Arkansas Best Practices Study: Implications for School Improvement

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Introduction

A consistent goal of education is improving student academic achievement, and educators acknowledge that a variety of factors influence how a student performs in the classroom. In an effort to further our understanding of these factors, the National Center for Education Accountability (NCEA) and Just for the Kids (JFTK) created a framework for analyzing best practices in today's school systems. NCEA currently facilitates Best Practices in 20 states, and has established a common protocol to be used in each state throughout the nation. Since the school selection process and the interview protocols are the same for all participating states, comparisons between state findings may be made. JFTK, a non-profit educational research organization, addresses the national interest in accountability and aims to engage communities in efforts to raise academic standards and public schools allowing for identification of best practices in education. Over the past six years, JFTK has been involved in the study of more than 500 schools through the Best Practices studies. Best practices are defined as strategies or processes that are working to improve student achievement across multiple high-performing schools.

As a part of the NCEA State-Comparable Study, the Arkansas Best Practices studies are designed to identify practices and procedures that relate to student achievement. A primary goal of the Arkansas studies are to disseminate findings across the state and nation, so that all schools can implement practices that work. The Arkansas Best Practices studies examine elementary, middle, and high schools, and are currently in the third year of study. In 2003-2004, seventeen elementary schools were examined for the Arkansas Best Practices study. In 2004-2005, the focus shifted to middle level best practices, and fifteen middle schools and six elementary schools were studied. While the focus of these two studies was to identify best practices at the

elementary and middle school level separately, the purpose of this paper is to identify similarities and differences in educational systems as a whole. Content analysis of the data collected in these two studies shows overarching similarities in the practices of high-performing elementary and middle schools. Along with these similarities, however, there are marked differences.

Theoretical Framework/Perspective

The Arkansas Best Practices studies investigated all levels of a school system that impact student achievement. Interviews were conducted and data were collected at the district, school, and classroom level. In addition to an analysis of the data by school system levels, data were analyzed based on five general best practices themes, as identified by NCEA and JFTK. These five themes were developed by JFTK through an examination of grounded studies between 1999-2001, and were then further clarified when NCEA formed in 2001. More than 500 schools across the country have been studied by NCEA using the same theoretical framework. The five themes of study are:

- Curriculum and Academic Goals
- Staff Selection, Leadership, and Capacity Building
- Instructional Programs, Practices, and Arrangements
- Compilation, Analysis, and Use of Data, and
- Recognition, Intervention, and Adjustments

Additionally, a sixth area of analysis, Factors Influencing Educational Practices, was included to identify supports that are beneficial for schools. After completion of data analysis, findings were organized into a 15-block (3x5) grid to allow for examination of each theme and how it impacts the three school system levels. Table 1 shows the arrangement of the three school system levels

and the five best practices themes. The sixth area of analysis is not included in the grid, as it includes components that affect all themes.

Table 1

NCEA Framework for State Comparable Best Practices Studies

ORGANIZING THEMES	DISTRICT PRACTICES	SCHOOL PRACTICES	CLASSROOM PRACTICES
CURRICULUM & ACADEMIC GOALS			
STAFF SELECTION, LEADERSHIP, & CAPACITY BUILDING			
INSTRUCTIONAL PROGRAMS, PRACTICES, & ARRANGEMENTS			
MONITORING: COMPILATION, ANALYSIS & USE OF DATA			
RECOGNITION, INTERVENTION, & ADJUSTMENTS			

The first theme, *Curriculum and Academic Goals*, encompasses how a school or district uses the state standards to develop and improve curriculum, taking into account vertical and horizontal alignment and use of materials. In addition, this area of analysis examines the process

of setting academic goals and how those goals influence student achievement. Second, *Staff Selection, Leadership, and Capacity Building* explores how teachers and principals are recruited and selected for hire as well as which policies are used to retain effective teachers and principals. The availability and applicability of professional development activities, the amount of teacher collaboration, and how and when teacher support is provided are also included. For the third theme, *Instructional Programs, Practices, and Arrangements*, the main focus is on how teachers select and use published programs in the classroom, including the role of the district, school, and teachers in the selection of instructional programs. Influences of legislation, how instructional time is allocated, the impact of the school schedule, and the use of student grouping arrangements are also explored in this theme. The fourth theme, *Monitoring, Compilation, Analysis, and Use of Data* investigates how schools use testing to influence instructional practice, how data are organized and distributed to schools, teachers, and parents, and whether schools or teachers use testing other than standardized testing to monitor student performance. Additionally, teacher and principal evaluation systems are included for analysis. The last theme, *Recognition, Intervention, and Adjustment*, encompasses recognition programs for teachers and students. Included are both remedial and enhanced programs, with a focus on improved academic achievement. The additional area of analysis, *Factors Influencing Educational Practices*, was included to identify underlying supports for all five themes that are beneficial for increasing student achievement. This area explores how the school board, teachers' unions and associations, parents, and community members influence practices. School climate, funding, and core beliefs about teaching and learning are also examined.

