HIGHER AND LOWER READING ACHIEVEMENT IN

RURAL OKLAHOMA ELEMENTARY SCHOOLS:

A DESCRIPTIVE COMPARISON OF CONTEXT

AND INSTRUCTIONAL ENVIRONMENT

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CHAPTER I

INTRODUCTION

Teaching children to read is the key to subsequent educational success and should be the most important priority of elementary school. Reading is essential to success in our society. If you live in America, you are not likely to succeed in life if you do not learn to read. The ability to read is highly valued and important for social and economic advancement. Consider that reading skills serve as the major avenue to learning about other people, about history and social studies, the language arts, science, mathematics, and other content subjects that must be mastered in school. When children do not learn to read, their general knowledge, their spelling and writing abilities, and their vocabulary development suffers in kind. Within this context, reading skills serve as the major foundational skill for all school-based learning, and without it, the chances for academic and occupational success are limited.

Of course, most children learn to read fairly well. In fact, a small number learn it on their own, with no formal instruction, before school entry (Anbar, 1986; Backman, 1983; Bissex, 1980; Jackson, 1988; Jackson et al., 1991). A larger percentage learn it easily, quickly, and efficiently once exposed to formal instruction (Snow et al., 1998).

Although children have been taught to read for many centuries, only in this century has there been widespread expectation that literacy skills should be universal.

Under current conditions, in many "literate" societies, 40 to 60 percent of the population have achieved literacy; today in the United States, we expect 100 percent of the population to be literate (Snow et al., 1998).

The National Literacy Act defines literacy as "an individual's ability to read, write, and speak in English, compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one's goals, and develop one's knowledge and potential" (Irwin, 1991).

But the fact is that more than 20 percent of adults read at or below a fifth-grade level (National Institute for Literacy, 2000). This is far below the level needed to earn a living wage. And the impact of low literacy cannot be ignored. Forty-three percent of people with the lowest literacy skills live in poverty; 17 percent receive food stamps, and 70 percent have no job or a part time job (National Institute for Literacy, 2000).

Literacy learning begins in the home and community. It continues in school where literacy instruction should stimulate, teach, and extend the communication and thinking skills that will allow students to develop positive attitudes and to become effective readers, writers, communicators, and life-long learners.

Despite the many ways in which American schools have progressed and improved the teaching of reading over the last half century, however, there is little reason for complacency. Clear and worrisome problems having to do specifically with children's success in learning to read and our ability to teach reading to them exist.

These reading problems are found among every group and in every primary classroom, although some children with certain demographic characteristics are at greater risk of reading difficulties than others. Precisely how and why this happens has not been

fully understood. In some cases, the sources of these reading difficulties are relatively clear, such as biological deficits that make the processing of sound-symbol relationships difficult. In other cases, the source is experiential such as poor reading instruction (Burns, Griffin, & Snow, 1999).

A large number of students who should be capable of reading ably given adequate instruction are not doing so, suggesting that the instruction available to them is not appropriate. If low-quality instruction is confined to one particular teacher, children's progress may be impeded for the year spent in that classroom, but they may overcome this setback when exposed to more adequate teaching in subsequent years. There is evidence, however, that poor instruction in first grade may have long-term effects. Children who have poor instruction in the first year of school are more seriously harmed by the bad early learning experience and tend to do poorly in schooling across the years (Pianta, 1990).

In some schools, however, the problem is more pervasive, such that low student achievement is schoolwide and persistent. Sometimes the instructional deficiency can be traced to lack of an appropriate curriculum. More often, a host of conditions occur together to contribute to the risk imposed by poor schooling: low expectations for success on the part of the faculty and administration of the school, which may translate into slow-paced, undemanding curriculum; teachers who are poorly trained in effective methods for teaching beginning readers; the unavailability of books and other materials; noisy and crowded classrooms; and so forth.

It is regrettable that schools with these detrimental characteristics continue to exist anywhere in the United States; since these schools often exist in low-income areas, where

resources for children's out-of-school learning are limited, the effects can be very detrimental to students' probabilities of becoming skilled readers (Kozol, 1991; Puma et al., 1997; Natriello, 1990). Attending a school in which low achievement is pervasive and chronic, in and of itself, clearly places a child at risk for reading difficulty (Snow et al., 1998).

Parents, educators, community leaders, and researchers identify clear and specific worries concerning how well children are learning to read in this country. Large numbers of school-age children, including children from all social classes, have significant difficulties in learning to read. Failure to learn to read adequately for continued school success is much more likely among poor children, among nonwhite children, and among nonnative speakers of English (Snow et al., 1998). Achieving educational equality requires an understanding of why these disparities exist and developing efforts to redress them.

In summary, a variety of detrimental school practices and/or differences in instructional environment may place children at risk for poorer achievement in reading than they might otherwise experience.

Purpose of the Study

This study was designed to compare the instructional environments of third grade classrooms in selected rural Oklahoma elementary schools to determine why students in one school do better than those in another on the reading section of the Iowa Test of Basic Skills (ITBS).

Definition of Terms

Terms used in this study are defined as follows:

"At Risk" Schools – A school is considered "at risk" if its students score below

the 25th percentile rank when compared to all other schools in Oklahoma on the CORE

curriculum tests given in grades 5, 8, and 11, and if its students score at or below the 49th

percentile rank on the national average on the Iowa Tests of Basic Skills Complete

Battery, which is given each year to students in the third and seventh grades. Both

circumstances must exist for a school to be considered "at risk."

Accelerated Reader – A reading motivational program for children which

combines the use of children's literature with the use of computer software to test

comprehension. The software follows individual students as well as whole class

performance and also manages the records.

Context – The interrelated conditions in which schools in the study exist. Three

contexts were examined in this research: the community contexts, the school districts

contexts, and the classroom contexts.

Balanced Approach to Reading Instruction – An approach that has a strong

literature, language, and comprehension program that includes a balance of oral and

written language, and an organized explicit skills program that includes phonemic

awareness, phonics, and decoding skills to address the needs of the emergent reader.

Criterion Referenced Tests (CRT) – Tests that reflect an assessment approach that

requires that standards be established regarding what achievement levels children should

attain at successive points in their educational careers. Tests are then designed to determine whether or not children have reached the standards for their grade.

Decoding Perspective – A philosophical belief that the ability to read and comprehend depends largely on the ability to manipulate letter symbols and sounds and connect these with oral language. It is also called the phonics perspective.

Drop Everything and Read (D.E.A.R.) – A reading enrichment activity in which teachers set aside time each day for students to read for at least fifteen minutes. Students read in their personal readers, books they are familiar with, and class books, or they listen to books in listening centers.

Family Educational Rights and Privacy Act of 1974 (FERPA) – The Family Educational Rights and Privacy Act insures confidentiality of students' educational records and restricts disclosure to or access by third parties, except as authorized by law.

Formal Reading Instruction – Refers to time spent in the actual process of teaching reading.

Higher Performing Schools – Schools in the study not identified by the Oklahoma State Department of Education as "at risk" for academic failure.

Instructional Environment – Refers to all aspects of the daily educational experience that affect or influence students. This includes the school itself, the classroom, the classroom teacher, other school personnel who come into contact with students, the instructional program, the available resources, the involvement of the community, and the community demographic characteristics.

Iowa Tests of Basic Skills (ITBS) – A norm-referenced test (NRT) intended to provide information about the skills development of individual students and about

relative strengths and weaknesses of instructional programs. In Oklahoma they are given in grades 3 and 7. These tests were formerly called Iowa Every Pupil Test of Basic Skills (IEPTBS).

Literature-Based Instruction – Implies a movement away from the exclusive use of the basal reader toward teaching and learning through children's literature, both fictional and factual.

Lower Performing Schools – Schools in the study identified by the Oklahoma State Department of Education as "at risk" for academic failure.

Multigrade Classrooms – In this study multigrade classrooms are those in which more than one grade level is present in a single classroom. However, this class configuration is used solely because it is more economically feasible for the district, not because a philosophy of multiage grouping is in place. In other words, multigrade classrooms in this study cost less.

Oklahoma Core Curriculum Tests (OCCT) – Specially designed Criterion-Referenced Tests (CRT) used to measure Oklahoma's own core curriculum, the Priority Academic Student Skills (PASS). These tests compare students with Oklahoma state education standards. Students in grades 5, 8, and 11 are currently tested.

Phonics – Refers to instructional practices that emphasize how spellings are related to speech sounds in systematic ways.

Rural Schools – Schools associated with the country rather than urban or suburban communities.

Sequoyah Children's Reading Program – An annual activity sponsored by the Oklahoma Library Association developed to encourage boys and girls of Oklahoma to

read books of literary quality. Children read from a master list of notable books compiled

annually by the Sequoyah Children's Book Award Committee and vote for the book they

like best. The winning author is presented the Sequoyah Award by two children at the

annual meeting of the Oklahoma Library Association.

Skills Perspective – A philosophical belief that views reading as one of four

language arts - listening, speaking, reading, and writing. Each of these four language arts

is composed of a series of discrete skills, which are equally important and equally

accessible to the reader. In this perspective, each skill is taught in isolation and is thought

to be integrated by the reader at a later time.

Standardized Tests – Tests required by nearly all school districts to compare their

students' progress to the progress of students in other districts or previous years. These

tests utilize standardized materials and standardized procedures for administration and

scoring.

Student Oral Reading – Refers to the amount of time students spend daily in

reading aloud during any subject.

Teacher Oral Reading – The amount of time the teacher spends daily in

instruction or recreational activities during which he/she reads aloud to the students.

Whole Language Perspective – The philosophical belief in which reading, writing,

speaking, and listening are viewed as alternate forms of language used in society for the

purposes of communication. It assumes that young children develop reading and writing

ability in much the same way as they acquire oral language.

Significance of the Study

There is a strong connection between reading instruction and literacy. Teachers have the opportunity to match the student with the best type of literacy instruction. This study can provide information about what is essential in successful reading instruction and about what is taking place in Oklahoma elementary school third grade classrooms today. It can help provide guidelines and recommendations for program planning and action necessary to ensure successful literacy education.

The study can also begin to provide the documentation of effectiveness that researchers have sought. It will add to the increasing body of knowledge concerning the impact of differences in instructional environments on reading instruction in this country.

Assumptions

Two assumptions underlie this study. First, it is assumed that Oklahoma's third grade teachers teach reading as part of their curricula. Second, it is assumed that information about programs, methods of instruction, philosophies and test scores are reported correctly.

Limitations

This study is limited due to the use of standardized tests to assess academic achievement, and particularly because of its reliance on the Iowa Tests of Basic Skills. Also, the necessity of employing a selected sample raises questions regarding the generalizability of the findings. The study is partially dependent upon self-report

participation, so the size of the sample affects the interpretation and analysis of data. The basic question is: Do schools included in the sample represent all public schools in Oklahoma?

Organization of the Study

This study is composed of five chapters. Chapter I introduces the study, including a statement of the problem, significance of the study, a definition of terms, limitations, and assumptions. Chapter II is a review of the literature. Chapter III describes the methodology used in the study and includes a description of the subjects, instruments used, procedures, and analysis. Chapter IV presents the results of the study, and Chapter V provides a discussion of the findings.

CHAPTER II

REVIEW OF THE LITERATURE

Many children in this country fail to learn to read proficiently. Every year

thousands of articles, reports, studies, surveys, and community projects address the

problem of the juvenile illiterate. Yet every year thousands of students continue to fail at

reading. How can a child painlessly master oral language without any formal educational

program and then fail to master written language despite years of instruction?

How to teach reading has been the subject of much debate for years. One reason

may be that, to the reading public, reading seems to be a fairly easy and natural thing to

do. However, this apparent ease masks the very real and complex processes involved in

the act of reading.

The truth is that learning to read is anything but natural. In fact, it does not

develop incidentally; it requires human intervention and context. While skillful readers

look quite natural in their reading, the act of reading is complex and intentional, a process

that takes years to master; it requires bringing together a number of complex actions

involving the eyes, the brain and the psychology of the mind (e.g., motivation, interest,

past experience) that do not occur naturally (Larrick, 1987). If you add to this the many

external factors that influence the process of learning to read, the fact that children do

learn at all becomes remarkable.

How should reading be taught? With what sort of materials? What are the best ways of leading a child to literacy? There seems to be an emerging consensus about the need for change in literacy instruction offered in our elementary schools, but as yet there is no clear consensus on the nature of the changes that are needed, nor any clear plans on how best to facilitate the change (Allington, Guice, Li, Michelson, & Baker, 1995)

Why do similar schools and similar types of students achieve at very different academic levels? How do some schools produce successful students despite poverty and rural isolation and their effects? To these and other questions, Uri Bronfenbrenner, an environmental psychologist, would say it all depends. "It all depends" translates into the idea that the explanations for what we do are to be found in interactions between characteristics of people and their environments, past and present. He believes the main effects are in the interaction, and would suggest that if we want to change behavior, we have to change environments (Bronfenbrenner, 1979).

The successes and failures of American children in reading achievement are continuously scrutinized. Rather heavy utilization of tests to measure student progress in reading as well as all other subjects is very much in vogue. State mandated tests which harmonize with the states' measurably stated objectives are commonly used. For schools, much depends on the outcomes of these tests. Funding and staffing are dependent upon satisfactory test performance. Worse, schools can be closed if their students' performance on their achievement tests falls below expected levels over time. The issue of achievement in reading is part of a larger discussion about academic achievement as a whole.

Academic Achievement

Educators want to see their students succeed. They like to believe that their school systems are among the best in the world. Unfortunately, this is not always true. Reports of American students consistently outperformed by their foreign counterparts are common in both professional and popular literature. As a result, schools are under constant pressure to raise academic performance levels.

In a school that produces large numbers of children who cannot read at grade level, year after year, it is not necessary to assess children individually (Burns, Griffin, & Snow, 1999). We already know that children who attend this school are being placed at risk for reading difficulties. In these cases, teachers and principals should probably consider addressing the problem with system-wide restructuring and change, rather than invest in a costly child-by-child remediation process. Good teaching and a good classroom reading program can bring most students up to or near grade level during the primary grades. But sustaining this accomplishment is difficult when a large percentage of a school's students are failing.

