td>
<td>255</td>
<td>86</td>
<td>30</td>
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<tr>
<td>Oak Grove ES</td>
<td>Whitley Co.</td>
<td>East</td>
<td>Rural</td>
<td>635</td>
<td>83</td>
<td>&lt;5</td>
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### Table 2: Performance of Study Schools: Commonwealth Accountability Testing System (CATS)

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<tbody>
<tr>
<td>Brodhead ES</td>
<td>87</td>
<td>86</td>
<td>80</td>
<td>93</td>
<td>101</td>
<td>107</td>
<td>107</td>
<td>107</td>
<td>100</td>
<td>3</td>
<td></td>
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<td></td>
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<tr>
<td>Cuba ES</td>
<td>73</td>
<td>75</td>
<td>83</td>
<td>85</td>
<td>94</td>
<td>103</td>
<td></td>
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<td>91</td>
<td>4</td>
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<tr>
<td>Drakesboro ES</td>
<td>72</td>
<td>81</td>
<td>79</td>
<td>82</td>
<td>87</td>
<td>96</td>
<td></td>
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<td>82</td>
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<tr>
<td>Lincoln ES</td>
<td>51</td>
<td>46</td>
<td>67</td>
<td>73</td>
<td>81</td>
<td>87</td>
<td></td>
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<td>80</td>
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<tr>
<td>Lost River ES</td>
<td>67</td>
<td>77</td>
<td>79</td>
<td>76</td>
<td>89</td>
<td>96</td>
<td></td>
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<td>84</td>
<td>15</td>
<td></td>
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<tr>
<td>McFerran ES</td>
<td>59</td>
<td>64</td>
<td>72</td>
<td>71</td>
<td>80</td>
<td>90</td>
<td></td>
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<td>81</td>
<td>-3</td>
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<td></td>
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<tr>
<td>Morgan ES</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>74</td>
<td>84</td>
<td></td>
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<td>87</td>
<td>83</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oak Grove ES</td>
<td>64</td>
<td>71</td>
<td>78</td>
<td>78</td>
<td>86</td>
<td>90</td>
<td></td>
<td></td>
<td>83</td>
<td>8</td>
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spring was critical, and most schools had no more than a few weeks to prepare for the visit. The project could not have succeeded without the schools’ cooperation and willingness to be examined by outsiders.

Research Methods

The scholastic audit was the centerpiece of the research design. The audit process typically involves sending a trained, external, six-member audit team—comprised of a Highly Skilled Educator, a teacher, a building administrator, a district administrator, a parent, and a university educator—to designated schools. Each team spends a week on site, interviewing all certified teachers and administrators as well as most of the noncertified staff and numerous parents and students. The team observes all classrooms at least once and reviews an array of school documentation that includes test scores, school improvement plans, school council policies and meeting minutes, teacher lessons plans, and student work samples.

The audit team bases its work on an extensive, uniform process and protocol, using the Standards and Indicators for School Improvement (SISI). The SISI categorizes school activities into nine standards:

1) Curriculum
2) Assessment
3) Instruction
4) School culture
5) Student, family, community support
6) Professional development, professional growth and evaluation
7) Leadership
8) Organizational structure and resources
9) Comprehensive and effective planning

Eighty-eight empirical indicators of success are spread across these standards. (A table showing standards and indicators is included in Appendix D.) Audit teams rate the schools on a scale of 1 to 4 for each of the 88 indicators. The ratings are defined as follows:

LEVEL 1: Little or no development and implementation of a standard
LEVEL 2: Limited development or partial implementation
LEVEL 3: Fully functioning and operational level of development and implementation
LEVEL 4: Exemplary level of development and implementation

A score of 3 reflects fully functioning performance, meaning the school is meeting state standards. A score of 4 reflects exemplary performance. Scores of 1 and 2 indicate weak areas; audit teams typically make recommendations for improvement in areas where these ratings are assigned. In addition to a numerical score for each indicator, the audit team produces a narrative description of its rating (usually a short paragraph or two for each rating). By the end of its week in the school, the audit team has produced a draft report of its findings, recommendations, and next steps. After

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ii Kentucky’s Highly Skilled Educators are practicing school administrators or teachers who are selected through an intensive application and screening process and receive intensive training to work as intervention specialists in low performing schools. These individuals work full time in low-performing schools for a two-year period before returning to their own districts.

iii Audits are performed on the lowest performing schools in the state. For comparison purposes, reviews using the same auditing approach are conducted on additional schools across the state.
the report is edited and formatted by department staff, it is presented to district and school officials, who decide how to proceed.

We contracted with five trained audit teams to perform the audits of the study schools during the spring of 2004. The composition of our audit teams differed somewhat from those used by the Kentucky Department of Education. Four of the five teams consisted of five rather than six members, given that Highly Skilled Educators were working in schools at the time the audits were conducted and were not available. The fifth audit team, consisting of only four members, conducted only one audit at a very small school. All audit teams included a principal, a teacher, and a district administrator; most included a parent and a university representative. We were assured by audit team members, as well as officials at the Kentucky Department of Education, that this variation in team membership would not substantively affect audit results.

In total, 23 individuals served on our audit teams. All had prior experience conducting audits for the Kentucky Department of Education. Nearly all team members had conducted audits in low-performing schools, as well as in schools deemed successful under Kentucky’s accountability system.

To ensure that we had a thorough understanding of the audit process, as well as some familiarity with the study schools, research team members observed one audit intensively as it was being conducted and then visited each study school during one day of the audit. Research team members also interviewed as many audit teams members as possible, 18, in the weeks following the audits. Following completion of the audits and one round of data analysis, research team members conducted follow-up telephone interviews with principals at the eight schools to obtain additional data and clarify our understanding.

Audit reports were reviewed and edited by members of the research team. As needed, audit team members were contacted to clarify the report contents. When reports were finalized, audit team leaders hand-delivered the reports to the study schools and presented key findings to the faculty.