Methodology

The methodology for the Arkansas Best Practices Study followed the guidelines established by the National Center for Educational Accountability (NCEA). Schools for the Arkansas Best Practices Study were selected from a list generated by NCEA. A set of criteria were developed by NCEA to categorize schools as high-performing or average-performing. NCEA uses three years of state criterion-referenced testing data in mathematics and literacy for continuously enrolled students. In order for schools to be considered high-performing, they must have tested an appropriate percentage of students in each grade, and must have made Adequate Yearly Progress (AYP). NCEA then regressed the number of student proficient on various demographic characteristics, including ethnicity and percentage of free and reduced lunch, to obtain a residual for each school. The residuals were then adjusted by the continuously enrolled group size and the state mean of the same group. Adjusted residuals were ranked within low income deciles, as determined by the school's percentage of low income students and converted to percentile ranks. Schools were then identified as high-performing or average-performing based on their percentile ranks for mathematics and literacy. More information on the NCEA school selection process can be found at http://www.nc4ea.org/files/NCEA%20HP%20Selection%20Criteria.pdf.

In 2003-2004, twelve high-performing schools and five average-performing elementary schools agreed to participate in the Arkansas Best Practices Study. In 2004-2005, twenty-one schools participated: four high-performing elementary schools, two average-performing elementary schools, ten high-performing middle schools and five average-performing middle schools. These schools were matched with regard to size, income level, ethnic background, and

limited English proficiency population. Geographic location was also considered in selecting the schools.

The same data analysis process was followed for both the elementary and middle level studies. Triangulation of the data was accomplished by collecting and analyzing data from different sources. Data were collected through interviews of superintendents, curriculum coordinators, principals, schools counselors, and classroom teachers. Additionally, districts and schools provided documentation to support and further explain the processes that occur within the district and at the individual schools. All interviews were transcribed and subsequently analyzed using rigorous qualitative methods. Each transcript was read by two independent researchers who coded statements related to the five best practices themes identified by NCEA. Statements related to the sixth area of analysis were also coded. In addition to coding by best practices themes, each statement was coded by school system level.

Once the transcripts were coded, statements across interviews were compiled into lists of characteristics for each school according to the best practices themes and school system levels. Compilation of interview statements was completed by a different researcher than the researcher who initially coded the transcript. Discrepancies between researchers with regard to coding were discussed, and a consensus was reached for each statement. The lists of characteristics were then compared across schools in order to detect differences between high-performing and average-performing schools, and to identify common practices that contributed to student achievement. Documents from the schools were examined for confirmatory evidence, as well as to reconcile discrepancies or to clarify information provided in the interviews. Practices that were identified as contributing to student achievement were summarized into “Missing the Mark” and “On Target” tables. Overarching differences found between practices of high-performing and

average-performing schools were then condensed into the framework grid statements (see Appendices A and B).

While the analysis of practices at the elementary and middle levels separately provides substantial information, the purpose of this study was to compare similarities and differences across both the elementary and middle school studies. After best practices were identified at both the elementary and middle school level, an examination of similarities and differences across both the elementary and middle school levels was conducted. To achieve this, the NCEA framework grids for both the elementary and middle school study were compared to identify initial differences and similarities. When similarities or differences were noted, a deeper analysis was conduced using the “Missing the Mark” and “On Target” tables and the lists of characteristics for both the elementary and middle school studies. Furthermore, the case studies, which were created for all high-performing schools, were also consulted as needed. The resulting common characteristics that elementary and middle schools shared were then organized into new “Missing the Mark” and “On Target” tables. Major differences between elementary and middle schools were also noted during the process and are discussed in the results section.

Results

The study focused on identifying differences and similarities in best practices as a whole, with an examination and comparison of all thirty-eight schools involved in the study. The 15-block framework grid, as evidenced in Tables 2, 3, and 4, allowed for examination of data by school system level and theme. Table 2 represents overall findings present in both the elementary and middle level best practices schools. Table 3 (see Appendix A) represents findings from Arkansas data for elementary schools and Table 4 (see Appendix B) findings for middle schools.

Table 2

NCEA Framework for Overall Findings for Arkansas Elementary and Middle Level Best Practices Studies

ORGANIZING THEMES	DISTRICT PRACTICES	SCHOOL PRACTICES	CLASSROOM PRACTICES
CURRICULUM & ACADEMIC GOALS	Establish detailed process for curriculum development & revision, aligning goals and objectives to state standards	Develop, implement, & revise district curriculum with a clear focus on academic rigor & high expectations	Align teaching practices with state standards, following curriculum closely
STAFF SELECTION, LEADERSHIP, & CAPACITY BUILDING	Provide instructional support and variety in professional development opportunities to develop instructional leaders	Promote and provide opportunities for focused teacher collaboration and leadership development	Meet regularly to share plans, duties, & ideas from professional development, & to create subject integrated units
INSTRUCTIONAL PROGRAMS, PRACTICES, & ARRANGEMENTS	Research instructional materials to ensure alignment with state standards	Plan scheduling, arrangements, instructional practices, & instructional materials carefully to facilitate student learning	Use curriculum, objectives, and research-based practices to drive instruction and meet student needs
MONITORING: COMPILATION, ANALYSIS & USE OF DATA	Analyze and utilize data as vital aspects to curricular and instructional decisions	Use assessments to evaluate curriculum and instructional methods in order to improve student achievement	Monitor student performance on an ongoing basis to support instructional practices and use data to inform instruction
RECOGNITION, INTERVENTION, & ADJUSTMENTS	Provide extensive support for struggling teachers & students, while recognizing success	Establish strategies for early identification of struggling students and provide point in time remediation	Recognize student success, while targeting students who have additional learning needs