Hughes (1995), in a study to determine why some West Virginia schools are successful in spite of the obstacles they face, found there are differences between high and low achieving rural schools. The study indicated that rural, low-achieving schools had higher faculty turnover, teachers with lower education levels, less experience, fewer years of teaching in the present building and lower faculty morale than the rural, higher-achieving schools. In the rural, high-achieving schools, teachers wanted to be in the schools, faculty turnover was low, continuity of instructional programs was present and

there was evidence of the faculty working together as a team over time. While the detrimental effects of poverty on student learning were present in both the high and low-achieving rural schools, the difference in academic achievement appeared to be in the attitude of the teachers, low faculty turnover, continuity of instructional programs, an identified instructional leader and having available services and programs for students in needs.

Research indicates that academic achievement is affected by many factors. These include issues of poverty, class size, curricula, and instruction (Yap, 1997). Yap also reports that variables shown to be related to student achievement at the district level include percentages of students from ethnic minorities, in special education, below the poverty level, in bilingual programs, or in compensatory reading programs. In considering the complex issues related to low student academic performance, the Public School Forum of North Carolina (1998) stated that confronting issues related to poverty, inadequate parental support, and difficulties in attracting and retaining top quality teachers emerged as critical to achieving success in such performance. An examination of several of these identified factors follows.

Poverty

Poverty occurs in all races and in all countries. In the United States in 1996, one out of four individuals (25%) under the age of 18 was living in poverty (Payne, 1998). In 1989, one in three Latino children was living in poverty. According to current estimates, between one fifth and one quarter of all American children are living in poverty (Fisher & Adler, 1999). But regardless of race or ethnicity, poor children are much more likely than

non-poor children to suffer developmental delay and damage, to drop out of high school, and to give birth during the teen years (Miranda, 1991).

Poverty has long been recognized as a contributing factor in low academic achievement. This has been shown so often that it is now an unquestioned assumption behind such programs as Title I and Head Start (Schellenberg, 1998). Many urban school districts routinely report data disaggregated by students' free and reduced lunch status. Researchers such as Bracey (1991 and following) and Berliner and Biddle (1995) often cite the increase in poverty as a counter argument to claims that the public schools are in a state of crisis.

The fact that poverty has a profound effect on achievement has been well established; poverty undeniably poses numerous threats to children's educational prospects. The mechanisms that produce this effect are less clear. Some authors speak of the lack of academic enrichment in poor families (Taylor & Wang, 1997), or point out that children in low income families tend to have uneducated parents (Burns, Griffin, & Snow, 1999). Others cite poor nutrition, both prenatal and in early childhood (House Committee on Education and Labor, 1994). Others focus on education being pushed aside by the stresses of meeting basic needs. Still others speak more generally of a cycle of low expectations in multi-generational poor families (Taylor & Wang, 1997).

Knapp (1995) writes that schools that serve large numbers of children from low-income families face one of the most difficult tasks in education. Over the years, the teachers and administrators who staff these schools have learned to cope with high mobility among children, limited resources, inadequate facilities, and concentrations of children with diverse and hard-to-meet learning needs.

Most teachers try hard to make the best of the challenge before them; many wonder why it seems so hard to engage and maintain children's attention to learning tasks, communicate what often appears to be common sense, and show demonstrable achievement gains on conventional measures of learning. In their approach to their work, these teachers often settle for a curriculum that aims at the most "basic" elements of the content to be learned, on the assumption that no more can be managed and that mastery of the basics is an important accomplishment.

The children who attend such schools face an equally difficult task. From their point of view, it is not always obvious what they have to gain from being in school or from going along with what schools ask of them (Knapp, 1995). For one thing, the culture and language of school are often unfamiliar, even if the children have grown up speaking English; for a growing percentage of children from low-income families, English is literally a foreign language. To complicate matters, what teachers expect of students in high poverty classrooms is not always clear or compelling; indeed, it often appears to the students that relatively little is expected of them. The result in these settings is an educational experience that lacks meaning and importance to the learners (Knapp, 1995).

The difficult tasks of teaching and learning in high-poverty classrooms have prompted a continuing search over the years for effective teaching practices and curricula. At issue are questions about the capabilities of the learners, the nature of learning itself, the content of challenging academic instruction, strategies for teaching, and ways to manage productive learning environments.

Recently, some public policy researchers have begun to look at concentration of poverty, rather than poverty itself, as the cause of learning difficulties, although studies dating back to the Coleman Report (1966) have looked at this subject. Often, though, they have viewed the concentration of poverty as simply a cumulative effect of the poverty of individual students (Chou & Coultin, 1990). In a 1992 study, however, Anderson suggested that the problems produced when poor children attend schools filled with other poor children were caused by more than that cumulative effect, and that poor children who attend relatively affluent schools have fewer problems and fewer risk characteristics than those attending schools filled with other poor children. However, this study, like those that had gone before, did not attempt to distinguish the poverty level of the student's school from the poverty level of the neighborhood where that student lives. Indeed, in urban areas with large geographic areas of concentrated poverty, such a distinction is often not possible, as students are unlikely to attend schools in areas that are much different economically from their homes (Anderson, 1992).

Prevalence of poverty in a student's surroundings seems to compound the effects of poverty itself. Schellenberg (1998) conducted a study in a Midwestern urban school district which sought to separate the effect of concentrated poverty on students' academic achievement and to develop a simple method for demonstrating that effect. It used two years' worth of data on elementary school students in the district and concentrated on two outcome variables, standardized test scores and absenteeism. In both years, the district had more than 20,000 students, of whom about 55% were eligible for free lunch. When compared to students at the same economic level (free lunch, reduced-price lunch, no

subsidy), students from more affluent neighborhoods had consistently higher test scores

and lower absenteeism than those from poorer areas of the city.

Not everyone, however, thinks that poverty necessarily predicts poor achievement.

Kati Haycock, in Dispelling the Myth: High Poverty Schools Exceeding Expectations

(1999), writes that

> a kind of creeping malaise has come to infect more and more educators
> and school systems which results in their lesser expectations of poor
> children and poor schools. Somewhere along the line, somebody decided
> that poor students couldn't learn, or at least not at a very high level.
> (pg. 186)

According to Haycock, however, the truth is actually quite different. Some poor children

have always achieved at high levels, and some whole schools get all of their children to

levels reached by only a few students in other schools. Burns, et al. (1999) agree, stating

that, all else being equal, coming from a low-income family, in and of itself, does not

greatly increase a child's risk for learning to read, provided they are given the instruction

and support they need. Therefore, poverty in individual families should not be used

exclusively as an identifier for children at risk. It is more effective to identify children

who come from families with low income status and attend a school with large numbers

of poor students (Burns, Griffin, & Snow, 1999).

In the fall of 1998, the Education Trust constructed and administered a survey of

1200 schools that had been identified by the states as their top scoring and/or most

improving schools with poverty levels over 50%. The purpose of the survey was to

highlight the success stories of Title I, the law which supported efforts by high poverty

schools to give their low-achieving students extra help in mastering the most basic skills.

The survey also sought to identify characteristics that seem to contribute to high academic

achievement among low-income students. The 366 elementary and secondary schools responding to the survey served student populations that are largely poor. They came from 21 states, operated in rural isolation and urban overcrowding, served every racial and ethnic group in the country as well as those who came to school with little or no English, and came from low income families. In many of them, poor students comprised over three quarters of the school population. Many of these schools produced results that exceed the best efforts of their suburban counterparts. All of them met one of two significant criteria: (1) "high performing," or among the ten highest performing high poverty schools on state assessments in reading and/or mathematics; or (2) "most improved," or among the ten biggest gaining schools on state assessments in reading and/or mathematics (Education Trust, 1999). This report seems to dispel the myth that poor kids can't learn and are proving it everyday through their work in top performing, high poverty schools.

Ethnicity

Closely related to the issue of poverty is the issue of ethnicity. Failure to learn to read adequately for continued school success is especially likely among children who are members of racial minority groups and among those whose native language is not English (Burns, Griffin, & Snow, 1999).

In the 1990 census, 12.5% White, 39.8% Black, 32.2% Hispanic, 17.1% Asian-American, and 38.8% Native American children lived in poverty (Payne, 1998). While the number of white children in poverty is the largest group, the percentage of children in poverty in minority groups is higher.

Differences between the dialect children speak at home and the dialect taught at school may contribute to difficulties in learning to read. In the United States, some teachers, administrators, and policy makers view dialect differences not as regional variations, but as incorrect English. Some teachers develop low expectations for these students. Under these conditions, children are being placed at risk because of their unfamiliarity with standard English dialect (Burns, Griffin, & Snow, 1999).

Hispanic students in the United States are at especially high risk. Despite progress over the past 15 to 20 years, they are about twice as likely as non-Hispanic whites to read well below average for their age. Many of these children also have parents who are poorly educated, come from low-income families, live in low-income communities, and attend low-achieving schools. With multiple potentially detrimental factors in place, we can predict that, without excellent instruction, large numbers of these children will be at risk for reading difficulties (Burns, Griffin, & Snow, 1999).

Ruralness

The rural areas of our country account for more than one-fourth of our nation's population and most of our natural resources. Some 26.6 percent of all public school buildings are located in rural areas serving approximately 26 percent of the nation's public school children (Phelps, 1998).

In a report reviewing the research on rural education and at risk students in order to determine what the literature reveals about the combined influence of poverty and rural communities, Nidhi et al. (1997) states that, in general, the information specifically on poor, rural students, communities, and schools is sketchy, lacking in focus, and not

comparable across studies. However, some preliminary conclusions about students in poor, rural schools can be drawn: academic achievement of poor, rural students is better than that of poor urban students; overall, the magnitude of the problem of low academic achievement is smaller in poor, rural areas than it is in poor, urban areas, as a smaller proportion of rural students are poor and attend schools with other poor students; rural communities are quite diverse, and their economic, social, and demographic characteristics vary across, the country; the overall characteristics of rural students indicate that, in general, they are different from students in urban schools, and therefore the strategies for dealing with this population may need to reflect such differences; minorities do comprise a large proportion of the rural poor, and there the profile of many poor, rural students, especially in some persistent-poverty areas, is likely to be similar to that of many in poor, urban areas; and rural students attend smaller schools that are connected to the community, but they seem not to have the same breadth of curriculum and extracurricular offerings as their urban counterparts. However, the evidence is far from definitive (Nidhi et al., 1997).

Analysis of data from the 1992 National Assessment of Education Progress shows that the average proficiency of students from "extreme rural" communities (i.e., those residing outside a metropolitan area and attending schools in areas with a population below 10,000 where many of the students' parents are farmers or farm workers) at ages 9, 13, and 17 in writing, mathematics, and science was above that of students from "disadvantaged urban" areas (i.e., those residing in a metropolitan area and attending schools where a high proportion of students' parents are on welfare or are not regularly employed) (Nidhi et al., 1997). Furthermore, students in extreme rural areas

outperformed students in disadvantaged urban areas in reading at grades 4, 8, and 11 (Mullis et al., 1994). However, while both groups are, by definition, disadvantaged, poverty is not strictly controlled for in this analysis, and therefore, the differences between students in poor, rural and poor, urban communities are not entirely clear.

Several other studies have found no significant differences between performance on standardized achievement tests of students from small, usually rural, schools and those from larger, often urban, institutions. In research completed in the state of New York, Monk and Haller (1986) found that students from smaller, often rural, schools achieved as well as students from larger schools. Kleinfeld and others (1985), in their Alaska study, did not find that high school size determined the quality of a student's education, experience, or achievement on standardized tests. Moreover, in one New Mexico study, which looked at factors affecting performance of selected high school students, those attending schools in rural areas performed as well as those in urban locales (Ward & Murray, 1985). In a study designed to examine the issue of whether any differences exist in school achievement among rural, suburban, and urban school students in four major areas of school learning (reading, mathematics, science, and social studies), results showed that students from rural schools performed as well as, if not better than, their peers in metropolitan schools.

Other scholars have found, however, that rural-urban differences do exist. One study in Kansas found that the ACT scores of rural students were two points lower than scores of urban students in each of the categories on the ACT (Downey, 1980). Another examination of student performance in Hawaii public schools found substandard achievement to be a pattern in rural areas (McCleery, 1979). Other research on

achievement in social studies for 13-year-olds pointed out that rural students, comparatively speaking, did well on objective tests focusing on skills, but not as well on objective tests that focused on factual learning (Easton & Ellerbruch, 1985).

The issues surrounding efforts to assess the achievement of rural students on standardized tests are by no means simple. To really assess the small, rural schools' impact on students, comparisons must be made among students who are matched by origin, background, and access to information before any meaningful conclusions about rural achievement can be rendered.

Class Size

The controversial issue of class size has been a noteworthy educational issue since 1900 (Costello, 1992). There have been many studies regarding small class size. Researchers are very interested in whether small class size improves achievement or not. Studies regarding class size vary in structure, length, and conclusions (Porwoll, 1978). Some indicate significant results and others determine that class size does not significantly influence achievement of students because teachers do not generally teach very differently in class sizes of 15 than in larger classes. In smaller size classes many researchers have discovered that each child received more individual attention from the teacher and students paid more attention to their work. They found that the curriculum took greater depth and discipline problems diminish (Costello, 1992).

The search for the best instructional environment, especially in terms of class size, is an important educational issue for parents, teachers, administrators, and government officials. Parents and educators argue that smaller class size leads to more effective

teaching and improved learning for students. Government officials argue that substantial reductions in class size are too costly and not effective (Nye, Boyd-Zaharias, Fulton, & Wallenhorst, 1992). Costello (1992) found that in her review of the literature regarding small class size, defined as 14-25 students per class, researchers disagree, and that evidence regarding the benefits of small class size is inconclusive. This view is supported in research by Tomlinson (1990).

Results of a study by Costello (1992) seeking to determine the effect of small class size on the reading achievement of first grade students indicated that those students in small classes made greater gains in reading achievement compared to those in larger classes on the Iowa Tests of Basic Skills. The research findings in this study are consistent with the findings of Achilles (1996) and Weis (1990). These two studies indicate findings that small class size provides an advantage over large class size in the area of reading achievement.