**Data Analysis**

Data were analyzed qualitatively and quantitatively. On the qualitative side, the two authors of this report, along with two consultants, met for two days in June 2004 to review the audit reports, interview transcripts, and all available documentation on the study schools. Each person reviewed all the data on four of the eight schools. Each school’s data were reviewed by two different team members. Following this review, a set of preliminary common characteristics of the high-performing schools was generated, along with a set of follow-up questions for principals. After follow-up telephone interviews were conducted with principals at the eight schools, the common characteristics list was revised. Case studies, including information and relevant quotes related to the common characteristics list, were compared for each of the schools. These case studies were used to
develop key sections of this report.

In addition to the qualitative analysis, a statistical analysis was performed using numerical data from the audit reports. The eight study schools were matched on several demographic factors with eight low-performing, high-poverty schools that had previously been audited by the Kentucky Department of Education. The scores earned by these schools on the 88 standards and indicators were compared with those of the study schools to identify statistically significant differences in the audit results for the two types of schools. We discuss this procedure later in this report.

Quality Control

Although the scholastic audit process is intensive, consistent across schools, and involves multiple sources of data, it does have features that limit its use for research and comparison purposes. (Limitations of the research are presented in Appendix F.) Suffice it to say here that the research team attempted to offset study limitations by supplementing the audits with school visits and interviews. In addition, we called on the expertise of a peer review panel of researchers with experience in educational research in Kentucky and throughout the United States. The panel was composed of Jane David of the Bay Area Research Group (Palo Alto, CA), Melissa Evans-Andris of the University of Louisville, and Art Thacker of the Human Resources Research Organization (Louisville). Panel members assisted the team in designing the research, selecting schools, and reviewing findings and drafts of this report.

Results

In this section we first consider the numerical results of the scholastic audits: how the schools performed as a group and how their performance compared to that of low-performing, high-poverty schools audited by the Kentucky Department of Education. We then take a closer look at specific philosophies, programs, and practices that audit teams encountered in the schools—factors that seemed to be closely connected to school success.

Audit Results: School Strengths

The eight study schools were matched on several demographic factors with eight low-performing, high-poverty schools that had previously been audited by the Kentucky Department of Education. The scores earned by these schools on the 88 standards and indicators were compared with those of the study schools to identify statistically significant differences in the audit results for the two types of schools. However, 70 percent or more of the indicators for the study schools were rated at the top two levels (3 or 4). Across the board, the eight schools scored highest by far on the School Culture standard. The
11 indicators under this standard encompass such characteristics as providing a safe and orderly environment; holding high expectations for students; teachers accepting their professional role in student success and failure; assigning staff according to their strengths; communicating regularly with families; caring about students; valuing and celebrating student achievement; being committed to equity; and appreciating diversity. One school received the highest rating of 4 on every indicator under the School Culture standard. Six of the eight schools earned all 3s and 4s on this standard; the other two each received only one rating of 2, with their remaining ratings being 3s and 4s.

Schools also scored very well on the standard addressing Student, Family, and Community Support. The five indicators under this standard reflect characteristics that combine elements of support for families and students: families and communities work together; all students have access to the curriculum; instructional practices are in place to reduce barriers to learning; additional support is provided beyond initial classroom instruction; and a student record system provides timely information. Six of the schools received all 3s and 4s on this standard; the other two schools each scored one 2 on this standard.

There was greater variation in the schools’ performance in other areas, with some schools scoring very high on curriculum, others on organization, others on planning, and so on. However, some patterns were noted regarding the schools’ performance on certain indicators. These will be discussed in the section that follows.

### Comparison of Audit Results for High-Performing vs. Low-Performing Schools

The research team always expected the bulk of our findings to emerge from a direct analysis of the audits, but we also suspected that our results could be buttressed substantially by additional analyses. We reasoned that there might be a credible way to conduct a quantitative comparison of the high-performing, high-poverty schools in our study against some other set of schools that the state Department of Education had audited. As noted earlier, we began the project with various hypotheses about which of the 88 indicators, either individually or in combination, might be most closely associated with high achievement levels among students with disadvantaged backgrounds and with very low achievement gap levels.

In consultation with an expert in quantitative social research techniques, we conducted a quantitative data analysis using numerical ratings from the audit. Given that a relatively small number of schools across Kentucky have been audited, we realized that one of the most popular tools available to researchers, multivariate linear regression, would not be particularly helpful to us because there are not enough schools

Across the board, the eight schools scored highest by far on the School Culture standard. ...Schools also scored very well on the standard addressing Student, Family, and Community Support.
for regression to be reliably used. Our consultant thus conducted a type of univariate analysis that we believe is very revealing, and that involved comparing audit results of our eight study schools with eight closely matched low-performing, high-poverty schools that the department had previously audited. (A complete description of the statistical analysis procedures is contained in Appendix G.)

Based on this head-to-head comparison, the eight high-performing, high-poverty schools differed from their low-performing, high-poverty counterparts in statistically significant ways on 22 of the 88 audit indicators, as shown in Table 3.