Elementary and Middle Level Analysis

Analysis of the data revealed similarities in the practices of Arkansas' high-performing elementary and middle schools. Tables 5-9 illustrate similarities between the 27 high-performing

schools for each of the NCEA themes. Each table represents a series of comparative statements called “Missing the Mark” which addresses practices that were identified as ones that can limit student achievement and the “On Target” column illustrates practices that should are positively related to improved student achievement. The sixth area of analysis *Factors Influencing Educational Practices* is included in Table 10.

Table 5

Arkansas Best Practices for the Theme of “Curriculum and Academic Goals”

System Level	Missing the Mark	On Target
Classroom	Teachers individually adapt district curriculum for their classrooms.	Teachers follow district curriculum closely to ensure grade and subject level alignment.
Classroom	The classroom focus is on covering a particular amount of content in a given period of time.	The classroom focus is on student mastery of content.
Classroom	Teachers have little to no flexibility and/or input in terms of what content is taught throughout the school year.	Teachers follow pacing guides but are given the flexibility to adapt and revise curriculum (often via pacing guides) by meeting regularly with other teachers in their content area.
School	Curriculum development and revision is based on textbooks and/or programs.	Curriculum development and revision is based on Arkansas’ State Frameworks.
School	Curriculum is revisited infrequently.	Curriculum revision is an ongoing process.
School	Horizontal and vertical alignment are not a focus of the school.	Teachers frequently and routinely collaborate on horizontal and vertical alignment.
School	School has vague or unwritten academic goals.	School goals are clearly defined and distributed to all stakeholders.

School	The Arkansas Consolidated School Improvement Planning (ASCIP) model is developed by administrators alone.	Development of the Arkansas Consolidated School Improvement Planning (ACSIP) model involves many stakeholders.
School	The principal's activities and professional focus are limited to general administration and/or discipline.	The principal is a strong instructional leader.
School	High expectations for teachers and students are not clearly established.	High expectations for teachers and students are clearly established and modeled by the principal.
School	State requirements are viewed as additional work and not beneficial to students.	State requirements are generally viewed as beneficial to students.
District	Academic goals are not revisited on a regular basis, but only revised when state standards change.	Academic goals are revisited several times each year to evaluate progress and identify areas of improvement.
District	Curriculum alignment and revision are done by the district office only, with no input from individual school building personnel.	Curriculum alignment and revision are done district-wide. Teachers and principals are involved in the alignment process.
District	Curriculum goals are loosely based on state standards.	State standards are closely analyzed to determine what should be taught at each grade level, and curriculum goals strictly adhere to state standards.
District	Goals may be vague or poorly worded and are developed without the involvement of stakeholders.	Goals are clearly and concisely written, and involve input from all stakeholders.
District	Long-term goals are nonexistent or are not clearly stated.	Both long-term and short-term goals are clearly defined for the district.

Table 6

Arkansas Best Practices for the Theme of “Staff Selection, Leadership, & Capacity Building”

System Level	Missing the Mark	On Target
Classroom	Teachers do not collaborate on a regular basis.	Teachers collaborate regularly on the issue of curriculum and instruction.
Classroom	Teachers may have common planning time, but do not view this as an opportunity to improve instruction.	Teachers meet formally on a regular basis to share ideas, plans, duties, and to create subject integrated units.
Classroom	Teachers do not promote a team environment and do not share ideas and duties with each other.	Teachers view the school as a team and student achievement as part of a team effort. Ideas are freely shared and informal collaboration is common.
Classroom	Teachers view professional development as a personal endeavor and sessions attended are often not effectively monitored by the school or district.	Teachers are expected to share good ideas from professional development sessions with others.
School	Teachers are expected to use their own time, without compensation, to collaborate.	Principals schedule time during the day for teachers to collaborate or provide compensation for work done before or after school.
School	Teacher collaboration focuses on discipline problems and paperwork.	Teacher collaboration focuses on ACSIP goals, curriculum revision, student needs, and the sharing of instructional practices.
School	Current teachers are not involved in the process of hiring new teachers.	Current teachers are involved in the process of hiring new teachers.
School	Teachers are selected based on how well their personalities fit with the school climate.	Teachers are selected based on their strength as instructors as well as personality.