Egelson (1996), in a research publication summarizing data from broad studies in Tennessee, Virginia, Wisconsin, and North Carolina, indicated that educators view class size as a factor in improving student learning. Data also showed that students in reduced-size classrooms had higher standardized test scores in reading and mathematics than students in typically populated classrooms. Egelson also reported that reduced class size gives a good early start in school, which is important for student achievement and later success, and appears to especially benefit minority children.

In a study by Butler and Handley (1989), results indicated that, compared to students taught in larger groups of 27 students, first graders taught in groups of 20 attained significantly higher total and subscale scores on the Stanford Achievement Test

Battery, Primary I, in word study skills, word reading, reading comprehension, vocabulary, listening comprehension, spelling, concept of numbers, mathematics applications, environment, and reading.

Lindjord (1998) suggests that reducing class size represents a preventive rather than a remedial approach to improving academic performance, particularly for low-income and minority students, but that class size must go below 20 students to make a real difference. Similarly, Ziegler (1997) found that reduced class size results in higher achievement levels so long as classes do not exceed 17 students.

Results of a study by Nye et al. (1994), support findings which conclude that reduced class size is beneficial in improving achievement, adding that improved achievement for participants in small classes up through grade 3 lasts at least through grades 4 and 5. In reviewing the Student Teacher Achievement Ratio (STAR) project, a longitudinal project conducted in Tennessee designed to prove to state legislators the efficacy of smaller class sizes, Achilles (1996) reported positive results. These include (1) small classes benefitted all students by improving their academic achievement, but minority and traditionally hard-to-teach students received approximately twice the benefit from the same investment and treatment; (2) small classes benefitted teachers and parents and improved instruction; (3) students in small classes were less likely to be held back than students in large classes; (4) STAR students performed better on all measures; and, (5) benefits obtained in K-3 remained with students up through at least grade 9.

Multigrade Classrooms

The multigrade classroom is an organizational pattern widely used in schools in the United States. Typically a feature of small-scale schooling, multigrade classrooms are today getting a closer look.

In 1918, there were 196,037 one-room schools, representing 70.8 percent of all public schools in the United States (Miller, 1991). By 1980, less than 1,000 of these schools remained (Muse, Smith, & Barker, 1987). But the multigrade classroom persists. For example, in a study consisting of multigrade classrooms of only two grades, Rule (1983) used a sample from a suburban district outside Phoenix, Arizona. Of the 21,000 elementary students in the district, approximately 17 percent were in classrooms that combined grades. In rural, small elementary schools the incidence of students served in multigrade classrooms may well be much higher.

Although rural, small schools may combine grades to save money, in the guise of the "ungraded classroom," multigrade organization has also been a feature of urban and suburban districts. In the 1960s and 1970s, "open education" and individualized instruction became influential curriculum and instructional models. Such models were commonly implemented with multigrade classrooms. Energized by developmental theories of learning, a large influx in federal money, and student-centered models of instruction, open education became a major educational innovation. As a result, multigrade classrooms received new attention.

Numerous studies compared the effectiveness of "open" classrooms (multigrade organization with student-centered ethos and methods) and "regular" classrooms (single-

grade organization with traditional ethos and methods). We have learned a great deal from these innovative efforts. Working in an open, multigrade school requires serious, ongoing teacher training and a commitment to hard work.

Most teachers have been trained to work in single grade classrooms. Their knowledge of teaching methods is based on whole-class instruction and small-group instruction, with groups often formed on the basis of ability or achievement level. When placed in a multigrade setting, teachers of the 1960s and 1970s discovered that the time requirements and skills needed to be effective were simply not part of their prior training and experience. Although the premises of "open" and "regular" (traditional) education can differ sharply, this finding still applies to multigrade classrooms in traditional schools (Miller, 1991).

The large-scale innovations of the 1960s and 1970s have virtually ended. But the multigrade classroom persists, especially in small, rural schools. Yet, here, as elsewhere, most people view graded schools as the natural way to organize education. This norm can be a handicap for anyone (whether out of necessity or by theoretical design) who wants to, or who must, work with multigrade classrooms or schools. Teachers of multigraded classrooms who face the biggest challenge may be those working in school systems in which single-grade classrooms are the norm.

For many rural educators, multigrade instruction is not an experiment or a new educational trend, but a necessity imposed, in part, by economic and geographic conditions In an environment dominated by graded schools, the decision to combine grades can be quite difficult, especially if constituents feel shortchanged by the decision. Nonetheless, recent proposals for school restructuring reflect renewed interest in

multigrade organization (Cohen, 1989) and in small-scale organization generally. Such work may eventually contest the norm of the graded school.

Many teachers, administrators, and parents continue to wonder whether or not multigrade organization has negative effects on student performance. Research evidence indicates that being a student in a multigrade classroom does not negatively affect academic performance, social relationships, or attitudes (Miller, 1991).

Miller (1990) reviewed 13 experimental studies to assess academic achievement in single-grade and multigrade classrooms and found there to be no significant differences between them. The data clearly support the multigrade classroom as a viable and equally effective organizational alternative to single-grade instruction. The limited evidence suggests there may be significant differences depending on subject or grade level. Primarily, these studies reflect the complex and variable nature of school life. Moreover, there are not enough such studies to make safe generalizations about which subjects or grade levels are best for multigrade instruction.

When it comes to student affect, however, the case for multigrade organization appears much stronger. Of the 21 separate measures used to assess student affect in the studies reviewed, 81 percent favored the multigrade classroom (Miller, 1990).

If this is the case, why then do we not have more schools organized into multigrade classrooms? One response is that history and convention dictate the prevalence of graded classrooms. However, there is a related, but more compelling, answer to be found in the classrooms themselves and in information drawn from classroom practitioners.

The multigrade classroom can be more of a challenge than the single-grade classroom (Miller, 1991). Skills and behavior required of the teacher may be different, and coordinating activities can be more difficult. In fact, such a realization is one reason graded schools came into being in the first place (Callahan, 1962).

At first look, the skills needed to teach well in the multigrade and the single-grade (multilevel) classroom appear to be quite similar. The differences between the two sorts of classrooms may be more a product of socialization and expectation than of fact. Clearly, if a teacher in either sort of classroom fails to address differences among students, the effectiveness of instruction suffers. Likewise, teachers are harmed when they have not been adequately prepared to teach students with varying ages and abilities, no matter what sort of classroom they work in.

Six key instructional dimensions affecting successful multigrade teaching have been identified from multigrade classroom research (Miller, 1991). Each of these points has some bearing on the related issues of independence and interdependence. It is important to cultivate among students the habits of responsibility for their own learning, but also their willingness to help one another learn.

The six dimensions include:

1. Classroom organization: Instructional resources and the physical environment to facilitate learning.

2. Classroom management and discipline: Classroom schedules and routines that promote clear, predictable instructional patterns, especially those that enhance student responsibility for their own learning.

3. Instructional organization and curriculum: Instructional strategies and routines for a maximum of cooperative and self-directed student learning based on diagnosed student needs. Also includes the effective use of time.

4. Instructional delivery and grouping: Methods that improve the quality of instruction, including strategies for organizing group learning activities across and within grade levels.

5. Self-directed learning: Students' skills and strategies for a high level of independence and efficiency in learning individually or in combination with other students.

6. Peer tutoring: Classrooms routines and students' skills in serving as "teachers" to other students within and across differing grade levels.

In the multigrade classroom, more time must be spent in organizing and planning for instruction. Extra materials and strategies must be developed so that students will be meaningfully engaged. This additional coordination lets the teacher meet with small groups or individuals, while other work continues.

Since the teacher cannot be everywhere or with each student simultaneously, the teacher shares instructional responsibilities with students. A context of clear rules and routines makes such shared responsibility productive. Students know what the teacher expects. They know what assignments to work on, when they are due, how to get them graded, how to get extra help, and where to turn assignments in.

Students learn how to help one another and themselves. At an early age, students are expected to develop independence. The effective multigrade teacher establishes a climate to promote and develop this independence. For example, when young students

enter the classroom for the first time, they receive help and guidance not only from the teacher, but from older students. In this way, they also learn that the teacher is not the only source of knowledge.

Instructional grouping practices also play an important role in a good multigrade classroom (Miller, 1991). The teacher emphasized the similarities among the different grades and teaches to them, thus conserving valuable teacher time. For example, whole-class (cross-grade) instruction is often used since the teacher can have contact with more students. However, whole-class instruction in the effective multigrade classroom differs from what one generally finds in a single-grade class.

Multigrade teachers recognize that whole-class instruction must revolve around open task activities if all students are to be engaged. For example, a teacher can introduce a writing assignment though topic development where all students "brainstorm" ideas. In this context, students from all grades can discuss different perspectives. They can learn to consider and respect the opinions of others (Miller, 1989).

Cooperation is a necessary condition of life in the multigrade classroom, but there are challenges, too. All ages become classmates, and this closeness extends beyond the walls of the school to include the community.

Reading Achievement

Researchers have always been interested in the reasons why children have reading difficulties. Causes of reading problems may be physical, intellectual, emotional and environmental or cultural, or they may stem from factors within the schools themselves (DeAngelo, 1997).

Physical factors which may affect reading achievement include visual and auditory handicaps, health, and body chemistry. Researchers agree that visual and auditory discrimination skills are important factors in reading but that training helps improve weaknesses in these areas. The health of students also affects their ability to learn. Prolonged illnesses, malnutrition or other serious health disturbances place a burden on students, leaving them unable to concentrate on difficult learning tasks. Other researchers have found that an imbalance in the body's chemistry prevents students from concentrating on learning (DeAngelo, 1997). Medication to improve the imbalance has proven helpful in reducing distractibility and making students more amenable to learning.

The school environment also affects reading achievement. First, class size affects achievement, as stated above. This is especially true in the primary grades. Secondly, some school environments do not provide a literate atmosphere. Library budgets are cut; libraries are shut down. Classroom teachers are not allotted money to fill their classrooms with books. Reading achievement is not a priority.

Another cause for low reading achievement is lack of staff training and development (DeAngelo, 1997). The teaching of reading is not just a job for English teachers; the entire faculty should contribute to the reading program's effectiveness (DeAngelo, 1997). Some teachers will feel that they are not qualified for teaching reading or that one more job is being added to their numerous present duties (Karlin, 1972). Eighty percent of teachers say they don't have enough training to teach reading (Carbo, 1996). Training is needed in order to make staff members comfortable in the teaching of reading all content areas.

According to Lapp (1978), the teacher is a more important variable for success in reading instruction than are the teaching methods or instructional materials. Teachers must strive to create positive learning environments and facilitate the learning process.

The use of whole language as a teaching method is another probable cause of reading problems according to DeAngelo (1997). Whole language is instruction in which the teacher regularly reads aloud and teaches reading through story and literature instead of basal materials with controlled vocabulary. She contends that whole language programs reduce linguistic nourishment and phonetic instruction. Vail (1991) finds three drawbacks to the whole language movement: a lack of instruction in decoding and skills needed for independent reading, a reliance on narratives for instruction rather than content materials as in science and social studies texts, and a lack of integration of various reading programs to motivate readers.

Since the mid-1960s, the reading community has held a lively philosophical debate about the nature of the reading process and which of two instructional approaches better promotes the attitude and abilities that children need to comprehend written language (Council for Educational Development & Research, 1997). Sometimes called the Great Reading Debate, the argument has raged between advocates of two main philosophies of reading instruction: the whole-language method, which emphasizes reading for meaning, the use of children's literature instead of basal readers and worksheets, and the teaching of skills in the context of reading; versus the phonics or code-oriented approach, which emphasizes direct instruction in letter-sound relationships and patterns. The evidence from research increasingly points to the conclusion that

neither method by itself is as effective as a balanced approach that combines the two (Council for Educational Development & Research 1997).

Instead of reaching consensus, however, the combatants have become more strident. Every time a new test shows falling reading scores, each camp claims the other side's influence is creating a crisis in the schools. Some conservative critics regard whole language as feel-good, fuzzy-headed literal nonsense. Some liberals, in turn, view the attack on whole language as part of a strategy to destroy public education (Council for Educational Development & Research, 1997).

The argument about which reading instruction method is best continues to generate controversy, especially as it concerns the basal approach and decoding emphasis versus alternate methods, such as whole language (Bracey, 1992; Chall, 1989; Holland & Hall, 1989). Previous research has found that teachers believed the basal reader approach guaranteed a sequenced program of skill mastery (Holland & Hall, 1989; Miller & McKenna, 1989). Proponents of the whole language approach state that it is preferable because it integrates all language components into the teaching of reading and thus improves comprehension (Holland & Hall, 1989).

In 1977, ninety-five percent of primary teachers in the United States and eighty percent of intermediate grade teachers relied in part on a basal reader for instruction (Spache & Spache, 1986). Flood and Lapp (1986) reported that over 90% of teachers in the United States used the basal method. However, in more recent years, the whole language philosophy of learning has become popular in many primary classrooms.

Learning to read has traditionally been viewed as a fairly straight-forward skills-based process (Council for Educational Development & Research, 1997). Students first

learned to recognize the letters of the alphabet, then to decode or translate those letters into their corresponding sounds, and next, by listening to the sounds of the letters, to produce words. Comprehension is the process of making meaning out of a series of phrases or sentences. In this view of reading, the role of the teacher is to systematically teach children a preestablished sequence of concrete skills, including recognizing letters, recognizing letter and sound relationships, using phonics rules, breaking words into syllables, and making inferences about the material they had read. Students did much of their work by completing exercises to enhance the skills in which they were deficient.

Detractors of the skills approach, however, criticize the isolated lock-step manner of reading instruction that this approach implies. They argue that the worksheets and low-level activities on which most of these programs depend stem the natural flow of language development and limit growth in comprehension by not giving students sufficient practice in using the skills in the context of real reading materials. As a result, students neither see the relevance of reading nor learn to appreciate its rewards. In addition, those who argue against the skills approach maintain that the rules of phonics are too complex to be useful, with more than 300 correspondences between sounds and letters, not to mention the confusion of single letters representing more than one sound - including silences - and no sound represented by one letter only. These people advocate what has become known as the whole-language approach to reading (Council for Educational Development & Research, 1997).