As Table 3 indicates, the main clusters of

<table>
<thead>
<tr>
<th>Standard</th>
<th>Indicator</th>
</tr>
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<tbody>
<tr>
<td>Curriculum</td>
<td>1.1.a Curriculum is aligned with Academic Expectations, Core Content for Assessment, Transformations, and Program of Studies.</td>
</tr>
<tr>
<td></td>
<td>1.1.b District facilitates discussions among schools on curriculum standards preschool through 12th grade.</td>
</tr>
<tr>
<td></td>
<td>1.1.f Systematic process for monitoring, evaluating, reviewing curriculum.</td>
</tr>
<tr>
<td></td>
<td>1.1.g Curriculum provides access to common academic core for all students.</td>
</tr>
<tr>
<td>Assessment</td>
<td>2.1.a Classroom assessments are frequent, rigorous, aligned with Core Content.</td>
</tr>
<tr>
<td></td>
<td>2.1.e Multiple assessments provide feedback on student learning.</td>
</tr>
<tr>
<td>Instruction</td>
<td>3.1.b Instructional strategies aligned with learning goals and assessment.</td>
</tr>
<tr>
<td></td>
<td>3.1.c Instructional strategies aligned to needs of diverse students and different learning styles.</td>
</tr>
<tr>
<td>School Culture</td>
<td>4.1.b Leadership creates experiences to foster belief that all can learn at high levels.</td>
</tr>
<tr>
<td></td>
<td>4.1.c Teachers hold high expectations for all students, as evident in their practice.</td>
</tr>
<tr>
<td></td>
<td>4.1.d Staff are involved in decision-making.</td>
</tr>
<tr>
<td></td>
<td>4.1.e Teachers accept their professional role in student success and failure.</td>
</tr>
<tr>
<td></td>
<td>4.1.f Staff are assigned to maximize student access to instructional strengths.</td>
</tr>
<tr>
<td></td>
<td>4.1.g Teachers communicate student progress to families regularly.</td>
</tr>
<tr>
<td></td>
<td>4.1.h Staff care about students, inspire best efforts.</td>
</tr>
<tr>
<td></td>
<td>4.1.k School/district committed to equity, appreciate diversity.</td>
</tr>
<tr>
<td>Student, Family, Community Support</td>
<td>5.1.d Students provided with opportunities to receive additional assistance beyond initial classroom instruction.</td>
</tr>
<tr>
<td>Professional Growth, Development, Evaluation</td>
<td>6.1.e Professional development is ongoing and job-embedded.</td>
</tr>
<tr>
<td></td>
<td>6.1.f Professional development planning is connected to analysis of student achievement data.</td>
</tr>
<tr>
<td></td>
<td>6.2.e School/district improvement plan identifies leadership needs, strategies to address them.</td>
</tr>
<tr>
<td>Organizational Structure and Resources</td>
<td>8.1.a School is organized to maximize resources to support high student/staff performance.</td>
</tr>
<tr>
<td></td>
<td>8.1.d Staff makes efficient use of instructional time to maximize student learning.</td>
</tr>
</tbody>
</table>
important indicators are found in curriculum, assessment, instruction, and culture. The high-performing, high-poverty schools focus a considerable amount of attention on curriculum, and they work to use assessments and instructional strategies that are designed to ensure that students learn the curriculum. In addition, both administrators and teachers in these schools work diligently to create a culture of high expectations for students and educators, a participatory work setting, a caring environment, a commitment to equity and diversity, and the belief that student learning is the responsibility of educators.

Numerous influential indicators are spread across other areas. For example, the study schools tend to have ongoing, job-embedded professional development that often focuses on analysis of student test data. They also make efficient use of their fiscal and human resources and of their instructional time.

We conclude here with the simple observation that these findings are consistent with those that emerge from our other analyses of the audit results. We read these findings to mean that having a strong school culture is necessary for school success with disadvantaged populations but that curriculum, instruction, and assessment must be a central focus and must be addressed simultaneously, coherently, systematically, and intentionally if the school is to reach high levels of achievement among all students.

Common Characteristics of Study Schools

We have described how the study schools performed on Kentucky’s scholastic audit and how these schools compared on audit results to low-performing schools. But the audit results, although impressive, do not adequately capture what the study schools were doing to succeed. Audit team members – accustomed to conducting audits on low-performing schools – were effusive in their praise of the study schools. They provided specific details on the schools’ successful programs and strategies. The audit teams did find some problem areas in most schools. Overall, however, they were highly impressed and grateful for the opportunity to visit the schools.

One team member commented after the first audit she conducted for this study: “It is the best school I have ever reviewed. I went away from there feeling I had been in a revival.” Another team member remarked: “I was absolutely amazed. It was fun. This was my first audit I have been on that was fun.”

Below we provide a closer look at the atmosphere, people, focus, and activities we found inside the schools. We base this section not only on the audit reports, but on what we and audit team members saw and heard when we visited and on what the school principals told us in follow-up interviews. Using this information, we developed a set of characteristics that were common to the eight study schools. These characteristics correspond closely with the audit results, but flesh out what the audits captured on a more general level. The characteristics are:

- School-wide ethic of high expectations for faculty, staff, and students
- Caring, respectful relationships
- Strong academic, instructional focus
- Systems for assessing individual students on a regular basis
- Collaborative decision-making led by non-authoritarian principals
- Strong work ethic and high faculty morale
- Recruitment, hiring, and assignment strategy for teachers.
High expectations. “High expectations” has been a mantra of the school reform movement since the late 1980s. At the study schools, we saw high expectations exhibited in concrete ways; they were not just a rhetorical device. Principals held high expectations for faculty and staff, who held high expectations for themselves and the students. There was a strong belief that all students could succeed academically and that faculty and staff were capable of making this happen.

Audit team comments:

Everyone—which means faculty, parents, staff, administrators, students—has high expectations for the education process and values each person in the building. They have set clear goals and are working to achieve those goals. Every human being in that building was treated with dignity and high expectations, parents included.

The common thing was the high expectations for students; that was so, so glaring… They are totally committed to making sure every child learns and they believe that every child learns. They are willing to do whatever it takes, whether long hours or professional development, whatever it takes to meet the needs of the children.

Along the same lines, audit results showed and team members told us that faculty and staff at the eight schools took responsibility for student learning. They did not blame student failure on the students, but acknowledged their own role in student success or failure.

Audit team comments:

I strongly believe everyone there believes all can learn, and I have never found that in another school. You will have some isolated examples in other schools of teachers who accept responsibility for student learning, but I find for the most part there is still a desire in most [low-performing] schools to say it is these kids, it is their parents.

In some lower-performing schools we have audited in the past, there has been an attitude that some students can’t learn regardless of what the staff does. We have heard just the opposite in these successful schools. They all have the attitude that they must find a way to teach these students and that they can do it!