School	Teachers are not encouraged to pursue advanced degrees or develop leadership skills.	Teachers are encouraged to pursue advanced degrees, obtain administration certification, and develop leadership skills.
School	Staff development is limited to what the school offers to teachers.	Teachers are involved in the selection of professional development offerings.
District	All district-provided professional development activities are mandatory for teachers.	The district mandates some professional development activities, but also elicits staff input and allows for personal and school based selections.
District	The district does not provide additional instructional support staff for schools or teachers.	Additional instructional support, such as math or literacy specialists, are provided by the district.

Table 7

Arkansas Best Practices for the Theme of “Instructional Programs, Practices, & Arrangements”

System Level	Missing the Mark	On Target
Classroom	Textbooks or programs drive instruction and are used to pace and guide instruction.	Curriculum, objectives, and research-based techniques drive instruction.
Classroom	Teachers rely on administration to introduce new strategies or materials.	Teachers are willing to seek out and try new strategies and materials.
School	The school schedule is inconsistent.	The school schedule is structured to minimize interruptions and to give teachers large blocks of teaching time.
School	Scheduling is not adjusted to allow teachers to teach subjects in which they have expertise.	Scheduling is flexible to allow for teachers to utilize their strenghts to best meet the needs of students.
School	Instructional pacing and arrangements are not monitored and adjusted to meet student needs.	Instructional pacing and arrangements are adjusted to accommodate student learning.
District	The school schedule is loosely structured with many irregular days.	The school calender is scheduled so that assemblies, faculty meetings, teacher inservice days, and other potential interruptions are minimized.
District	Textbooks are chosen by a district committee with little input from teachers.	Textbooks are chosen by a committee of teachers and often other stakeholders, who recommend materials to the district.

Table 8

Arkansas Best Practices for the Theme of “Monitoring: Compilation, and Use of Data ”

System Level	Missing the Mark	On Target
Classroom	Teachers use only state testing data as a way to assess student strengths and weaknesses.	Teachers monitor students regularly through a variety of methods and use information to inform instruction.
Classroom	Student progress is not monitored on a regular basis.	Student progress toward mastery is monitored and affects teachers’ daily decisions.
Classroom	Teachers do not use state testing data to determine curricular and instruction decisions.	State testing data are used to identify weaknesses in curriculum in individual classrooms.
Classroom	Teachers view accountability as negative.	Teachers view accountability as an important way to measure and improve student achievement and instruction.
Classroom	Teachers focus on improving test scores rather than teaching curriculum.	Teachers focus on teaching curriculum, with the understanding that test scores will improve if the district curriculum and state frameworks are followed.
School	Accountability is viewed as difficult and unnecessary.	Accountability is viewed as a positive influence, even though it may be challenging to implement.
School	Teachers are expected to analyze classroom data on their own.	The faculty works together to analyze data and make instructional decisions.
School	Assessment data are used intermittently to identify school and student strengths and weaknesses.	Assessment data are used to regularly to identify school, student, and teacher strengths and weakensses and provide point in time remediation for students.

School	The school does not integrate available data into the monitoring of school goals.	The school uses a variety of data as an integral part of monitoring school goals.
School	School administrators observe teachers to meet evaluation requirements.	Teacher evaluation process is seen as an opportunity for growth and administrators observe and meet with teachers regularly to provide relevant feedback.
District	Data are not monitored at the district level, or are not made available to building-level personnel.	A strong system of monitoring data exists at the district level.
District	The district disaggregates data and distributes it to teachers, but little training is provided to teachers on how to interpret data.	The district provides training for teachers on how to interpret data, and allows teachers to disaggregate and analyze their own data.
District	Data are used infrequently and are not utlized when making adjustments to curriculum and instruction.	Virtually every educational decision is data-driven, from selecting curriculum materials to determining interventions.
District	District-wide common assessments are not used.	Common assessments are developed, with the help of teachers and specialists, at the district level.
District	Teacher evaluation and principal evaluation processes may be in place, but are viewed as another obligation to meet.	Teacher evaluation and principal evaluation policies are consistently followed and viewed as opportunities for growth.
District	District personnel do not network with other districts.	District personnel are constantly networking with other districts to determine best practices.

Table 9

Arkansas Best Practices for the Theme of “Recognition, Intervention, & Adjustments”

System Level	Missing the Mark	On Target
Classroom	Teachers do not consistently incorporate needed student interventions into their instruction.	Teachers focus on student needs by intervening before, during, and after instruction.
Classroom	Teachers do not use all available resources when students need interventions.	Teachers use all available resources to improve student achievement.
School	Students are not identified for intervention during the first several weeks of the school year.	Students are identified for interventions as quickly as possible, either by teacher monitoring or by examining past test scores.
School	Student intervention plans rely on yearly assessments and are not regularly adjusted.	Student intervention plans are flexible, allowing for continual review, adjustment, and point-in-time remediation.
School	High quality student work is not publicly recognized.	High quality student work is publicly recognized.
School	Reward systems are focused on extrinsic rewards.	Reward systems use extrinsic rewards, but the focus is on creating intrinsic motivation.
School	Student recognition is mainly focused on academics.	Student recognition is focused on academics, character, and behavior so that each student can be recognized for his or her accomplishments.
School	Teachers do not observe or monitor each other.	Teachers monitor each other, and will intervene if another teacher is struggling.
School	Parent communication is reactive and parental involvement is not a school priority.	Parent communication is proactive and their involvement is an important part of student remediation.