Advocates of whole-language instruction believe that, because the purpose of reading is to make meaning, reading skills develop from children reading books and writing stories about topics that are important to them. In this view, students learn to read

"naturally" in much the same way that they learn to speak. They scan a text, picking up semantic and graphic cues that they then combine with their understanding of the topic. This process eventually leads them to figure out the meaning of the piece of reading correctly. There is no prescribed sequence of skills development in whole language. Instruction in phonics and skills development is embedded into the stories children read. The theory is that if children immerse themselves in reading good literature, they will learn discrete reading skills as a by-product. Breaking up reading into the analysis of sounds and words only detracts from such learning. The role of the teacher in the whole-language approach is to facilitate students' learning without being unduly directive (Council for Educational Development & Research, 1997).

Opponents of the whole-language approach like to point out, however, that only students who already know how to read or who can learn to read without much assistance are capable of jumping right into reading books and writing stories. The approach is not very effective with students who cannot figure out for themselves that there is a system of language behind reading and writing, or who do not have a strong understanding of sentence structure and grammar. In addition, research refutes the notion that children have a natural disposition to written language and that they can glean the meaning of words from contextual information often enough to make this an effective way of learning to read. Although learning vocabulary words in context is more effective than learning lists of words and definitions, studies show that even skillful adult readers can intuit the meaning of words only 25 percent of the time (Council for Educational Development & Research, 1997).

Other recent research in how the human brain functions reveals that the brain is much more compartmentalized than previously thought (Council for Educational Development & Research, 1997). According to this research, in the initial stages of learning to read, students do indeed use distinct, visual, phonological, and motor strategies and that separate processors in the brain govern each of these. This would appear to argue for a phonics-based approach to reading instruction.

Which instructional approach a given teacher emphasizes may depend on local school board policy, administrative directives, or the teacher's beliefs about effective instruction. One of the primary lessons from research on this issue is that there are merits to both sides of this reading argument and that the best instruction integrates these approaches as necessary. Teachers, too, are recognizing this. The 1992 National Assessment of Educational Progress reports that most teachers appear to be using a curriculum that balances both approaches to reading instruction. Similarly, the research literature is replete with hundreds of studies showing that when phonics is paired with a program of reading and writing, children achieve at higher levels in word recognition, spelling, and vocabulary (Council for Educational Development & Research, 1997).

In this view of reading, which calls for integrating the skills approach to reading with the whole-language approach, the teacher's role is to enhance specific skills that the student may be having trouble with while the student engages in meaningful reading and writing activities (Council for Educational Development & Research, 1997).

Marie Carbo (1996) discusses how the debate around teaching reading has pitted one side against the other to the detriment of the children. According to Carbo, the real question that needs to be addressed is, "How do people best learn to read?" Carbo also

stresses the importance of focusing on a balanced approach to reading, as different students have different learning styles. Students who benefit most from the whole language program have visual, tactile, and global reading styles. Those children who learn best with phonics instruction have analytic and auditory reading styles. As a result, the logic of phonics makes sense to them. For an analytic learner, a program based exclusively on whole language can seem disjointed and haphazard. Conversely, those students who have visual, tactile, and global reading styles enjoy the hands-on learning and the interesting literature to which they are exposed. Carbo concludes that to choose either whole language or phonics as the sole basis for a language-arts program does a great disservice to the children with different learning styles throughout the classroom. Her recommendation is for a balanced approach to reading instruction.

Regie Routman (1997), a strong advocate of the whole language approach, discusses the misinterpretation of teaching reading with the whole language approach. Whole language promotes phonics instruction in the context of real and predictable literature. A literature-based reading program does not necessarily exclude phonics skills. It is generally accepted that phonics plays a valuable part in any reading program (Raven, 1997). But even proponents of phonics agree that rote memorization and skills worksheets are boring to students, and, therefore, detrimental if given too much emphasis. Both approaches should be incorporated into reading instruction. Phonics skills should be incorporated within a whole language program which includes rich and exciting literature, so that students will develop a true love of the written word (Raven, 1997; Routman, 1997).

Routman (1997) also attempts to dismiss misconceptions concerning the failure of whole language. After the California Department of Education adopted a language arts. program that moved away from a skills-based approach, the pressure was on whole language to produce results. In 1994, the scores on the NAEP were terribly low and whole language became the scapegoat. She points to other problems within the system that critics ignored at the expense of whole language. Such problems included inordinately large class sizes, low funding for education, and high numbers of students whose primary language was not English. In addition, many educators also don't understand the methods involved in a whole language reading program. Some believe that if students are immersed in books they will learn to read as easily as they learned to speak. However, this is not the case and not the basis of whole language. Phonics has always played a role in this method of teaching reading.

Holland and Hall (1989) found that there was no significant difference between reading achievement scores of first grade students who were taught under a basal approach and those taught under the whole language approach. This confirms the notion that a major factor in the classroom setting is the teacher and how he/she implements the curriculum to meet the needs of the students as well as how he/she inspires the students' love of learning. The type of reading instruction, whether basal or whole language, while important, does not in and of itself guarantee increased academic achievement. Simply changing reading instruction from basal approach to whole language will not improve academic achievement and, as Chall (1989) states, reliance on whole language without phonics instruction will hinder reading achievement.

Matson (1996) echoes the philosophy of Routman, Raven, and others in arguing for a balanced approach. Matson states that the debate between advocates of the whole language approach and the phonics approach threatens to become so polarized and politicized that agreeing on a middle ground seems at times impossible, and the voices of reason and experience are drowned out. According to her, the debate erupted anew in California after alarming news stories about reading scores ranked the state's fourth graders next to last in reading proficiency among the 39 states participating, even though most informed observers agree that state-by-state comparisons of average scores mean little without taking into account the racial and economic status of the students. Critics of whole language claim that it allows some children to fall through the cracks, while the argument against phonics is that it is boring. As researchers debate the significance of the studies and test results, teachers are left hanging. Increasingly, researchers are finding better results from teachers who take a balanced approach, especially with children from disadvantaged background. Scholars have begun to call for consensus on the balanced approach (Matson, 1996).

Bennett (1998) believes that, particularly in the search for effective reading strategies for at-risk students, it became clear that at-risk students especially need a balanced approach to reading instruction including the usage of quality literature, reading for meaning, explicit skills instruction, and the development of phonemic awareness.

The balanced approach to reading incorporates many of the practices developed in the whole language movement. One article in 1992 described the benefits of the whole language practices for at-risk readers (Lowe, Lowe, Wood, & Algozzine, 1992). The whole language strategies which produce benefits for at-risk readers are teacher modeling

of literature, opportunities for writing and reading what they have written, choice of independent reading materials and writing topics, encouragement of invented spelling in writing, and numerous opportunities to be engaged with texts. Practices in the whole language approach were also documented as being successful towards improving the reading comprehension abilities in the 1993 study by Bartley.

The past two decades have seen considerable change in accepted assumptions about reading instruction in American schools. Recommendations for good teaching include moving from an overwhelming emphasis on basal readers and workbooks toward a greater emphasis on comprehension strategies, a wider range of higher-quality reading materials, more independent reading for children, and more opportunities for combining reading and writing activities (Anderson et al., 1985).

It has been documented that easily effective readers are more successful in school and become less likely to drop out of high school (Cronan & Walen, 1995). This makes the importance of providing instruction so that all students can be successful in reading of great concern. Many researchers have held the position that a major cause of reading disability is not in a shortcoming within the child, but in the inadequate instruction that child has received (Felton, 1993). With that in mind, educators need to take the responsibility for developing programs to reach every student.

Studies conducted on beginning readers have discovered that reading acquisition occurs within three stages. The first is the selective-cue stage in which attention is given to context. The second is the spelling-sound stage in which phonic skills and phonemic awareness become important. The final stage is that of automaticity in which a reader becomes fluent. Effective readers are able to easily progress through these stages of

acquisition through skills that they develop. Some of these skills include an awareness of print, the ability to recognize the shapes of letters, knowledge of the sounds of letters, the association of letters with words, decoding and word recognition skills, the ability to identify words in print accurately and easily, and knowledge of spelling patterns.

In contrast, ineffective, or at-risk, readers are unable to develop these skills for a variety of reasons which may include environmental factors, lack of quality reading experiences, ineffective reading instruction, and/or language, memory or processing deficits. At-risk readers have limited development of cognitive ability to use the reading process, few reading strategies to help them process information in a literate manner, a lack of understanding of the purpose of the reading process, and/or a belief that they cannot read text material (Lowe et al., 1992).

The majority of poor readers show an inability to understand the alphabetic code of the English language and end up relying heavily on the context of the material as their decoding strategy (Felton, 1993, Shefelbine, 1995). It is very common for poor readers to have difficulties with phonological awareness skills either in areas of segmenting the different sounds in words, encoding sounds into words, or retrieving phonological information from memory (Felton, 1993). In addition, poor readers encounter experiences with slow and effortful reading which affect their word recognition and impair their comprehension. As a result, they encounter less text than an effective reader, receive smaller amounts of practice in reading, and often demonstrate lower motivation towards reading (Mathes & Simmons, 1992).

Describing the characteristics and attitudes of a nationally representative sample of 36,000 students in grades 3, 7, and 11, Applebee (1998) details the specific features of

reading instruction, how students approach their reading tasks, student reading experiences, and home and school supports to academic achievement in a report based on the National Assessment of Educational Progress's (NAEP) 1986 assessment of the reading achievement of American school children. Applebee found that (1) students at all three grade levels (3, 7, 11) had particular difficulty with tasks that require them to elaborate upon or defend their evaluations and interpretations of what they read; (2) poor readers reported doing less independent reading than good readers; (3) students at all three grade levels reported that their teachers used a variety of instructional approaches to reading instruction; (4) poor readers reported that their teachers used a narrower range of approaches than were used with better readers; (5) poor readers reported using a narrower range of strategies than good readers; (6) students from historically at-risk populations continued to perform poorly relative to the national population at each grade level; and (7) reading proficiency was related to a students' general literacy experiences.

According to the Illinois State Board of Education (1997), research over the past 30 years has shed tremendous light on how children learn to read. Certain abilities must be developed that work together to create strong reading skills. These core abilities include phonemic awareness, alphabetic principle, sound-spelling correspondence, decoding ability, spelling, vocabulary, and writing skills, and comprehension skills.

Noting that existing research reveals considerable diversity among researchers' philosophical stances toward literature-based reading instruction versus traditional basal reading instruction, a study by Pamphlet (1994) determined the effects literature-based instruction had on the reading achievement of fourth grade students. Subjects were randomly selected. A control group was taught using a literature-based reading series,

and an experimental group was taught using a basal series. Comparison on reading sub-test scores on the ITBS indicated no difference in students' reading achievement. Findings of this study suggest that the method of reading instruction, while important, does not guarantee increased academic achievement.

Shany and Biemiller (1995) find that assisted practice significantly improved the test reading rates and reading comprehension scores of the experimental groups compared to the control group, although some gains did not reach statistical significance. Other findings indicate that listening while reading resulted in twice the amount of reading as the other method and led to higher scores on listening comprehension measures.

According to Shany and Biemiller, many reading researchers have proposed that increased reading practice would lead to improved reading skill for large numbers of children, and correlational studies have supported this conclusion. However, there has been surprisingly little experimental study of reading practice; in particular, there have been few studies which examine the effects of increased practice over substantial periods of time on commonly used measures of reading comprehension, speed, and accuracy.

Reciprocal relationships between amount of reading experience and growth of reading skills were emphasized in Stanovich's (1986) paper on "Matthew effects" in reading. Stanovich argued that children who read well will read more and improve their reading abilities; those who read poorly read less and increasingly fall behind on developing proficiency. Similarly, Chall (1983) stressed the role of practice in building fluency with print and enabling children to move from the state of "learning to read" to the more advanced state of "reading to learn the new."

Several investigators have developed measures of amount of reading and have related this amount to reading ability. Using daily reading diaries, Anderson, Wilson, and Fielding (1988) were able to show that poor readers spend much less time reading and read fewer pages than able readers. Exposure to print, as measured by recognition of titles of books, was found to be a significant predictor of skills involved in word recognition and of verbal abilities and general knowledge (Allen, Cipielewski, & Stanovich, 1991; Cunningham & Stanovich, 1990, 1991; Stanovich & West, 1989). Cunningham and Stanovich (1991) also suggested that even children with low reading ability can improve their verbal abilities through exposure to print.

However, in all of the above studies, conclusions are based on correlational data. There has been no experimental proof that intervention to increase the amount of reading by poor readers will actually result in improved reading (Shany & Biemiller, 1995). As Anderson et al. (1988) stated, "The really penetrating research remains to be done. Our objective is that well-designed evaluation of sensible intervention to increase amount of reading would consistently show fairly strong results" (pg. 300).

Examination of practice studies indicates clearly that even though theorists have suggested that a large amount of reading is vital for the development of reading efficiency, few attempts have been made to design interventions based on large amounts of practice. The majority of studies have involved repetitive procedures (rereading of content) or nonrepetitive procedures (on-going reading) with a few texts, with effects assessed through a small number of performance or ability measures. Some studies have involved poor readers (Dowhower, 1987; Herman, 1985; Peterson, Scott, & Sroka, 1990; Rashotte & Torgeson, 1985; Rasinski, 1990; Sindelar, Monda, & O'Shea, 1990; Taylor,

Wade & Yekovich, 1985). Others have used normal Readers (Amlund, Kardash, & Kulhavy, 1986; Annis & Annis, 1987).

Several studies have examined the effects of large amounts of time spent on reading practice on speed, accuracy and comprehension (Chomsky, 1978; Dowhower, 1987; Herman, 1985; Homan, 1991; Rashotte & Torgeson, 1985; Sindelar, Monda & O'Shea, 1990; Thomas & Clapp, 1989). Other studies have examined effects of practice only on speed and accuracy (Cohen, Torgeson, & Torgeson, 1988; Levy, Newell, & Snyder, 1986; Peterson, Scott, & Sroka, 1990; Rasinski, 1990; Reitsma, 1988; Shapiro & McCurdy, 1989). Several others have examined these effects only on comprehension (Amlund et al., 1986; Annis & Annis, 1987; Taylor et al., 1985).