Relationships. The caring, nurturing atmosphere in each of the eight schools related closely to high expectations. Audit team members, as well as the authors of this report, were impressed by the respectful relationships we observed and were told about—relationships among adults, between adults and children, and among children.

A team member commented:

One thing in the classroom was the respect that teachers had for students and students had for the teacher. I
thought it was a mutual thing. To have as many diverse groups as they had, there were very few discipline problems, and when you have done a few audits, you don’t see a put-on-show type thing, it was there all along. I observed in some of the special education classrooms, and those kids were treated with dignity and respect just like any other student.

We also heard stories of the supportive and respectful relationships that school staff had with parents and families. A grandmother at one school told of how the school faculty had helped her deal with a tragedy. The same school provided transportation so families could attend evening and weekend school activities.

The culture of caring, respectful relationships extended to the audit teams that visited the schools. One team member commented, “They were very, very welcoming; they were eager to share what they were doing.” Another team member shared this story:

The [school improvement plan] said they had discipline problems; we could not find a one and questioned them about why that was in there. The students were at the apex of respectfulness. One of my jobs is to observe classrooms, and I go to the back of the classroom as soon as possible. One class was bulging full and there was no place to sit. A little fourth grader got up and offered me his seat. That kind of respectfulness is all over the school.

Academic, instructional focus. All eight schools had a strong focus on academics, instruction, and student learning.

One audit team leader put it this way:

It comes down to instruction for students, and the rest of it can go to hell in a hand basket as far as they are concerned. They have “school.” There is not all this wasted time on other things that interrupt.

Another team leader remarked:

They had the strongest standards 1, 2 and 3 [curriculum, assessment, instruction] that I have seen. They had all their ducks in a row in curriculum, assessment, instruction.

Another team member who visited a third school summed it up:

They stood above all others, speaking of Standards 1, 2, 3 [curriculum, assessment, instruction]. You will go into schools with a strong curriculum, and in 60 percent of classrooms you see a lot of research-based and student-centered strategies, but you might not see a strong assessment element on all levels. What was really outstanding in this school was that Standards 1-3 were interrelated and functioned well together. The curriculum was well-aligned, it was integrated and strong. It fed into a strong instructional program.

Focus seemed to be the primary element and came largely from Kentucky’s Core Content for Assessment, which school faculty used to map out their curriculum. Perhaps because the Core Content
was the focus, specific curriculum and instructional strategies varied as teachers consulted many and varied sources to make sure they were covering the Core Content. Some schools adopted commercial packages, but no single program dominated. Schools were using everything from *Everyday Math* to *Reading Mastery* to *Accelerated Reader* to *Saxon Phonics and Math* to *Direct Instruction*.

Some schools dedicated part of each day to reading or literacy activities, during which time they often reduced class sizes by using instructional assistants, administrators, and counselors to provide instruction to small groups. One school frequently regrouped students to meet individual needs; another had been “looping” for a number of years (keeping the same teacher with the same students for two or more years). We also heard of a particular method of answering open-response questions that was taught at one school, and of a Friday rewards assembly at another.

The point is that schools were doing all kinds of things as part of their academic and instructional focus. The key seemed not to be what they were doing so much as the fact that the entire faculty and school community had focused consistently over time on academics, instruction, and student learning.

**Student assessment.** Much has been said and written about how high-stakes assessment and accountability programs in Kentucky and across the nation drive what schools do. It is true that all eight schools paid a lot of attention to their performance on the state assessment program. However, results from the state test—which is administered once a year—were just a starting point for these schools. Each of the schools had systems in place for regularly assessing the progress of individual students and for planning or changing their instruction according to what these assessments revealed about individual student needs.

One school had small group instruction daily in what it called “focus groups” of students with similar needs. The principal, other administrators, and Title I teachers worked with up to six students for an hour each day. Two days were used for math, two for reading, and the fifth for assessment. Students would then be regrouped as needed. One audit team member described it this way: “They teach, they test, they teach, they test.”

This particular school had perhaps the most regular, systematic, and integrated approach to student assessment and instruction, but other schools also regularly examined student performance data. The principal at a different school sits down with each teacher at the start of the year to look at all available test data on each student. They discuss how far the student will likely progress with one more year of instruction, and how much farther they want to take the child beyond that expectation.
A team leader spoke of another school’s strong assessment focus:

The glue that held it all together was assessment, from student assessment, to how teachers use assessment to evaluate the effectiveness of instruction in meeting individual student needs, and to identify if curriculum gaps were being filled or if there were overlaps. That was an extremely impressive thing that stood out more than other schools our team has visited.

A team member at a different school remarked:

The school has analyzed its assessment data to the finest detail, including gaps analysis and an analysis of the scores of students who are with particular teachers.

And a final example from a team member who visited yet another school:

They continually analyze student work and assess their students. They look at these assessments by each student name and make plans according to where each student is and where they need to go.

Leadership and decision-making. A surprise for us and the audit teams was the great variety of leadership styles at these eight schools. At some of the schools, the principal’s name came up often as audit team members asked why the school was successful. At other schools, the many programs, practices, and beliefs were the focus of responses about the school’s success. One thing the schools did share, however, was a collaborative decision-making process. None of the schools had an authoritarian or dictatorial leader. Instead, faculty and staff were involved in making most key decisions at these schools.

At one school we heard about a leadership team of teachers who often provided in-house professional development and who filtered information and issues to present to the faculty for input. An audit team member explained:

Another strength [at the school] was the way they use this leadership team…. Those people act as a liaison between the administration, the SBDM [school-based decision making] council, and the faculty. Instead of having a zillion meetings, this leadership team (and they volunteered for it) goes through and filters and puts together things and then brings [those issues] to the faculty for their input.

At other schools we heard more generally about teacher empowerment—how teachers were involved in hiring and instructional decisions.