District	The district does not have a clear intervention plan for student remediation.	The district has a clear intervention plan for student remediation.
District	Struggling teachers are provided with limited support.	Struggling teachers are provided with multiple means of support.
District	Teachers are not publicly recognized for their accomplishments.	Teachers are publicly recognized for their success.
District	Remediation is limited to one or two programs, and is not incorportated into the daily schedule.	Remediation for struggling students is incorporated into the school day in addition to after and before school, Saturday, and summer programs.

Table 10

Arkansas Best Practices for "Factors Influencing Educational Practices"

System Level	Missing the Mark	On Target
School	Increasing parental involvement and support is seen as a difficult endeavor.	Increasing parental involvement and support is a top priority and schools use creative strategies and programs to get parents and other family members involved.
School	Local business and community support is not aggressively pursued.	Local business and community support is seen as a vital connection between the school and the community, so business and community volunteers are encouraged to support schools in a variety of ways.
School	Funding is limited to traditional methods.	Increased funding is creatively sought through grant writing, local foundations, and community support.
District	The collaborative environment may exist primarily at the school level.	An environment of collaboration exists across the district.
District	The school board is primarily seen as a policy making body.	The school board is viewed as a vital component to school and district success, offering vision and a real connection to the community.
District	An educational foundation is not present or inactive.	An educational foundation is present and active, supporting the district, individual schools, and teachers.

In addition to the overall analysis, case studies were created for each of the high-performing schools. Case studies for participating middle schools can be accessed on the Arkansas Best Practices website (http://just4kids.org/en/arkansas).

Discussion

Results of the Arkansas Best Practices Study indicate that high-performing and average-performing schools engage in different practices which influence student achievement. At both the elementary and middle level, common practices that improved student achievement were found. However, it is important to note that all best practices identified were not present in all high-performing schools, nor were all average-performing schools ignoring aspects of best practices. However, high-performing schools typically had been incorporating best practices more effectively and for longer periods of time than average-performing schools, which contributed to their increased levels of student achievement. Furthermore, although the NCEA framework establishes five distinct themes for successful practices, our study revealed that often times these themes overlap. For example, several principals and teachers we interviewed considered the monitoring of student data to be an important part of their curriculum and academic goals, their plans for student remediation, and their monitoring of classroom instruction. Finally, it is also important to understand that while schools were studied at the classroom, school, and district level, we found that successful practices were often a result of what was happening specifically at the school level and in the classrooms. In other words, successful practices found at the school level were not necessarily found at the district level.

Curriculum and Academic Goals

Curricular issues strongly impacted student success. In high-performing schools, the district curriculum was developed by teachers and then was carefully implemented by all teachers throughout the school year. Teachers paid particular attention to how the curriculum at their grade level impacted student achievement in future grade levels. Instruction was based solely on the established curriculum and pacing guides, which were built on state frameworks,

while textbooks and programs were viewed as resources only. When necessary, teachers also had the flexibility to adapt units and lessons to ensure that each student achieves mastery. However, this flexibility was embedded in regular teacher collaboration which ensured that the school curriculum was not substantially altered by individual teachers across grade or subject levels.

Curriculum revision in high-performing schools was viewed as an ongoing process in which teachers must be directly involved. Pacing guides and other curricular materials were regularly revised and adapted based on what teachers perceived to be beneficial for students. District curriculum was based on state standards and frameworks, and school personnel viewed state standards as valuable guidelines for designing district curriculum. School administrators and teachers were provided with district support when implementing the district curriculum, usually in the form of additional personnel such as curriculum coordinators.

Curriculum decisions in both high-performing elementary and middle schools were made after a careful examination of test scores. Areas identified as weaknesses became the focus of the curriculum. Goals were then set for the identified areas and progress toward those goals was closely monitored. Curriculum was revisited on a regular basis, not only when state standards changed. High-performing schools constantly reevaluated and revised curriculum goals so that school academic goals were written and clearly defined. The school goals were viewed as an extension of the district goals. All stakeholders received copies of the school goals and referred to them on a regular basis to monitor progress. Additionally, school goals were developed, revised, and implemented by following the ACSIP model.

Academic goals for the district were in a continual state of examination and revision, not only by district personnel but also by teachers and principals, for the purpose of monitoring the district's progress towards those goals. Curriculum goals for the district, like goals for the

schools, were established by first examining the state standards with a critical eye to determine what specific instructional topics are included in each standard. Also, goals in districts with high-performing schools included both academic and behavioral goals. Teachers and principals all received copies of the district goals and incorporated the goals into everyday school life. Additionally, districts often developed both short- and long-term goals, and short-term goals were viewed as "stepping stones" toward the long-term goals.