All studies which examined the effects of large amounts of reading practice on speed and accuracy found significant gains, except for that by Reitsma (1988). However, studies which examined speed, accuracy, and comprehension indicated an important conclusion: while gains were found for comprehension on practiced material, except for Chomsky's (1978) study, the few studies which measured gains on unpracticed material either did not find significant effects on comprehension (Rashotte & Torgeson, 1985; Thomas & Clapp, 1989) or, in one case, found effects on comprehension but not on speed and accuracy (Homan, 1991).

Data gathered as part of the National Assessment of Educational Progress (NAEP) describe the learning conditions in American schools that relate positively to reading achievement. Unfortunately, the data do not appear to have greatly affected classroom practice. According to the 1990 NAEP study of students in grades four, eight and twelve, the following conditions correlate positively with reading achievement: large amounts of

reading done in and outside of school; major deemphasis of workbook activities; discussions of reading that emphasize higher-level thinking; opportunities for connecting reading and writing; reading a great variety of texts (novels, poems, stories); and support for literacy in the home (Foertsch, 1992).

In sharp contrast to the above listing of desirable conditions, the same 1990 NAEP study (Foertsch, 1992) described the following characteristics that actually exist in the United States today: U. S. students read very little, either in or outside of school; schools continue to place overwhelming emphasis on activities involving the use of reading workbooks; U. S. students have "difficulty in constructing thoughtful responses" when asked to "elaborate upon or defend their interpretations of what they read;" the majority of students still do not write each week about what they read; library use decreases throughout the grades; most 12th graders report only yearly use of the library; access to reading materials in the home has declined somewhat; only 25 percent of the students reported discussing reading with family and friends; and approximately 20 percent of the students reported reading for fun only yearly or never.

A particularly disturbing trend in the NAEP data came to light in the period between 1988 and 1990 (Foertsch, 1992). While there was a slight increase in the amount of student reading both in and outside of school, the study also showed a sharp increase in the number of students who "never read for fun." These data suggest that between 1988 and 1990, students were being assigned more reading in and outside of school, but that more students were growing to dislike reading.

Instructional Practices

Reading has long been considered one of the most important skills that a child needs to learn. The ability to read is a basic skill which enables a child to learn information on his/her own and enjoy literature. According to a report of the National Research Council, the type of instruction children receive in the classroom is very important in the prevention of reading difficulties (Snow, Burns, & Griffin, 1998). For these reasons schools wish to employ the best methods of reading instruction available.

In 1998, the National Research Council, in a study commissioned by the United States Department of Education and Health and Human Services, issued a report about how reading develops and how reading instruction should proceed. In the report the committee agreed that the key to preventing reading difficulties is excellent instruction (Snow, Burns, & Griffin, 1998).

However, there is no consensus as to which method is the best. Indeed, there appear to be as many methods as there are proponents. The following is an overview of some of those methods.

Reutzel and Hollingsworth's (1991) findings indicate that time spent teaching specific reading comprehension skills contributes directly to gains on criterion-referenced tests of specific comprehension skills. The findings also seem to argue that time spent only reading or time spent in a combination of the two activities (skill instruction and practice and voluntary reading) yield essentially equivalent gains on a criterion-referenced test of four reading comprehension skills. Although the results are not yet conclusive, they do seem to point to the possibility that time spent reading may affect criterion-

referenced skill test performance in much the same way as time spent reading affects standardized reading achievement test scores (Anderson, Wilson, & Fielding, 1988).

A study by Parmer (1997) examined the effectiveness of an integrated language arts instructional format for teaching reading compared with the effectiveness of the typical traditional reading program. Results indicated that the integrated language arts format for reading instruction increased reading comprehension performance and had no significant effect on word recognition performance as measured by the Iowa Tests of Basic Skills.

In a study investigating the achievement of sixth-grade students in a language arts curriculum (Argo, 1995), subjects were divided into a treatment group who were taught using an integrated approach to language arts instruction and a control group who were taught using a traditional approach. Results of the study indicated that the integrated approach of language arts instruction yielded higher achievement test scores for these sixth-graders on the California Achievement Test.

There is considerable research evidence to suggest that (1) literature has a positive effect both on reading achievement and attitude toward reading; and (2) the use of a literature-based program is an effective alternative to the traditional basal reading approach (Huggins & Roos, 1990). The majority of studies concluded that the literature-based approach produced higher reading achievement and fostered more positive attitudes toward reading than the basal-reading method. Children of all ability levels, given the opportunity to experience reading as a visual and thought process, take a more active role in their own learning. Students not only learn to read, they also develop a love for reading and become life-long readers through the process of using a literature-based

approach. Research evidence also supports the use of a shared book experience. Most teachers are required to use a basal reading series. In literature-based programs, the secret of success is creating the right learning environment, one in which a natural intimacy between teacher and children develops and one in which reading is pleasurable and meaningful.

The technique of using literature as a basis of reading instruction has proven to be successful in terms of measures of achievement and attitude. Research evidence supports the theory that literature-based classrooms create an environment that makes skill learning easier and more natural for all students (Huggins & Roos, 1990).

Reading researcher Jim Trelease was quoted in an article by Schwartz (1995) as believing that the single most important activity for building the knowledge required for eventual success in reading is reading aloud to children. In the decade since the publication of Becoming a Nation of Readers, Richard Anderson believes, the evidence for this has continued to mount.

Study after study from reading researchers confirms a litany of benefits: reading to children builds vocabulary and background knowledge and establishes the reading-writing connection; it exposes children to a wealth of experiences outside their own; it stimulates imaginations, stretches attention spans, nourishes emotional development, encourages compassion, reshapes negative attitudes to positive ones; and it introduces textures and nuances of the English language rarely heard on TV sitcoms. But for all that, it does even more. Reading aloud is, in essence, an advertisement for learning to read, a process that can otherwise be tedious, frustrating or even threatening (Trelease, 1985).

Trelease (1985) laments that elementary school students are too often conditioned to associate reading with pain in the form of a thousand worksheets a year, on average, even though no study has even shown a correlation between reading ability and how many worksheets a child completes. He believes teachers have concentrated so hard on teaching children how to read, that they have forgotten to teach them to want to read. As a result, they have created a nation of school time readers, not lifetime readers.

Previous research has examined either the effects of strategy instruction or the effects of literature-based instruction on children's literacy learning. Much less is known, however, about the combination of teacher-led strategy instruction within a literature-based framework. The purpose of a study by Baumann and Ivey (1997) was to explore what diverse second-grade students learned about reading, writing, and literature through a year- long program of strategy instruction integrated within a rich, literature-based environment. A content analysis revealed that students: grew in overall instructional reading level and came to view reading as a natural component of the school day ; demonstrated high levels of engagement with books; developed skill in word identification fluency, and comprehension; and grew in written composition abilities. Baumann and Ivey interpreted these findings within a framework of teachers striving for balance and equilibrium within the curricular elements of literature-based instruction and contextualized strategy instruction, and a blend of teacher-initiated instruction and instruction responsive to students. They believe that their study provides evidence for the efficacy of teaching students reading and language arts strategies within a literature-based environment, recognizing that there are multiple models for accomplishing this objective. Bennett (1998) believes the literature shows the following strategies as being effective:

repeated readings, reading for meaning balanced with explicit skills instruction, using writing as a means to read, and the use of predictable or patterned stories.

Pikulski (1994) states that there is a growing amount of research that presents evidence suggesting that reading failure is preventable for all but a very small percentage of children. The researchers behind this belief are growing in number. With this evidence, many articles and research studies have been developed to document and attempt to explain those strategies and approaches which will have an impact upon students who are not succeeding with current reading practices.

Clay emphasized in 1985 that the first essential to any early intervention reading program is a good reading instructional program in the classrooms. Reading programs can be successful at any level; however, the earlier effective techniques are implemented and intervention is available, the more successful the strategies discussed below will be for at-risk readers (Felton, 1993). Whether the strategies are delivered in remedial programs or in the general education program, levels of success should be similar.

The effective strategies to be discussed include: repeated readings, direct instruction of reading skills, using writing as a means to develop reading skills, a literature-based instruction program, and the use of one-on-one tutoring.

Documented repeatedly is the technique of repeated readings for struggling readers. This approach builds word recognition rate, accuracy, fluency, reading comprehension, and motivation. Repeated readings allow for intensive amounts of practice in reading and generally results in optimum comprehension following the third reading. Repeated readings can be accomplished in a one-on-one sitting, through paired reading, with a cross-age or peer tutor, or through choral readings. The greatest gains

through repeated readings are shown by those demonstrating the lowest reading abilities (California Reading Task Force, 1995; Felton, 1993; Mathes, & Simmons, 1992: Pikulski, 1994; Taylor, Hanson, Justice-Swanson, & Watts, 1997).

Crucial for struggling readers is the inclusion of quality, systematic, direct instruction of reading skills. This instruction should focus on words, letters, phonemic awareness, phonics, and word patterns. These skills can also include strategies for reading for meaning, becoming independent readers, and self-monitoring. Direct instruction in phonics, or the alphabetic code, has been emphasized recently. Recommendations include presenting these skills in the context of meaningful reading materials, introducing regularities first, and providing structured and systematic lessons. Instruction in phonemic awareness is a relatively new suggestion being made in the schools; however, it is estimated that twenty percent of struggling readers will have difficulty with this area of reading. Therefore, instruction in language analysis, such as rhyming, recognizing sounds in words, and pulling apart or changing sounds in words should be included in skill instruction (Council for Exceptional Children, 1995; Felton, 1993; Pikulski, 1994; Taylor, Hanson, Justice-Swanson, & Watts, 1997).

Writing instruction is often overlooked; however, many researchers stress the use of writing as a means for developing better reading ability. They stress that the process of writing helps students to hear sounds, focus on letter order, understand sound-letter sequences, and develop fluency with high frequency words. Researchers have documented the relationship between spelling and writing. Suggestions are made for daily, brief mini-lessons in writing followed by time for independent writing (Felton, 1993; Pikulski, 1994; Taylor, Hanson, Justice-Swanson, & Watts, 1997).

Two of the research studies documented the benefits of utilizing literature-based instruction and many of the other pieces of literature emphasized the importance of the usage of literature. Two reasons for a literature-based program are a resulting increase in students' reading abilities, specifically in the areas of vocabulary development and comprehension, and increased student motivation. In addition, wherever skills instruction was emphasized for at-risk students it was suggested the instruction occur during use of quality literature (Bartley, 1993; Council for Exceptional Children, 1995; Felton, 1993; Pikulski, 1994; Smith, 1993; Taylor, Hanson, Justice-Swanson, & Watts, 1997).

Frequently documented is the usage of one-on-one tutoring as an effective means of remediating reading difficulties. This allows struggling readers to receive more quality instructional time which has been documented as a necessary factor in remediating their limited abilities. The difficulties with this approach are in the limited number of students who can be served and the expense of resulting programs. One solution to this difficulty is in initially placing all students in small group instruction with no more than five students per group. At least some of the struggling readers will make progress in the small group setting. Those who do not can then be pulled into a one-on-one tutoring program. Another solution is to develop programs for trained, cross-age peer tutors which has resulted in great success. The benefits of this program are felt by both the at-risk younger student and by the older peer tutor (California Reading Task Force, 1995; Pikulski, 1994; Mathes & Simmons, 1992; Taylor, Hanson, Justice-Swanson, & Watts, 1997).

The balanced approach to reading also incorporates many of the practices that have been used in phonics-based reading programs. A 1995 article by Shefelbine

presented strategies for successfully delivering phonics instruction to beginning readers. It was emphasized that the teaching of phonics should be systematic, explicit, developmental, and brief, but should not overshadow meaning-based experiences with text. In other words, phonics instruction would not be a series of isolated worksheets, but should be incorporated into experiences with the listening to and reading of quality literature and writing for a variety of purposes. Phonics instruction should involve the direct instruction of letter sounds, spelling-sound relationships, and blending.

Included in the skills portion of a balanced reading approach is the new focus on developing phonemic or phonological awareness. The "unnatural" act of reading requires a beginning reader to make sense of symbols on a page (i.e., to read words and interpret the meanings of those words). In the case of English, these symbols are actually sequences of letters that represent an alphabetic language, but more important, the printed letters can also be translated into sounds. To translate letters into sounds, a beginning reader should enter school with a conscious awareness of the sound structure of words and the ability to manipulate sounds in words (Smith, Simmons, & Kameenui, 1995). This is referred to as phonological awareness.

Many articles made mention of the research base behind the importance of phonological awareness and especially its place for at-risk students. The Council for Exceptional Children published an article in 1995 which stressed this crucial area of development in beginning readers. The article pointed out that those students who do not develop phonemic awareness have been proven by research as not becoming successful readers. When instruction in phonemic awareness is combined with phonics skills instruction, both areas become more effective.

Fitzsimmons (1998) finds unequivocal research evidence that students who enter first grade with phonological awareness skills are more successful readers and urges explicit instruction in these skills. Research evidence on word comprehensions and other higher-order reading activities depend on strong word recognition skills, including phonological decoding skills.

The two processes described here, phonological awareness and word recognition, are essential to teaching beginning reading to children with diverse learning and curricular needs, such as students with learning disabilities. For these children, as for many children, learning to read is neither natural nor easy. Also, research has made it clear that, for those students who fall behind in reading, opportunities to advance or catch up diminish over time. Therefore, the teaching of beginning reading is of supreme importance and must be purposeful, strategic, and grounded in the methods proven effective by research.

According to Juel (1991), children who are ready to begin reading words have developed the following prerequisite skills. They understand that words can be spoken or written, that print corresponds to speech, and that words are composed of phonemes, or sounds. Beginning readers with these phonological awareness skills are also more likely to gain the understanding that words are composed of individual letters and that these letters correspond to sounds. This "mapping of print to speech" that establishes a clear link between a letter and a sound is referred to as alphabetic understanding.

Spector (1995) likewise argues that learning how to read in an alphabetic system requires children to understand the complex relationship between print and speech. She

also suggests that pre-reading and beginning reading instruction should be designed to facilitate the acquisition of phonemic awareness.