An audit team member described one school’s leadership culture:

The principal’s leadership is different, but what he has done is empower his teachers to have the freedom to teach. The district in turn has trained teacher leaders to come back and train the rest of the staff. From that have arisen some powerful teachers in that group.

Faculty work ethic and morale. The faculty and staff at the eight schools worked very hard to meet the needs of their sometimes-challenging
students. They regularly analyzed data on individual students and planned appropriate instruction or interventions. They helped families and students find transportation, clothing, health care, and other services. They worked after school and on weekends to give extra help with tutoring, portfolios, assessment preparation, or parent programs.

Despite the strong work ethic and long hours, we heard virtually no stories of teacher burnout; nor did we hear many teachers complaining. These schools were happy places—focused, but happy.

**An audit team member shared her reaction to teachers’ attitudes at both schools she visited:**

I found with [both schools], not once did a teacher or instructional aide, and I interviewed the cafeteria manager, not once did I hear anyone say, “They keep giving us more and more to do and less and less time and money.” I have heard that in most every school [I have audited]. Not once [at either] school did I hear them complain. Also at both schools so many people said, “I love my job.”

**One audit team member expressed her amazement at the high morale and strong work ethic in the schools:**

When you talk to teachers, they say “I love my job,” and you just don’t hear that [in a lot of schools]. And why should they love their job? They have everything against them. [But] they were doing what they wanted to do. They felt like they were being rewarded for it in the success of the children.

**Teacher recruitment, hiring, assignment.** It was clear that a contributing factor to the high morale and overall success of the eight high-performing schools was the careful and intentional manner in which teachers were recruited, hired, and assigned. Some schools focused more strongly on recruitment than others, but all eight schools were careful and selective in the hiring process and in assigning teachers once they were hired. The specific characteristics of prospective teachers that were emphasized at the schools varied somewhat. We heard reports at some schools that they looked for teachers who cared about and believed in the students. Others required demonstration lessons as part of the interview process so they could observe a teacher’s pedagogical skills and content knowledge.

Among those principals who had a recruitment strategy, at least two worked with local colleges and universities to place student teachers at their schools. This allowed the principals to “try them out,” and urge the strongest candidates to apply the following year. One principal explained:

We just began training our own. We would get them early when they were just substituting and once you found someone who clicked, then once they were into student teaching, you asked for them to student teach [at the school]. You placed them with someone who had a lot of experience that you knew they could learn from. They had that experience of being in the classroom with an experienced teacher, learned a lot about your school, philosophy, how you taught reading and writing, you just kind of grew them.
A principal in a larger district described her strategy for filling vacancies while also complying with the district policy on teacher transfers:

First you have to go through the transfer list. … When I get the list I go through and screen it and after I finish that, I pick out who I want on the list. In most cases I have knowledge of who they are and [how] they teach. [If not], I check with principals and try and find someone who knows them from [the university] or someone here who has taught with them. I do a lot of research, and if I happen to be in some of the buildings, I stop by their classroom and watch them. If you get good people on the front end, you spend less time working on deficiencies. Getting the right people is the best thing you can do. You can put $3 million of remedial materials in the school, and it won’t do any good if you don’t have the right people.

Most, if not all, of the schools involved teachers in interviewing applicants for teaching positions. This process was described as being fairly systematic in most places; the interview committee or school council had a set of questions its members wanted addressed, and they knew what they were looking for. At least one school asked applicants to do a demonstration lesson.

An audit team leader described the process at one school:

We asked the new teacher [at the school] about the interview process when she was hired. She said, “You have to understand that you don’t come and interview here unless you want to work. That is a known fact.” When you walk in and hand them your portfolio and there are 20 people sitting there and you have to demonstrate a lesson, slackers will not come. Everyone on the staff interviews them: teachers, principal, and secretary.

We also heard descriptions of purposeful assignment of teachers in these schools. That is, principals tried to assign teachers in ways that teacher strengths were matched with student needs. Most of the principals reported that they typically do not move teachers around against their will, but that they had occasionally done so, with results that satisfied everyone – even the initially reluctant teachers.

An audit team member described the process for one school:

They have organized themselves to teach to those strengths. They move teachers into grade levels based on teaching strengths, [even the] veteran teachers. One 27-year teacher is moving to another grade.
The principal at a different school spoke of how she prepared teachers in advance to make a transition to another grade level:

*I had a fourth-grade opening. Someone retired and I have three people that I have been grooming for a period of time. They knew that when I had the fourth-grade opening, I would not put someone fresh off the street in there. I just went to these people and said, “You all know I have three or four fourth-grade teachers who will be retiring, and eventually you will all have to go. You need to decide who is going now and who will wait.” I had someone who said they would rather go ahead, and the transition was easy.*

Unanticipated Results

The characteristics of the eight high-performing schools will not surprise those who have followed successful schools research over the years. We have long known the importance of high expectations for students, a supportive culture, a strong academic focus, attention to student performance data, and competent teachers who believe in the students. From a practical standpoint, the problem has been deciphering ways to spread these characteristics to most schools rather than only a few. But our research did turn up some unexpected findings. Some of these findings were unexpected because of what prior research has found about high-performing, high-poverty schools. Others were unexpected because we had not anticipated that these schools would, as a group, perform poorly in certain areas. The main unexpected results were:

- The “leadership factor” did not emerge in the precise manner that we had expected.
- The high-performing schools did not score particularly well on following state-recommended practices for planning, documentation, and school-based decision-making (SBDM).
- Schools did not score well on the use of technology.
- The districts did not play as strong a role as we anticipated, although this varied from one district to another.

Leadership. We discussed earlier the fact that the principals of the eight schools had very different leadership styles, but all were collaborative in their approaches to decision-making. The principals of the eight study schools mostly lacked big egos, instead channeling their energies toward the vision of academic success for the students in their schools. Interestingly, four of the principals were male and four were female; four were under the age of 40 with four-to-five years of experience as principals; the other four were veterans who had led their schools for more than 15 years.