Teachers in high-performing schools met on a regular basis to determine if the horizontal and vertical alignment for the school and district was intact. In some high-performing schools, teachers met as frequently as weekly. Principals arranged for teachers to have time to meet, both within grade level and across grade levels. The horizontal and vertical alignment process includes all schools in the district. However, successful alignment at the school of study, whether it was elementary or middle level, did not guarantee that the district was a whole was practicing successful alignment processes. All stakeholders were involved in the process of alignment and were encouraged to provide input. Since teachers and principals, as well as district personnel, were involved in the process, the district alignment goals were perceived as relevant and important to individual schools and classrooms.

A key factor to school success was principal leadership. In high-performing schools, the principal was a strong instructional leader, who focused on determining what students and teachers need to have in order to succeed. The principal was willing to listen to both teachers and students, but was also capable of making difficult decisions. High expectations for both teachers and students were established by the principal, and were communicated on a regular basis. One of the principal's high expectations was that teachers will have high expectations for their students.

Staff Selection, Leadership, and Capacity Building

The major differences between high-performing and average-performing schools with regard to Staff Selection, Leadership, and Capacity Building were found with how teachers collaborated within a school. In high-performing schools, teacher collaboration was seen as an important part of instruction. Principals in high-performing schools strove to provide teachers with opportunities to collaborate during the school day. Collaboration occurred both formally and informally, within and outside of the school day.

Additionally, the topics during collaboration time were focused on curricular and instructional issues. For example, some schools used the collaboration time to review individual student academic plans, conduct mini-lessons, or review pacing guides. Many followed prepared agendas and took notes during their meetings. Principals regularly reported dropping in to visit, check progress, and answer questions. Some schools allowed teachers to use the equivalent of one weekly group meeting to visit other teacher's classrooms or to work on lesson planning.

A team atmosphere was key to a positive school environment. Because of collaboration efforts, teachers viewed themselves as part of a team, working toward increased student achievement and higher state test scores. As part of the team, teachers were willing to share ideas about instructional practices and discipline, as well as support each other when problems arise. Teachers were aware that students must reach a certain academic level in order to be successful in the next grade. Therefore, teachers felt the need to be knowledgeable about what the expectations were for the next grade level. Successful schools understood that meetings with teachers across grade levels helped to ensure that all teachers are staying on track. It is important to note that Arkansas' high-performing middle schools were more likely than elementary schools to engage in teaming and collaboration. Many elementary teachers teach all of the required

courses to one class throughout the day, which may have limited teacher collaboration. Furthermore, many middle schools saw teaming as a part of their overall philosophy which supported a true middle school concept.

When teachers at high-performing schools attended a professional development activity, it was expected that they share ideas with the rest of the faculty so that all teachers in the school could use the information. It was also expected that ideas gained at professional development activities would be immediately incorporated into the classroom. The incorporation of these ideas was closely monitored by the principal, as professional development activities that were not valuable in the classroom were as viewed as a waste of district money. The school offered teachers a wide variety of options for professional development, and teachers were encouraged to attend the activities that were most relevant or interesting to them. If a principal perceived a weakness in a teacher, he or she encouraged the teacher to attend a professional development activity that addresses the weakness. The teacher was then asked to present the information to the rest of the faculty.

Most professional development activities that were mandated by the district were limited to the activities mandated by the state. Teachers were allowed to choose from a variety of activities for completing the remainder of the required professional development hours so that professional development is a valuable experience. Currently, the Arkansas Department of Education requires teachers to obtain 60 hours of professional development per school year. While the district offered many professional development options, teachers were also encouraged to seek professional development activities outside of the district, with the understanding that they must provide a rationale to the principal for why they wanted to attend a particular activity. The district was willing to pay for teachers to attend professional development activities outside

of the district, with the provision that the activities must be research-based and would enhance instruction. The school schedule was arranged so that most, if not all, of the necessary professional development hours could be obtained during the school year as part of the teachers' contracted days. The Arkansas Department of Education has recently required districts to add days to their teachers' contract in order to secure time for teachers to attend professional development activities during the summer and throughout the school year. Professional development activities were chosen based on what teachers and administrators feel would be valuable. Input from the teachers was considered to be of utmost importance as the district determined which professional development activities would be scheduled for the year.

High-performing schools made an effort to develop teachers into leaders. Teachers that exhibited leadership characteristics were encouraged to adopt leadership roles, and opportunities were provided for these teachers to develop their skills. For example, teachers that were interested in moving into administrative positions were asked to occasionally substitute for an administrator so that they could learn the logistics of administration. Support for developing teacher-leaders was found at both the school and district levels through leadership training.

In districts with high-performing schools, providing support for teachers in the classroom was a priority. For example, many districts hired math or literacy specialists, teacher aides, or curriculum coordinators to provide teachers with additional instructional support. Literacy and math specialists frequently collaborated with teachers during team meetings, or came into classrooms to help implement new standards-based lessons. Specialists were also available to review new programs and frequently provided their expertise during textbook adoptions.