The research on word recognition is clear and widely accepted, and the general finding is straightforward: reading comprehension and other higher-order reading activities depend on strong word recognition skills. These skills include phonological decoding. This means that, to read words, a reader must first see a word and then access its meaning in memory (Chard, Simmons, & Kameenui, 1991).

Another documented practice in the balanced approach to reading instruction involves the use of assessment for monitoring progress and planning future lessons. Some of the assessments mentioned in the literature include *The Wide Range Achievement Tests, The Picture Peabody Vocabulary Test, The Gray Oral Reading Test, The Diagnostic Reading Score, The McCarthy Developmental Oral Reading and Word Articulation Tests*, and *The Test of Phonological Awareness*. In addition, teachers and districts have developed their own methods of assessment involving the use of word lists and running records of oral reading.

The use of a balance between reading for meaning and skills instruction allows for students to access the three reading cues for effective decoding of text. The semantic and syntactic cues are developed through reading for meaning and developing language skills. The graphophonic cues are developed through the phonics and phonemic awareness. Giving at-risk students more skills for accessing all three reading cues will bring them closer and closer to success. The balanced approach to reading attempts to do just that.

There are too many factors involved for anyone to find or even create the perfect reading program which would address all struggling readers' needs. In addition, a strong

indicator of a successful program is the teacher's interest and commitment to the current program being used (Bennett, 1998).

A variety of approaches can be successful, however, and many of the programs include common elements. The most important factor seems to be that of "early" intervention. There is little evidence available to suggest that programs begun after the second grade can become successful (Pikulski, 1994). However, programs, such as Reading Recovery, which focus intensive attention on first grade students only are beginning to be documented as not being enough. Programs beginning in first grade or earlier and continuing across the primary grades appear to be more appropriate (Pikulski, 1994).

Programs which utilize the entire staff and focus on improving classroom reading instruction as well as providing additional structured tutoring make sense (Bennett, 1998). These programs will reach more students than pull-out programs and fit with research stating that all but a few children can learn to read if instructed effectively in their regular classroom.

Characteristics in common among the successful programs include a balance between reading for meaning and systematic word identification and decoding skills instruction. Successful programs include systematic and regular assessment in various ways to monitor progress and plan for future instruction. Successful programs utilize motivating, quality literature, but at the same time utilize texts with phonetically regular words or patterned stories. All successful programs expect reading to occur at home as well as in the classroom and the most common reading instructional method appeared to be repeated readings (Bennett, 1998).

Programs should be developed which attempt to reach all students with a balanced approach to reading for meaning and the development of reading skills through direct instruction utilizing literature and patterned stories experienced through repeated readings. Flexibility in approaches and delivery methods seem to be the key to reaching students.

Most importantly, at-risk readers seem to need increased quality instructional time. This has been suggested as being implemented through repeated readings, encouraged practice at home, and one-on-one tutoring. These practices are most effective when begun at least by first grade but should continue as long as needed.

Teachers must draw on their own good judgment to avoid the "feast-or-famine" approach to reading instruction. At the present time, a balanced approach appears to be important for success.

The solution to the problem of low reading achievement among elementary students will continue to be a challenging one for teachers and school administrators. There is no single remedy. Just as there are many ways to teach reading, there are many approaches to improving reading achievement for elementary students.

CHAPTER III

METHODOLOGY

This study examined the instructional environment of selected Oklahoma third

grade classrooms and the achievement test scores of the students in these classrooms as

measured by the Iowa Tests of Basic Skills, reading section, to determine why students in

some classrooms are achieving at low levels as determined by this test, and why students

in other classrooms are achieving at higher levels. "Instructional environment" refers to

all aspects of the daily educational experience that affect or influence students. This

includes the school itself, the classroom, the classroom teacher, other school personnel

who come into contact with students, the instructional program, the available resources,

the involvement of the community, and the community demographic characteristics. This

chapter explains the sample, the instruments and the procedure used in the study. The

chapter's sections include Participating Schools, Oklahoma Educational Performance

Measures, The Oklahoma Office of Accountability, Data Sources, Procedures, and

Analysis.

Participating Schools

The sample used in this study was composed of ten third grade classrooms from

ten selected public schools in the State of Oklahoma. Five schools were selected based

on their identification as "at risk" or low performing by the Oklahoma State Department of Education for the 1995-1996 school year, the most recent year for which data were available at the time of the study. Although more than five elementary schools were so identified, some were excluded because they were urban rather than rural schools, the type selected for this research. A school is considered low performing if its students score below the 25th percentile rank when compared to all other schools in Oklahoma on the CORE Curriculum Tests, given in grades 5, 8, and 11, and if its students score at or below the 49th percentile rank on the national average on the ITBS Complete Battery, which is given each year to students in the third and seventh grades. Both circumstances must exist for a school to be considered "at risk." However, it is possible for a school to be "at risk" even though its students scored above the 49th percentile rank on the reading section of the test, based on its overall performance on the ITBS.

In order to make comparisons, each "at risk" school in the study was paired with a school in a nearby community within the same county as the "at risk" school. These paired schools were selected as much as possible by their similar demographics to the original five based on statistics as reported by the Oklahoma State Office of Accountability, and because of the students' generally better performances on state required achievement tests. The names of all communities in the study have been changed.

In the following section, short descriptions of each community are presented using the qualitative research methodology known as portraiture, a technique in which a written picture of the geographic, demographic, and ideological setting in a study are portrayed.

The aim of portraiture is to present a subject in such a way that readers can learn from the images captured and conveyed by the writer. It is intended to enhance the research.

Paired Schools

Pair A: Alder and Aspen

Alder School (K-8, 298 enrollment) and Aspen School (K-8, 201 enrollment) are located in a rural area in the eastern region of the state. Agriculture is a mainstay of the county's economy, with grain and cattle being major products. Major employers in the county include health service organizations, city services, and education services. The county area is 715 square miles and consists of rolling hills, a major lake, and two major stream systems.

Alder School is a small but modern one story facility located about five miles from the main highway through the area. Adjacent buildings house the junior high and high schools. The campus sits alone atop a ridge surrounded by fields on all sides. There are no other buildings in sight. The original section of the school was completed in 1926 and served grades 7-12. The grade school section was completed in 1938 and was later remodeled and enlarged with the help of federal funds. A new wing was completed in 1995. The grounds are well kept, sporting low maintenance landscaping. There is a large playground area with playground equipment.

The interior of the school is attractive and well maintained. Classrooms are large and equipped with modern audiovisual and computer equipment. Hall bulletin boards are educational and current. Most teachers in the school live outside the Alder area in a

larger community and commute to the school. Nearly 68% of the students receive free or reduced priced lunches. Test scores for Alder School traditionally have been equal to or above the state average for grades K-8.

Aspen School is a small one story school located south of a mountain range on a tributary of a major river running through the eastern part of Oklahoma. The town in which Aspen School is located was settled shortly after the turn of the century and was originally part of the Indian Territory. There is presently no business section here. The school dates from 1910, although the present building is constructed of stone and was completed in the late 1930s.

The school is in a remote section of the county, separated from other towns by two-lane winding roads. The campus includes adjoining junior high and high school buildings and a playground. It is bounded by a beautiful stand of large trees. The drive and parking area are unpaved and covered with loose gravel. Except for a very few bushes, there is no exterior landscaping. Like Alder, the school is fronted by a low stone wall, a remnant from the school's WPA history. There are no buildings in the area except the school.

The interior of the building does not appear to have been changed for many years. The floors are of wood, and the unadorned halls are wide, high, and dimly lit in the fashion of a traditional American school of the past. The glass globe light fixtures hang several feet on single tethers from the high ceilings, also reminiscent of the past. Doors open from the classrooms into the central hall. Some of the classrooms are very small and appear to have been partitioned at some previous time. The rooms are drab and

unattractive, but the teachers attempted to brighten them with bulletin boards and covered walls. Audiovisual equipment was not present, although one computer was observed in one classroom. Most teachers at the school do not live in the community, but commute from a nearby small city. Almost 67 percent of the students at Aspen School receive a free or reduced price lunch. Test scores for Aspen School traditionally have been below the state average for grades K-8.

Pair B: Magnolia and Mulberry

Magnolia (K-8, 94 enrollment) and Mulberry (K-8, 75 enrollment) are located in eastern Oklahoma in a county which was originally part of the Creek Nation, Indian Territory. Much of the history of this area is tied to the Creek Nations and events of the Civil War. The land area is 629 square miles of level plains and rolling terrain with two major streams. The economy of the area is agriculturally based, relying primarily on wheat production and the cattle industry. Major employers in the county include medical services, government services, and manufacturing plants.

Magnolia School is located within a large sheltering grove of trees in a 42 square mile district in east central Oklahoma. It is accessible via a state highway leading from the Interstate. There is no town here. The school is bordered on the north by gently rolling hills that give way to a fertile river bottom. Farming and ranching create a pastoral scene that is prevalent here. The school was opened in 1915, and serves grades K-12.

The grounds of Magnolia School are green and well kept. The school has a nostalgic feel about it in that the main building is old and constructed of native stone. The large yard and inviting playground area are mowed and manicured and enclosed by a chain link fence. There are a large number of pieces of play equipment in a space with plenty of room for students to play. The many trees on the grounds provide shade for much of the area.

In contrast to the expansive exterior, the interior of Magnolia School is quite small. The halls, especially in the old section of the school, are narrow, more like passageways from one area to another than hallways in the traditional school sense. The office area is housed in the oldest building and a marked contrast is evident between the rustic stone interior walls and wood floors and the fax and copy machines present. Buildings that have been added over the years to house various grade levels, some larger than others, are connected by exterior breezeways. Classrooms are adequate but not large and are filled with school resources. Shelves are full, walls are covered, and space is filled, giving the impression that nothing is wasted. Audiovisual equipment is not readily visible; however, computers are seen in some rooms.

Most of the teachers at Magnolia School commute from outside the district. About sixty-seven percent of the students receive free or reduced price lunches. Elementary test scores at Magnolia have traditionally been at or above the state average scores.

<u>Mulberry School</u> is a very small rural school in a community founded in 1904 on 80 acres of land belonging to an Indian freedman. The community thrived for many years but has lately fallen into misfortune and is in danger of succumbing to it.

The campus serves grades K-12. The elementary school is housed in the school's original one story brick and cinder block structure. It has a low roof and is surrounded on three sides by a large gravel parking area. This building has been added to more than once, and interior halls and outside breezeways connect the different sections. A detached building to the rear of the campus houses the junior high and high school students. A gymnasium included inside the elementary building is used by all grades for school and extra-curricular purposes.

The school grounds are not landscaped and mowing the grass which is present on one side of the campus appears to be the only effort at grounds keeping. There is a small playground area with adequate common play equipment.

The halls inside are narrow and low. The classrooms have low ceilings as well, and are long and narrow. They have not been remodeled or renovated. Windows along one side of the rooms are dingy. Classroom furniture is old and sparse, and some desks are too small for students. There is no audiovisual or computer equipment observable in the classrooms.

Most of the teachers at Mulberry School live in the community. One hundred percent of students receive free or reduced priced lunches.

Test scores for Mulberry School have traditionally been considerably below state averages.

Pair C: Pecan and Pine

Pecan School (K-8, 141 enrollment) and Pine School (K-8, 134 enrollment) are located in 2000 square miles of wild prairie in rural northeastern Oklahoma. Agriculture, oil, and gas, as well as horse and cattle ranching, contribute to the economy of the county. Attractions to the county include Indian and western cultural activities, museums, recreational facilities, lakes, creeks, rivers, prairie reserves and a state park. Major employers in the county include education services, garment manufacturers, government services, medical services, and feed and trucking services.

Pecan School is in a small, isolated, rural city with a well-developed, centralized business district surrounded by a residential section which gives way to large expanses of land dotted with ranch type homes. Many of these are cattle or horse ranches, while others are homes built on lands which produce oil.

The Pecan School campus is a sprawling series of multi-shaped, multi-grade buildings rising out of a vast, green, virtually treeless, prairie outside the community's residential section. There is no shortage of land in this part of Oklahoma. The main highway in the area, which winds for many miles through gently sloping hills, passes by the school. Very few other buildings are visible nearby.

The elementary school section of Pecan School is traditional in style, but it has been remodeled to appear more modern. The lawns are meticulously manicured, but there is no landscaping, shrubbery, or flower garden. The play area behind the school is very large and has a combination of typical playground equipment, some old fashioned,

some modern, as well as a field fenced and intended for free play. There is a ball field in this section.

One area of the school is composed of hallways stretching the length of the structure. Large, traditional classrooms extend from this hall. However, another newer part of the school is modular and open. This part houses the library media center and resource area as well as space for class activities. The resource center holds sufficient audiovisual and computer equipment for use by students and teachers.

The teachers at Pecan School live in the community and surrounding area. About half of the students at Pecan School receive a free or reduced-price lunch. Test scores for the students at Pecan School have traditionally been near or above the state average.

Pine School is a small elementary school in an extremely remote section of the state. The main highway through the area divides the town in half. Homes and businesses are scarce, and decline in the town is evident. Many of the town's buildings are beginning to deteriorate, including the original red brick building on the school campus. The cornerstone dating the structure from 1920 is in danger of falling. The school is comprised of different sections, obviously built at different times, which are connected by a series of inside walkways, some sloping, some composed of steps which lead from one level to another. These halls are dim, the carpets are worn, and the walls are dingy. The campus serves grades K-12.

The grounds are not well kept, although they are not in neglect. There is no landscaping except for the occasional volunteer shrub or tree. There is a small

playground near the elementary school section with both modern and traditional equipment.

The interior of the elementary school is also dark. The halls are wide with original wooden flooring. Classroom space is adequate but small compared to a more modern school. The classrooms are not as dim as the halls, since each has a half-wall of windows along one side. No audiovisual equipment was visible during the visit, but each classroom has a computer; however, the teacher explained that they were not used extensively because there was not adequate software or instruction in their use.

Most teachers in the building commute from outside the school district. Nearly 60% of the students receive free or reduced priced lunches. Test scores for Pine School tend to be below the state average; however, isolated subject areas are sometimes at or above the state average.