What surprised us was not these facts but the realization that when we compared the audits of the eight high-performing schools with a comparison set of low-performing schools, Standard 7 (leadership) was one of only two standards where there was no statistical difference between the schools’ performance. This does not mean the high-performing schools did not do well on this standard. In fact, three of the eight schools earned the highest ratings of 3s and 4s on the leadership standard; three others earned 3s and 4s on 10 of the 11 indicators under the leadership standard; another school earned 3s and 4s on 9 of the 11 indicators. At only one school were the leadership ratings almost evenly split between 1s/2s and 3s/4s.

What we found intriguing was that the ratings of
low-performing schools on leadership did not differ appreciably from those of high-performing schools. What can this mean, given the extensive research findings over the years that have underscored the pivotal role of the principal in a school’s success? We suggest three possibilities:

- First, the audit instrument itself implies a role for principals that may not contribute as strongly to student success as initially believed. Of the five high-performing schools that earned a rating of 1 or 2 under leadership, four earned these low ratings for indicators having to do with whether the principal had a growth plan that focused on building leadership skills, and/or how effectively the principal was implementing school-based decision making (SBDM). Only one school earned low ratings for leadership indicators connected to curriculum, assessment, or instruction.

- A second possibility is that the recent push under standards-based reform for principals to serve as instructional leaders may undervalue other, equally effective leadership styles. We would classify five or six of the eight principals as instructional leaders. However, at two schools (and possibly a third), principals were mostly building managers and motivators; there were others in the building who provided instructional leadership. At one school, this leadership came from a team of teachers. At the other, the assistant principal filled that role. At the third school, the principal provided the vision and motivation, but an assistant principal did most of the instructional leadership. The one school where a team of teachers provided instructional leadership was the one that scored lowest on leadership on the audit. Here, everyone acknowledged that the principal played the role of manager, leaving academics and instruction to the teachers. To us, the audit instrument assumes that a certain style of leadership is necessary for school success, but it is possible that different types of leadership may be needed at different times in a school’s evolution or development. Perhaps a strong instructional leader is needed to help move a low-performing school to higher levels of achievement. But once that is accomplished, perhaps a more managerial approach is appropriate as long as there are others in the building who can provide instructional leadership.

- A third possible explanation is that leadership is necessary but not sufficient to bring about academic success for all students. All of the successful schools we visited had numerous programs, practices, and beliefs in place that seemed to contribute to the schools’ success; none of the audit teams gave full or even most of the credit for success to principals. It was much more common to hear of a combination of factors that contributed; specifically, those characteristics discussed

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earlier: a culture of high expectations, a supportive and caring environment, high quality teachers, collaborative decision-making, focus on academics, regular assessment of individual students. Of course, effective leaders have a lot to do with putting these conditions in place. But at three schools, at least, some audit team members believed the culture was strong enough to withstand an impending change in principals. One team member, when asked if a change in leadership might interrupt the school’s progress, responded:

No, there are too many teacher leaders. Changing the principal is not going to faze them. It would take a lot of major changes before they would be hurt.

Planning, documentation, and school-based decision making. Although the study schools performed well overall on the audit, we found that they did less well on following the state-recommended planning process (known as the Comprehensive School Improvement Plan, or CSIP). They also tended to score lower on implementing the formal decision-making structure and process mandated in Kentucky, school-based decision-making (SBDM). When we asked audit team members if there were any areas in which the study schools did not perform particularly well, comprehensive planning and SBDM were mentioned frequently. At the same time, audit team members often qualified their remarks by saying that the planning and decision-making processes used by the schools seemed to work, but those processes did not fit the description outlined in the audit. One team leader explained:

You would expect with all these great things going on—time, resources, efficiency, everything clicking—you would think there would be a great model of documentation and scheduling. That was not there, not nearly to the degree that it was functioning. But after being there and going through it, I don’t know if I can criticize it because what was going on was working. It was an efficiency thing, I guess, from their point of view. Taking time to write it all down takes time away from doing it. That was kind of the sense we got.

Another team member made a similar statement:

Their CSIP was not exemplary but yet their school was. They are planning, but it did not get captured in that document, not formally.

Yet a third audit team member remarked:

Both of these schools [that she audited] have apparently spent more time in the actual implementation of their school mission than they have in writing SBDM policies and formal documentation of CSIP action plan reviews. In the past, other schools may have had model written SBDM policies and CSIP documentation, but did not appear to be doing much of it in the classrooms. I guess if they have to choose where to spend their time and effort, they have made the correct choice. Hopefully, they can put the policies and documentation into place to enhance what they already have going for them. That should continue
to strengthen their program along with their accountability.

Technology. Audit team members also told us that most of the high-performing schools did not use technology as effectively as they might have, either in the classroom or for other purposes. One audit item measured whether teachers were incorporating technology into instruction. Six of the eight schools were rated at 2 on this item.

One audit team member commented:

*Technology is used for drill, practice, and reinforcement. One teacher was able to discuss innovative ways of teaching math with spreadsheets. The school technology coordinator knew little about the school technology plan [typically an element of the Comprehensive School Improvement Plan].*

At a different school, an audit team member spoke of how little use the school made of technology for keeping records:

*Teachers still fill out handwritten attendance reports and the principal collects them room-to-room rather than having them on each teacher’s computer to send to the office. Then someone has to input everything. They don’t use [technology] for grades and parent reports. …They don’t have electronic lesson planning.*

These findings suggest that technology may not be a necessary ingredient to school success. This is not to say that effective use of technology would not enhance what the schools are doing. But clearly, these schools were successful in student achievement even with somewhat limited use of technology.

**District role.** We expected when we started this research that we would learn something about the role that the district plays in school success. Some of the schools we selected are in districts that have several high-performing, high-poverty schools. Here, in particular, we expected to find a strong district role. What we found, however, was that the district role was quite varied; and that district influence was somewhat less *direct* than we anticipated. We expected that the district was playing a strong role in one school because of district-wide high performance, but we found just the opposite.