Instructional Programs, Practices, and Arrangements

The textbook and program selection process for high-performing schools was frequently lengthy, typically involving a committee of teachers from different schools in the district. High-performing elementary and middle schools utilized their teachers' expertise and experience to help chose new programs. Teachers on program and textbook committees examined several textbooks and teacher materials; researched the validity of the materials, and piloted materials in a few classrooms before making a recommendation to the district. In one district, schools were given the option to not adopt the district-recommended textbooks and were instead provided money for other materials if the school was able provide evidence that the program is effective. High-performing elementary schools frequently devoted more time to math and reading. However, this trend was beginning to take shape at middle schools too, as some schools had recently started adding math and reading labs into their daily schedule. During lab time students were able to work on enrichment or remediation activities that were often individualized.

Integration of content areas was a common practice at high-performing schools. At the time this study was conducted, math and literacy were the only two content areas tested by the state. High-performing schools focused primarily on math and literacy, but not to the detriment of other content areas, such as science and social studies. Principals structured the school schedule so that large blocks of time were available for teachers to cover core content areas. In most cases, elementary teachers had ninety-minute blocks of uninterrupted time. Additional classes, such as art, music, and physical education were scheduled carefully so as to maximize instructional time. The goal of the school is to provide as much continuity in scheduling as possible. School schedules were arranged to provide as many full-length school days as possible. Assemblies, faculty meetings, teacher in-services, and other interruptions were kept to a minimum, and were frequently scheduled to take place after regular school hours.

Monitoring: Compilation, Analysis, and Use of Data

The use of data was vital to the success of a school or district. Ongoing assessment allows schools to determine if interventions were necessary for students and teachers, and therefore maximized the impact of the interventions. The teachers' perspectives of assessment influenced how the assessments were used. Teachers that perceive assessments as unnecessary do not adapt instruction based on assessment results. However, if teachers perceived assessments as tools to provide information on the effectiveness of their teaching, then instruction was adapted to student needs, resulting in higher student achievement. For high-performing schools, assessment was seen as a necessary component of instruction, because without assessment, it was not possible to properly adapt instruction. Therefore, assessment must be completed on a regular basis, and the results must be made readily available for use by teachers and administrators.

An important distinction between high-performing and average-performing schools was found in teachers' perceptions of the relationship between curriculum and assessment. Teachers at high-performing schools focused on teaching the state and district curriculum, maintaining the belief that if the curriculum is taught well, then students will perform well on standardized tests. Test preparation was then incorporated into the curriculum and local testing materials were often formatted in the same fashion as state assessments. Teachers that concentrated on teaching the curriculum rather than test preparation experienced more student success.

At high-performing schools, teachers and administrators took teacher evaluation seriously, with a focus on growth for all staff members. Teachers met with the principal at the beginning of the year to determine what their personal goals are. These goals were kept on file and formed the basis for the formal observations. The principal utilized both formal and informal

teacher evaluations to monitor teacher progress toward personal and school goals, and to determine if adjustments need to be made. Documentation was kept on both formal and informal evaluations. Districts with high-performing schools typically focused on growth models for principal evaluations as well. For example, one district challenged principals to consider the following questions at the end of each academic year: Have your kids improved academically? What have you done to make sure that classroom instruction and utilization of the curriculum is effective?

Recognition, Intervention, and Adjustments

Interventions varied between high-performing and average-performing schools. In both high-performing elementary and middle schools, student interventions were based on assessment results. For many high-performing schools, timely intervention was vital for struggling students. Once students were identified for intervention, teachers adapted instruction to accommodate student needs. Interventions were offered to students in a variety of forms, including remediation during the school day, before- and after-school tutoring, Saturday school, and summer school. Students that were involved in interventions were closely monitored. Since intervention programs were viewed as flexible in high-performing schools, students moved in and out of remediation as necessary, and therefore did not receive unnecessary interventions. Point-in-time intervention was more focused at the middle school level. This may be partially explained by the organization of the school day, as middle schools were better able formally incorporate time for remediation in the form of math and reading labs.

Teachers at high-performing schools adapted classroom instruction for all student needs. This means that teachers needed to be aware of which students are in need of remediation and which students are in need of enrichment. Need identification was done through ongoing

assessment. Different teachers rewarded students in different ways, but the focus was always on motivating students to perform to the best of their ability. High quality student work was displayed in classrooms and in hallways. Students that consistently produced high quality work were recognized in school-wide assemblies. Rewards systems may use extrinsic rewards, but the main focus was to teach students that learning is its own reward. There was a consistent belief that extrinsic rewards will work for awhile, but will ultimately reduce student motivation. Student recognition was not only focused on academic achievement. Students may be recognized for appropriate behavior, displaying certain character traits, attendance, or academic growth. It was understood that students must be taught how to behave appropriately and be rewarded for displaying good behavior.

Factors Influencing Educational Practice

Both high-performing elementary and middle schools viewed potential problems as challenges. If parental involvement was lacking, the principal and teachers did whatever it took to improve achievement, including offer dinner banquets and even visiting students' homes. For example, if parental involvement was less than desirable it may have been attributed to poverty, a higher than average migrant population, or parents' busy lifestyles.