Pair D: Walnut and Willow

Walnut School (K-8, 186 enrollment) and Willow School (K-8, 77 enrollment) are located in eastern Oklahoma. The county was originally part of the Creek Nation, Indian Territory, so much of the history of this area is tied to the Indian Nations and events of the Civil War. The land area is 629 square miles of level plains and rolling terrain with two major streams. The area's economy is agriculturally based, and relies primarily on wheat production and the cattle industry. Major employers in the county include medical services, government services, and manufacturing plants. The schools are located in the same county as Magnolia School and Mulberry School.

Walnut School is situated on a small rural campus in a wooded area of east central Oklahoma. The elementary school is a one-story building. It is apparent that the school is central to the community since several citizens were seen coming and going into and around the building during the visit. There is no town here, just the residential community and school.

The grounds of the school are maintained but have a rural look to them, evidenced by the lack of sidewalks in favor of gravel paths, and grass that is not confined to lawn areas with any definition, but rather allowed to spread as it will. There is a chain link fence around the building.

This building, unlike others in the study, was not constructed as a WPA project. The exterior is covered with siding of a dull unremarkable color, giving the building a bland appearance. A small typical play area is visible a short distance from the building.

A central hallway dissects the classroom building. Classrooms open into this hallway from both sides. The hall is quite narrow and dark, and runs from one entrance to another on the opposite side of the building. The classrooms are also very small and dark, a result of the dark paneling. Neither audio-visual nor computer equipment is readily visible anywhere in the school.

Many of the teachers at Walnut School commute to work rather than live in the community. One teacher drives ninety minutes each way from a larger city.

About 75% of the students at Walnut School receive a free or reduced-price lunch. Test scores for the school have traditionally been near or above the state average for grades K-8.

Willow School is a very small school located along a tree-lined portion of the only highway through the area. The landscape has a pastoral look to it. There is no town here, just the school. The teacher reports that there was a thriving community here in the past, but it is now in decline. The school building is very old, and much of it was constructed during the WPA era. A stone walkway runs from the road to the front entrance of the school. The stones tell the history of the school, in that the names and graduation dates of former students are engraved individually on them. This practice apparently stopped several years ago, since no engraved stones are present for students who attended within the last two decades.

A small playground area sits at the back of the campus. The entrance to the school opens into a large gymnasium from which the other parts of the building extend around the perimeter. Elaborate photographs of large earlier graduating classes hang on the walls of the gym. The earliest classes are quite large, but subsequent pictures show a consistent decline in the number of graduates as the years progress.

The school office opens into the gym along one wall. It is large but sparsely decorated, with only basic items visible. There is no decoration in the office, but simply a few desks and minimal office equipment. It does not feel welcoming or comfortable.

A large bathroom in need of repair extends from another gym wall as do some of the classrooms. A narrow hallway on another wall leads to the remaining classrooms. All of these rooms are extremely small and are often home to multigrade classes. Audiovisual and computer equipment are not visible during the visit.

Most of the teachers at Willow School live in the area of the school rather than commuting from other places. About 84 percent of students receive a free or reduced-

price lunch. Test scores for Willow School are generally below the state average for grades K-8.

Pair E: Laurel and Linden

Laurel School (K-8, 177 enrollment) and Linden School (EC-8, 102 enrollment) are located in far eastern Oklahoma in a county created at statehood. Primary industries of the county include food processing and canning, poultry raising, cattle ranching and horse breeding. The county contains several sites of historical interest, including the site of a Civil War battle. Major employers of the county include a poultry processing plant, food processing plant, health services, an electrical manufacturing company, and a financial services institution. Three state highways connect the outlying parts of the country with the Interstate system.

Laurel School is a small part of a larger campus nestled in an isolated area along a winding road through rolling hills and an abundance of trees. The one-story buildings are about eight miles from the main highway through the area. The campus dates from 1889 and serves grades K-12.

The grounds of Laurel School are quite large. The grass is neatly trimmed, but it grows wild rather than having been planted. A four-foot chain link fence frames the buildings on three sides. There is a large grass-covered play yard which adjoins a baseball field, as well as a smaller playground area with equipment suited to small children. This playground has a combination of sand and grass under the equipment serving as the play surface.

Elementary classrooms are in a section of the building that is several decades old and are medium sized. There are single windows on the exterior walls of these rooms rather than the wall of windows as seen in some of the other schools. The school has a satellite dish on the grounds and audiovisual equipment is available. Computers were not visible in the classrooms. Some teachers in the school live in the Laurel community and others commute from the nearby larger town. One hundred percent of students at Laurel School receive free or reduced price lunches. Test scores for the school have traditionally been at or above state average scores.

Linden School, a smaller than average elementary school, sits amid a vast plain of flower-covered fields in a rural section of far eastern Oklahoma. It is nestled within a breathtaking expanse of tree-covered rolling hills about three miles from the nearest state highway. There is no town here. The first school term was in the fall of 1880. The school serves grades K-8.

The school grounds are well maintained, although there is minimal landscaping and no garden area except for a small flower bed outside the main campus building. A chain link fence surrounds the campus, which includes the main cinder block building as well as several well-kept outbuildings. There are few trees in the immediate area of the buildings, but several surrounding the campus a few yards away. A large playground area with a combination of traditional and modern play equipment adjoins the buildings. The school is one story, except for a gymnasium/activity facility adjacent to the classroom buildings.

Interior hallways are wide and slightly dim, but brightened by continuous displays of student art work. Outside buildings are connected to the main building and to each other by covered breezeways.

Classrooms are small and narrow but some rooms are made up of two combined areas to provide a larger space for instruction. One wall in each classroom is composed of windows from about midway to the ceiling, providing extra light. Classrooms are generally cluttered, with no space wasted.

Audiovisual and computer equipment is not present in classrooms, although a large satellite dish stands next to the building, implying that such equipment is available. Teachers at the school generally are members of the Linden community and live either within it or nearby, rather than commuting from larger cities. Nearly ninety-eight percent of students receive free or reduced price lunches at Linden. Test scores for the school are traditionally below the state average.

Oklahoma Educational Performance Measures

The ITBS compares the performance of Oklahoma students with that of other students throughout the nation. These norm referenced tests (NRTs) measure what students have learned in reading, language, mathematics, science, social studies and the use of sources of information.

Oklahoma has specially designed Criterion Referenced Tests (CRTs) called the Oklahoma CORE Curriculum Tests, or OCCT. These tests measure the state's core curricula, which are known as the Priority Academic Student Skills, or PASS. PASS was developed to meet state law requirements in school curriculum (70 O. S. Section 11-

103.6a). Beginning with the 1995-1996 school year, students in Grades 5, 8, and 11 have been tested.

Third and fifth grade students in the "at-risk" schools had scored poorly on the ITBS for two consecutive academic years. The schools were slated for visitation by state evaluation teams, whose mission was to help the schools raise their scores and achieve subsequent academic success. These visits took place in the spring of 1998.

For a school to be included in the study, three sets of data were required: (1) completed researcher-prepared questionnaires and interviews from the teachers in these schools (see Appendix A); (2) completed DeFord Theoretical Orientation to Reading Profiles (Appendix B); and (3) selected 1995-1996 scores reported to the Oklahoma State Department of Education for their students from the reading section of the Iowa Tests of Basic Skills (Appendix C). Class scores in reading for the ten schools ranged from 25% to 65% as measured by this section.

In order to pair each "at risk" school with another school in the same geographic region not identified as "at risk," demographic data on each community were necessary. These data were drawn from the Profiles 1996 - District Report (Appendix C) published by the Oklahoma Office of Accountability.

The Oklahoma Office of Accountability

The mission of the Office of Accountability is to provide narrative and statistical reports regarding the performance of the state's public schools to the people of Oklahoma, as required by the Oklahoma Educational Reform Act and the Oklahoma

School Testing Program Act (Oklahoma Office of Accountability, Profiles 1996 District Report).

The Office of Accountability operates under the governance of the Education Oversight Board with the Secretary of Education serving as the Chief Executive Officer. It implements the Oklahoma Educational Indicators Program by assessing and reporting on the performance of public schools and school districts. These reports present yearly and historical comparisons of public school and school district graduation rates, dropout rates, pupil-teacher ratios, enrollment gain and loss rates, first-grade readiness, school district finances, and test results by grade and subject/section in a socioeconomic context. This socioeconomic context includes population, population per square mile, ethnic makeup, average household income, average property valuation per student, unemployment rate, and poverty rate.

The Secretary of Education, through the Office of Accountability, monitors the efforts of the public school districts to comply with the provision of the Oklahoma Educational Reform Act and Oklahoma School Testing Act; identifies districts not making satisfactory progress towards compliance; recommends appropriate corrective action; analyzes revenues and expenditures relating to common education, giving close attention to expenditures for administrative expenses; makes reports to the public concerning these matters when appropriate; and submits recommendations regarding funding for education or statutory changes whenever appropriate (Oklahoma Office of Accountability, Profiles 1996 District Report).

Profiles 1996 is the fulfillment of the reporting requirement of the Oklahoma Educational Indicators Program, which was established in May of 1989 with the passage

of Senate Bill 183, also known as the Oklahoma School Testing Act. It was codified as Section 1210.531 of Title 70 in the Oklahoma statutes. In this action, the State Board of Education was instructed to develop and implement a system of measures whereby the performance of public schools and school districts would be assessed and reported, and whereby the public could be made aware of any tests administered under the Oklahoma School Testing Program Act, relative accomplishments of the public schools, and of progress being achieved. Also, the Oklahoma Educational Indicators Program presents school, socioeconomic, testing, and financial information for comparisons between school districts (Oklahoma Office of Accountability, Profiles 1996 District Report).

Profiles 1996 consists of three components: (1) the State Report; (2) the District Report; and (3) individual School Report Cards. Each component divides the information presented into three major reporting categories: (a) community-environment information, i.e., socioeconomic statistics relating to persons living within district boundaries, such as average household income and ethnic makeup; (b) educational programs offered and the percentage of students participating (program/process information), i.e., statistics related to the district's programs, curriculum offerings and finances such as gifted/talented programs and special education programs; and (c) student performance information, i.e., statistics on standardized test scores and other student performance measures such as ITBS scores and high school graduation and dropout rates. This methodology is meant to mirror the real-world educational process. Students have a given home and community life, they attend a school with a varied makeup of teachers and administrators who deliver education through different processes and programs, and finally all of these factors come

to bear on student performance. Of the three components, the School Report Card provided the most data about the researched districts under study.

The School Report Card component includes a report card for each of the 1,806 individual school sites in the state. The School Report Card includes demographic and financial information about the district and specific information about the individual school site. This information includes enrollment counts, achievement test scores, community involvement, information about teachers, and other site-specific information (Oklahoma Office of Accountability, Profiles 1996 District Report).

Thirty-six separate demographic elements from the School Report Cards were compared between paired communities in the study. Similarity was established using comparisons of socioeconomic data, educational attainment of adults, district programs, teacher information, professional support data, administration information, district revenues, district expenditures, and others. A great deal of effort was made to find community pairs as similar to one another as possible. The five "at risk" schools were paired with five demographically similar communities in geographic proximity at which students had higher reading achievement test scores. In one case a true demographic match could not be made to the 100% Black population of one community. This is discussed further in Chapter IV.

Data Collection

This study used scores from the Iowa Tests of Basic Skills as measures of student academic achievement, community visits, interview data reported by the teachers in the study as the definition of the instructional environment, and the DeFord Theoretical

Orientation to Reading Profile as the means to determine teacher instructional philosophy.

The Iowa Tests of Basic Skills

The Iowa Tests of Basic Skills were chosen as the basis for measuring achievement in this study because of their prevalence in Oklahoma and elsewhere and their inclusion in the existing literature on the effect of elementary school reading instructional programs on reading achievement. These tests are well-known and accepted in the educational community and are constructed to provide comprehensive measurement of growth in reading ability.

The ITBS battery was originally developed in 1935 under the direction of the staff of the College of Education at The University of Iowa. The first edition, then called Iowa Every Pupil Test of Basic Skills (IEPTBS), was developed by E. F. Lindquist, Harry Greene, Ernest Horn, Maude McBroom, and Herbert Spitzer. The test was so named until the mid-1950s. Since the inception of the IEPTBS in 1935, the authors have considered "basic skills" to be the entire range of skills a student needs to progress satisfactorily through school. The ITBS and its predecessors have always included multiple-step problem-solving items, multi-map study skills items, and reading skills which focus on inferences and generalizations. Because of the introduction of minimum competency testing programs in the 1970s, minimum skills have sometimes been incorrectly equated with basic skills. Basic skills are not minimum skills. On the ITBS, higher-order basic skills are measured beginning as early as grade one, and the proportion of higher-order basic skills items increases with each level of the test (Riverside 2000).

Core tests include Listening, Word Analysis, Vocabulary, Reading/Reading Comprehension, Language, and Mathematics. The Complete battery refers to these tests with the addition of tests in Social Studies, Science, and Sources of Information. Composite scores, as defined in Riverside 2000, are scores in respective batteries which have been averaged using a specific computational formula.

ITBS results are reported separately for fall and spring. The ITBS Complete Battery test reliabilities for Levels 5-8 (grades K-3) are .80 for both fall and spring, and Core Total and Composite reliabilities average .94 for fall and spring. For levels 9-14 (grades 3-8) the fall and spring test reliabilities average .86 and .87, respectively; the corresponding Core Total and Composite average values are both .98.

The DeFord Theoretical Orientation to Reading Profile

The Theoretical Orientation to Reading Profile (TORP) was designed and validated by Diane DeFord (1985). The purpose of the TORP is to help teachers clarify their own beliefs about how children learn to read and, consequently, how teachers believe reading ought to be taught. It also reveals which of the three instructional models (whole language, skills, or decoding perspectives) teachers' beliefs about reading and reading instruction are currently associated with most strongly. The DeFord TORP uses a Likert scale response system to determine these beliefs and is easily administered and scored (see Appendix B).