An audit team member who visited this school stated:

*A surprise element, one that stuck out, was that there did not seem to be as much district initiative in terms of instruction, curriculum, bringing together schools. They kind of left it up to the schools to do things.*

In another district that had many low-performing, high-poverty schools and only a few successful ones, we wondered if the school was succeeding in spite of the district. Again, we found the opposite. Here, the principal and teachers took full advantage of the resources the district had to offer, and there were several. A district resource teacher, who was assigned to the school several days a week, helped analyze data, facilitated teacher meetings, and helped out in other ways the school identified. Numerous professional development opportunities, as well as assessment tools, were available through the district.

The combined statements of audit team members who visited this school provide details:

*The district had a really powerful role in terms of working with curriculum and training leadership and offering...*
all kinds of things. I was very impressed with district leadership. Their district office provided a lot of tools and resources. There was an assessment piece on the computer for them to take their own teacher-made assessments and plug them into the state assessment model. The district resource teacher, they depended on her a lot.

If there was a common thread that ran through the data regarding the district role, it may have been that principals and teachers at these schools had learned to use district resources, professional development, and other supports. At schools in the larger districts where one might expect that the bureaucracy could be a hindrance, we found that principals and teachers mostly used the tools and resources that were available instead of perceiving them as irritating bureaucratic requirements.

Motivation for Change

We have shared a substantial amount of information about what the study schools were doing that seemed to be part of their formula for success. But audit results did not satisfy our curiosity about what started these schools on a path to improvement. Although we did not have time to study this question in depth, we did ask principals when we interviewed them what started their schools on the path to success. Clearly we do not have the level of data on this issue that we have on those addressed earlier in the report, but we share principals’ responses because they may be useful to other practitioners. Principals’ responses varied, but three key themes emerged:

- Changing teacher beliefs about student capabilities
- Passage of the Kentucky Education Reform Act (KERA) of 1990 coupled with a strong leader to implement it
- Hitting a low point

KERA. Principals at three of the eight schools attributed their school’s high achievement, at least in part, to the Kentucky Education Reform Act. Specifically, they believed that the focus on student learning and the accountability aspect of KERA forced teachers to pay more attention to student learning. One principal commented:

The idea of really focusing on student learning and students excelling and having high expectations [did not happen] until KERA. I don’t think the competition was there. …KERA has helped us look at student learning.

Two principals coupled the push from KERA with the arrival of a strong instructional leader who helped their schools implement the reforms. One principal who had taught at the school when KERA was enacted said that the principal at the time forced teachers to try new instructional approaches until these became part of the culture. The second principal, also a teacher at the school in the 1990s, told of how state test results under KERA forced the school to examine its performance and practices, and how a strong leader helped them do that.

Hitting a low point. Two principals spoke of their schools reaching a low point that made the faculty realize that they had to make a change.

One principal, mentioned above in relation to KERA, explained:

When the first set of state test data came out after KERA, we were one of the ten worst performing schools in the state. [After that] a new principal led the crusade for change within our school. He was
the assistant superintendent of our district before his return. He was, and still is, thought of as the patriarch of the small community. His family members taught at our school, he was a student, teacher, and former principal of our school. The faculty took it as a compliment that he left his central office position to lead his home school and improve the education of our children. He could not stand the thought of the children of his community not succeeding. The teachers did a tremendous amount of work that next summer. They worked as a team to align the curriculum in every subject and plan for the next year. They spent so much time at the school; they cooked out, worked intensely and grew closer as a faculty. Through the strong leadership of the principal, the faculty recognized that they had to do something to raise the expectations and performance of the students. It was an amazing experience for me as a first-year teacher. When the second set of test data was reported, the school had one of the highest gains in the state, and the faculty attributes that to the strong leadership. Through his leadership, and the strong leaders and teachers that followed him, our school has continued to be successful.

Another principal told this story of how the school had turned around some years earlier after confronting the dismal performance of its students when they got to high school:

*I went to high school graduation and brought back a copy of the program. I ran that program off and passed it out to the teachers. I had them circle the ones that went to school here, and they came up with four. I said, “Our budget is $1.2 million, and we have four graduates. They put people in jail for this. Do you understand what I am saying? We are collecting tax dollars to produce products, and we only have four graduates for a million bucks. We have got to do better.”* Instead of being defeated and demoralized, it was all of sudden what they were doing was not okay anymore. They started examining themselves and making improvements.

**Changing belief systems.** Principals in two schools said that their schools had started on a path to improvement through a gradual change in teacher belief systems about the capabilities of the students. Another principal spoke simply of having faith that the students and the school could be successful and of having a missionary zeal to make it happen. One of these principals identified the Effective Schools training that had been available a number of years before as significant in beginning to change people’s thinking about what students could do. She also said that she learned to hire teachers who wanted to work with inner-city students:

*I figured out if you get really good teachers in, and they have to like these children because there were times when I hired good teachers*
but they didn’t like inner-city kids. It was like, “These kids will never learn, look where they come from; this is a waste of my time.” So even though we give a lot of lip service to “All children can learn,” there are really people who don’t believe that. So you [have to] get good teachers who like these children.

Another principal said that teacher beliefs had changed through the principal modeling and leading teachers in successful instructional practices that proved the children could do challenging work.

The number one thing is that you change behaviors before you change attitudes and belief systems. It is almost a shift in thinking. When teachers see me going in and modeling a lesson and their students are successful, they begin to change their beliefs about those students. We had lots of staff meetings, lots of talks, lots of strategies that they tried and had success with.

Discussion

This research has buttressed what we have learned from Effective Schools and other studies: it is possible for schools to help low-income students succeed academically. The fact that there were so few schools that met our high-performing, high-poverty criteria, however, speaks of the challenges that high-poverty schools face.

The findings reported could be seen as encouraging. For the most part, these high-performing, high-poverty schools did not have flashy, publicity-seeking principals, but devoted individuals who cared deeply about the community and about establishing a culture of high expectations, high performance, collaboration, and mutual respect.