High-expectations and a willingness to do whatever it takes to improve student achievement permeated throughout high-performing schools, and these expectations were often found at the district as well. Furthermore, these schools truly believed that all students can learn. For example, a few of the high-performing schools visited were renowned for the special education programs, and parents clamored to enroll their exceptional students in these schools. Other high-performing schools were known throughout their district as schools that were always going above and beyond to secure additional funding and support through grants, community

partnerships, and local postsecondary partnerships. One high-performing middle level school was in the process of establishing tutoring classes throughout their school's neighborhoods that would be within walking distance for students and parents.

Districts with high-performing schools often welcomed the vision that their school board and community members could offer. Average-performing schools often viewed their school board as solely a policy making body and were hesitant to change. High-performing schools worked with their district and school board to obtain additional funding, to build support for new academic and extracurricular programs, and looked to community members to harness support. Again, above all, both high-performing elementary and middle schools took challenges and made them opportunities. Their dedication was evident at the school, district, and community level.

Summary

The results of this study are valuable to schools looking to identify and incorporate best practices that relate to improving to student achievement. Practical suggestions can be drawn from the results, giving districts, schools, and teachers actual practices to implement. Best Practices studies conducted in Arkansas and in other states, such as Texas, Illinois, and New Jersey, allow us to identify similarities in best practices and to determine if best practices differ based on region. As a whole these studies can help inform practice throughout the nation.

While not all best practices were identified in all high-performing schools, the data revealed clear practices that helped students achieve. The quality of implementation of a particular practice and the length of time that a school had been utilizing a given best practice influenced the success that schools have had. As average-performing schools devote more effort and time to implementing best practices, it can be expected that improvements will be seen.

The major differences that existed came from grounded beliefs about teaching elementary and middle level students. For example, the teaming approach was more likely to be found at the middle school level. In turn, this philosophy and organization allowed teachers to teach primarily disciplines they had specialized in and often led to an increase in collaboration and interdisciplinary teaching. Elementary schools, however, often experienced much higher levels of parental involvement, which they often attributed to their success. While differences were found, it is important to note that many of the practices deemed successful by schools were present at both the elementary and middle school level.

Appendix A

Table 3

NCEA Framework for Arkansas Elementary Best Practices Study

ORGANIZING THEMES	DISTRICT PRACTICES	SCHOOL PRACTICES	CLASSROOM PRACTICES
CURRICULUM & ACADEMIC GOALS	Develop clear academic goals and objectives that are aligned with state standards	Develop curriculum goals with clear focus on academic rigor and high expectations	Align teaching practices with state standards, keeping the focus on student achievement
STAFF SELECTION, LEADERSHIP, & CAPACITY BUILDING	Focus staff selection and professional development on creating strong instructional leaders	Promote collaboration, teacher leadership, and teacher responsibility	Incorporate information from relevant staff development directly into classroom practices
INSTRUCTIONAL PROGRAMS, PRACTICES, & ARRANGEMENTS	Research instructional materials to ensure alignment with state standards	Choose instructional materials that efficiently and effectively support teacher and student achievement	Utilize instructional practices that promote student learning
MONITORING: COMPILATION, ANALYSIS & USE OF DATA	Use data to support educational decisions fostering district quality	Utilize data in evaluations of curriculum, instructional methods, and student achievement	Monitor student performance on an ongoing basis to support instructional practices
RECOGNITION, INTERVENTION, & ADJUSTMENTS	Create programs that allow students of all abilities to succeed and be recognized	Establish strategies for early identification and intervention to meet student needs	Recognize student success while intervening and adjusting as individual student needs arise

Appendix B

Table 4

NCEA Framework for Arkansas Middle Level Best Practices Study

ORGANIZING THEMES	DISTRICT PRACTICES	SCHOOL PRACTICES	CLASSROOM PRACTICES
CURRICULUM & ACADEMIC GOALS	Establish detailed process for curriculum development & revision	Implement district curriculum & participate in revision process	Follow curriculum closely and meet regularly to adjust, align, & revise
STAFF SELECTION, LEADERSHIP, & CAPACITY BUILDING	Provide instructional support and variety in professional development opportunities and develop instructional leaders	Provide opportunities for focused teacher collaboration and support leadership development	Meet regularly to share ideas, plans, duties, and to create subject integrated units
INSTRUCTIONAL PROGRAMS, PRACTICES, & ARRANGEMENTS	Substantial differences in district practices were not identified	Plan scheduling, arrangements, and instruction to facilitate student learning	Use curriculum, objectives, & research to drive instruction and meet student needs
MONITORING: COMPILATION, ANALYSIS & USE OF DATA	Analyze and utilize data as vital aspects to curricular and instructional decisions	Use accountability models and assessment to improve student achievement	Monitor students regularly and use data to inform instruction
RECOGNITION, INTERVENTION, & ADJUSTMENTS	Provide ongoing and extensive support for struggling teachers and students	Intervene early and regularly by providing point in time student remediation	Target students who have additional learning needs