Likewise, they had hired and cultivated inspiring, creative teachers who believed in the school’s philosophy and in their ability – indeed, their moral responsibility – to turn even the most disadvantaged children into serious learners. Principals and teachers at most of the schools were not “brought in” to turn their schools around; instead, those who were in the schools took it upon themselves to make a change. Principals worked collaboratively with teachers to figure out how to help all students succeed. They established this collaborative relationship by believing in the teachers as much as they wanted teachers to believe...
in the students. There was a team mentality and a team dedication to improvement.

The school approach was not simply for administrators and faculty to be cheerleaders, however. Instead, they were problem-solvers. They looked closely at what each student was doing in school, often consulting several kinds of information about individual students. One principal spoke of looking at test data and then calling students by name—she wanted teachers to tell her by name which students in the class were not doing well in a given subject area. They personalized academic achievement. Once they knew who was not doing well on what, they made plans for improving that student’s performance.

In at least one case, this sort of analysis may have even occurred before belief systems changed, which suggests that principals and teachers need not agonize over how to get everyone to believe all children can learn. Instead, a first step is to look at what each child is and is not learning, and then decide what to do about it. Teachers in the schools we studied found out that when they took those initial steps toward trying to move each child forward, the students typically performed above teachers’ initial expectations.

We should note that we expected to find specific programs in place to address the special needs of impoverished students and perhaps common approaches to curriculum and instruction. And in fact, the faculty at some schools had received training in the Effective Schools model or Ruby Payne’s program on working with children in poverty. However, there was not a particular professional development program or curricular package that the schools had in common. Rather, all of the schools had very strong academic programs and school cultures that targeted the entire student body in an atmosphere of respect, collaboration, and teamwork.

Because this research was limited to a small number of schools, and examined these schools at a particular point in time, we cannot offer firm recommendations for policymakers and practitioners who wish to accelerate the learning of all students. In addition, since only elementary schools were included in the study, it would be difficult to make generalizations about all schools. However, we do wish to make some observations that may be worthy of further discussion:

- **Choosing, cultivating, and using personnel.** The study schools were filled with competent, hard-working personnel dedicated to improving academic achievement for all students. Several of the study schools were not located in especially desirable places and, thus, did not have the luxury of attracting large numbers of qualified applicants for vacancies. However, they used all resources and ingenuity available to do just that and when they could not, they developed the personnel they had in the district or the school. A critical characteristic that school or district leaders looked for or cultivated in personnel was the willingness to work with and believe in all students. Also, school leaders deployed teachers based on their instructional styles and strengths as best fit the needs of the school.

- **The importance of individual student assessment.** Accelerating the achievement of each student appears to require systematic and regular evaluation of how each child is doing in school. This means identifying where each child is having problems and planning instruction to address those problems.
problems. Close analysis of state test results was one tool schools used to do this, but they also used other kinds of more regular assessment to continually monitor student learning.

- **Dealing with the “poverty” issue.** Faculty in the study schools did not make an issue of the fact that many of their students were “in poverty.” Disadvantaged students appeared to be treated in fundamentally similar ways as advantaged students. Individual learning needs were targeted for attention, rather than categorizing students as part of an at risk group held to different performance expectations.

- **Alignment of curriculum, instruction, and assessment.** At the study schools, the entire school community appeared to be on the same page with regard to what was being taught, what performance expectations were, and where each teacher’s curricular focus fit into the broader curriculum of the school. Teaching at these schools was part of a larger collaborative effort, not a solitary activity involving individuals who decided on their own what to teach and when to teach it. Creating such alignment had taken the schools many years and involved a great deal of effort and commitment. While in many cases it was left to the school communities themselves to do this work, it seems to us that school districts, the state, and colleges and universities could and should focus their attention and resources on helping school communities develop the capacity exhibited by the study schools.

Despite the absence of specific policy recommendations based on the findings, researchers involved in this project believe that policymakers should focus their discussions on how best to replicate the characteristics of the study schools in elementary schools throughout Kentucky.
For national statistics, see the National Center for Education Statistics publication NAEP 1999
Trends in Academic Progress: Three Decades of Student Performance. By J.R. Campbell, C.M. Hombo, and J. Mazzeo. NCES #2000469 (available for download from NCES website through www.ed.gov). For state statistics, see the disaggregated data from the Kentucky Core Content Test in the Kentucky Performance Report (State) for Spring 2004. This document is available for download in PDF format through the Department’s Max website and accessible through www.kde.state.ky.us.

For Effective Schools literature, see Ronald Edmonds 1979 article, “Effective Schools for the Urban Poor” in Educational Leadership (volume 37, number 1, pp. 15-24); a 1985 article by Lezotte and Bancroft entitled “Growing Use of the Effective Schools Model for School Improvement in Educational Leadership (volume 42, number 6, pp. 23-27); and Purkey & Smith’s 1983 review of Effective Schools literature in The Elementary School Journal (volume 83, number 4, pp. 427-452). More recent literature on “high-flying schools” includes, for example, a 2001 Education Trust report by Ali & Jerald entitled Dispelling the Myth in California: Preliminary Findings from a State and Nationwide Analysis of “High-Flying” Schools (Washington, D. C.); a 2000 Heritage Foundation report by Carter entitled No Excuses: Lessons from 21 High-Performing, High Poverty Schools (Washington, D. C.); and a 2003 publication of the Tomas Rivera Policy Institute by Tonatzky, Pachon, & Torres entitled Closing Achievement Gaps: Improving Educational Outcomes for Hispanic Children. For information on the Kentucky Association of School Council’s data disaggregation, contact KASC at P. O. Box 784, Danville, KY 40423, 859/238-2188, www.kasc.net. Additional references can be found in Appendix A of this report.

Kentucky Department of Education (2003). School Level Performance Descriptors and Glossary for Kentucky’s Standards and Indicators for School Improvement. Frankfort, KY.