The Whole Language Perspective

A whole language instructional model of reading reflects a specific set of beliefs about children. Reading, writing, speaking and listening are viewed as alternate forms of language used in society for the purposes of communication. The whole language instructional model assumes not only that reading, writing, speaking, and listening are integrated but that these forms of language are simply different manifestations of the same underlying communication system called language. In other words, language may be expressed in different forms for a variety of purposes, but language as a communication system remains the same.

Teachers whose beliefs can be ascribed to as whole-language model feel that young children develop reading and writing ability in much the same way as they acquire oral language. They learn language in a supportive environment where they see and hear language used by others for meaningful purposes in a variety of social-situational contexts (Reutzel & Cooter, 1992).

Whole language teachers believe they must respond to the attempts of individual children who are learning to read. Ken Goodman (1986) calls this "kid watching." Whole language instruction is learner-centered rather than teaching- or subject-matter centered. Some educators refer to this as a child centered approach (Reutzel & Cooter, 1992).

The whole language instructional model depicts learning to read as a holistic, unitary process. Children learn to read by reading and to write by writing (Newman, 1985a). As a direct manifestation of this belief, children and teachers in whole language

classrooms typically engage in daily sustained reading and writing using predictable trade books, literature books, themed units, and self-selected writing projects, although these practices can also be found in classrooms where teachers do not ascribe to a whole language belief system (Altwerger et al., 1987; Reutzel & Hollingsworth, 1988b).

Several basic assumptions are associated with a whole-language instructional model. First, reading, writing, speaking, and listening are considered merely different media though which the concept of language may be manifested in communication. Second, learning to read and write is and ought to be a natural process like learning to speak. Third, meaning is at the heart of learning to read and write. Fourth, reading and writing instruction focuses squarely on meaning by progressing from the whole to the parts of language. Fifth, learning to read and write are developmental processes resulting in a final product that is greater than the sum of the instructional parts. And last, children learn to read in a supportive environment from caring people, not from published programs (Reutzel & Cooter, 1992).

The Skills Perspective

The skills instructional model views reading as one of four language arts - listening, speaking, reading and writing. Each of these four language arts is composed of a series of discrete skills, which are equally important and equally accessible to the reader. Each skill is taught in isolation and is thought to be integrated by the reader at a later time. While the skills instructional model acknowledges comprehension and meaning, the text, and the reader as important parts of reading, the focus on meaning is often at the word level, as in vocabulary or decoding instruction (Weaver, 1988).

The skills reading perspective is composed of three major components - comprehension, vocabulary, and decoding - with distinct skills within each of these three components. Comprehension is seen as a set of discrete comprehension skills such as getting the main idea, noting the details, drawing conclusions, and using the context. Vocabulary refers to skills such as understanding words and word meanings. Decoding typically focuses on formally and systematically teaching children letter-sound relationships during the early stages of reading instruction. These skills are used together in the act of reading but can be isolated from the act of reading for the purposes of instruction and measurement. Thus, reading becomes whole as isolated parts are integrated by the reader; and yet, reading is equal to the sum of its parts, dimensions, or skills.

The skills instructional model is perhaps most closely associated with using basal readers to instruct reading. Basal readers typically list reading skills in a scope and sequence chart. The scope and sequence of skills are organized into the three components of reading, and are published as a reference in the teachers' manuals. Another characteristic of skills model instruction involves the pre-teaching of new vocabulary words before reading a selection rather than allowing students to encounter these words in context (Gordon, 1984; Weaver, 1988).

After students read a selection in basal textbooks, teachers typically teach three skill lessons, one from each of the three components of reading. Thus, a comprehension skill lesson, a vocabulary skill lesson, and a decoding skill lesson are typically taught. Reading instruction is predominantly occupied with teaching skill lessons, practicing these skills, assessing these skills, and reviewing these skills to maintain mastery.

Although skills teachers also encourage the reading of stories in trade books and basal readers, reading of any text is usually a diversion from instruction dominated by skill instruction and practice, usually accomplished with worksheets (Reutzel & Cooter, 1992).

Another distinguishing factor of the skills model is the treatment of comprehension. Comprehension is seen as a set of discrete comprehension skills such as getting the main idea, noting the details, drawing conclusions, and using the context. Each of these comprehension skills is to be taught one at a time and reviewed in subsequent years. The skills instructional model clearly focuses on the mastery and application of skills as a means to becoming a reader.

Several assumptions are associated with the skills instructional model. First, reading is a sum of its parts. Second, instruction is designed to teach each of the language cuing components - decoding, context, and meaning - separately. Third, these skills function in a unitary fashion but can be isolated for instruction and practice. And fourth, print contains the author's message, and the reader's job is to get meaning from the text (Reutzel & Cooter, 1992).

The Decoding Perspective

According to the decoding instructional model, also called the phonics or subskills instructional model, reading is depicted as a pyramid, with understanding sound-symbol relationships at the base and comprehension as the capstone. Phonics or subskill teachers typically focus on formally and systematically teaching children letter-sound relationships during the early stages of reading instruction. According to a subskills instructional model, the most important skill to be learned in early reading is the

ability to decode the letters of print into the sounds of speech; thus letter-name and letter-sound instruction often precede allowing children to read words or books independently (Reutzel & Cooter, 1992).

Although comprehension is also important in the decoding or phonics model, the ability to comprehend is deemed to depend largely on the ability to manipulate letter symbols and sounds and connect these with oral language. In effect, the subskills model claims that efficient decoding causes comprehension ability (Reutzel & Cooter, 1992).

Teachers who believe that children should be taught under a phonics or subskills model begin reading instruction with the letters of the alphabet and the sounds these letters represent. Flesch (1955, 1979) among others, cautions that allowing children to attempt to read words or books without knowing the 26 letters and 44 sounds of the letters first could lead to potential reading failure and frustration. Thus, letter names and letter sounds become the basic building blocks of reading under this model.

Teachers who believe in the phonics or subskills instructional model often consider a lack of decoding ability or phonics knowledge to be the fundamental cause of reading disability.

Under the subskills or decoding model, learning to read involves the decoding of letters to sounds and sounds to words, which are then matched with words in the child's speaking vocabulary. Second, meaning is derived from the print on the page. Finally, reading skill is built from the smallest parts of language to the whole (Reutzel & Cooter, 1992).

The Researcher-Prepared Questionnaire

The researcher-prepared questionnaire was used to interview teachers in the study (see Appendix A). This document consisted of thirty questions which covered teacher background, teaching experience, and professional affiliation, school characteristics, instructional philosophy, district practices, classroom practices, class makeup, and community participation in the educational process.

The purpose of this questionnaire was to provide information about total classroom environments including factors and characteristics the individual teachers brought to these environments, so that determinations could be drawn about the relationship between environment and learning and comparisons between classrooms could be made.

The questionnaire development process focused on the identification of content that was representative of elementary school teachers and classrooms. The questions were developed by brainstorming with colleagues and committee members, and by calling upon personal experience as an educator in understanding the factors that complement and facilitate learning in the classroom.

After the questions were developed, the written questionnaire was given to five fellow teachers who taught at the third grade level to assess its usability. Each colleague who answered interview questions on the questionnaire was asked to respond to the instrument regarding inclusiveness, clarity, and ambiguity and each offered suggestions and changes. University faculty also served as readers and offered suggestions. These suggestions were considered and were reflected in the final compilation of questions.

Background questions were included dealing with which college or university the teachers attended, their areas of study and concentration, types of degrees, their ages, length of total teaching experience, and experience in teaching reading.

Questions about school characteristics included inquiries about class size, the teachers' feelings about the adequacy of teaching resources, the presence of school libraries, and the existence of preschool programs. Questions about district practices were included to determine whether or not local inservice activities or workshops were provided for teachers, whether the Oklahoma State Department of Education provided inservice support, or whether or not such inservice participation was supported or encouraged.

Classroom practices and curricula were described in questions concerning adopted reading series, whether or not all teachers in a particular school used the same methods and/or materials in their reading instruction, what type of reading program was utilized by the subject teacher, how much time was devoted to daily reading instruction, and what different activities were used during reading instruction times.

Items concerning instructional philosophy were designed to provide insight into each teacher's ideas about sound reading instruction, whether or not the teacher's thinking about reading instruction had changed over time, and whether or not each teacher's instructional style was similar to that of her colleagues.

Community involvement in each school was also questioned. Inquiries were made about tutoring programs, mentoring programs and parental involvement.

Procedure

The idea for this study began in the fall of 1997 when an article appeared in an Oklahoma newspaper reporting the upcoming visitation by evaluation teams from the Oklahoma State Department of Education to various Oklahoma public schools where students scored poorly on the Iowa Tests of Basic Skills for a second academic year (Appendix D). Several of these schools were in danger of facing state intervention since, by law, if a school is low performing for three consecutive years, it becomes a "high challenge" school, and after five years the Oklahoma State Board of Education can close such schools. The purpose of the teams' visits was to offer help in curriculum, instruction, and student assessment.

After reading the article, I considered possible causes of such a lack of progress in certain schools. Could it be the location, or "ruralness" of the schools, or were there in fact other schools in the area at which students performed at a higher level on achievement tests? Could the type of instruction, the way students were taught, have something to do with their lack of performance? As an educator, I am concerned with the primacy of reading in learning. What kind of scores did these schools have in the area of reading, and what factors from the community or district, or in the classroom, resulted in these scores?

This study grew from these questions. I proposed comparing schools in geographic proximity and with similar demographics, investigating why some schools succeed while others fail to teach children to read. A proposal for the study was sent to the Oklahoma State University Institutional Review Board and approval was granted in

March of 1998 (Appendix E). Letters of introduction and consent forms were also sent to district superintendents, principals, and teachers during March of 1998 (Appendix F, G, H, I, & J).

As noted above, five schools from around the state were selected from those mentioned in the "at risk" article, and a subsequent five companion/paired schools were chosen for the study. Comparisons between schools were drawn from the sources and data as outlined above. Individual classrooms and teachers in these schools were selected by default because the ITBS is given only to third graders in elementary schools in Oklahoma. Each school in the study had only one third grade class.

A questionnaire to be used during interviews with teachers in the study was developed by the researcher with the help of committee members. Pertinent topics were brainstormed and relative questions formed as a result. Final selection of questions was made after a review by the researcher and committee chair.

The researcher-prepared questionnaire and interview information were collected during the Spring of 1998. Each school was visited once, and the questionnaire was administered orally in a one-on-one setting at that time. Questions were read to the teacher and she was allowed as much time as necessary to complete her answer before moving to the next question. Answers were recorded in both written form on the actual questionnaire, and with a cassette tape recorder. Tapes were used during analysis as reviews of the interviews and were then stored. Each interview conducted lasted approximately one hour. Interviews were compared by the researcher.

The DeFord TORP was mailed to each participant prior to scheduled visits so that teachers would have adequate time for reflection in providing thoughtful, thorough

answers. These documents were collected at the time of the scheduled interviews. Data were then analyzed by site and teacher. Finally, comparisons of school information presented in written portraits were conducted.

Analysis

Reading achievement in this study was represented by scores on selected components of the Iowa Tests of Basic Skills which were reported by the Oklahoma State Department of Education. Initial differences in reading achievement between students in "at-risk" schools and students in higher achieving schools were determined to exist by comparing ITBS scores. Information obtained in the on-site data collection sessions was examined and compared by the researcher.

CHAPTER IV

RESULTS

This descriptive study was undertaken to answer the following question:

Why are the students in selected "at risk" Oklahoma third grade classrooms

achieving at low levels on the reading section of the Iowa Tests of Basic Skills, when

students in similar selected classrooms are achieving at higher levels?

Data collected to answer this question was obtained in five ways. First, aggregate

scores from the reading section of the Iowa Tests of Basic Skills for each school were

obtained using Profiles 1996 (Appendix C) published by the Oklahoma State Office of

Accountability (November, 1997). Second, demographic information about each

community, district, and school was obtained in November, 1997, using the same source

(Appendix C). Third, the DeFord Theoretical Orientation to Reading Profile (Appendix

B) was administered to the teacher in each of the schools in the study during April, 1998.

Fourth, each teacher was interviewed in April and May of 1998 using a researcher-

developed questionnaire (Appendix A). Finally, informal classroom observations were

made during school visits by the researcher (April, May, 1998). Findings from all

collected data will be presented in this chapter.

The sample consisted of five elementary schools identified as "at risk" for failure

by the Oklahoma State Department of Education, and five other elementary schools not

identified as at risk. These other schools were selected and paired with an "at risk" school from within the same respective counties. Both third grade scores from the reading section of the ITBS and Oklahoma Office of Accountability demographic statistics were used as the basis for their selection. Reading scores for schools not at risk were higher than those of at risk schools in all cases except one. This is explained in greater detail below.

Paired communities were demographically similar except for the ethnic makeup of one at risk community in which 100% of the population was Black. Finding a true demographic match for this community was not possible. "At risk" and "not at risk" groups of schools were generally comparable except for reading performance. For the remainder of this chapter, "not at risk" schools will be referred to as "higher performing schools," and "at risk" schools will be referred to as "lower performing schools."

<div align="center">Iowa Tests of Basic Skills Information</div>

Percentile scores on the reading section of the Iowa Tests of Basic Skills (ITBS) for third grade classes in the study are shown in Tables 1 and 2. These scores served as the basis for this study and were compared both collectively as higher performing schools were evaluated against lower performing schools and one-to-one within each pair of schools.

Scores in the higher performing group ranged from the 51st percentile to the 65th, while scores in the lower performing group ranged from 25 to 64 percentile. Mulberry's ITBS third grade score was not publicized because fewer than six students were tested, and such publication would violate the students' right to privacy. Reading performance scores were higher in the higher performing schools with one exception. Linden School

Table 1

Iowa Tests of Basic Skills Information

Category	Schools					Statistics		
Higher Performing Schools	Alder	Magnolia	Pecan	Walnut	Laurel	Total #	Avg	State Avg
ITBS Reading Percent	65	63	60	58	51	N/A	N/A	60
Lower Performing Schools	Aspen	Mulberry	Pine	Willow	Linden			
ITBS Reading Percent	25	N/A*	31	36	64	N/A	N/A	60

Note: *=Fewer than 6 students tested, results are FERPA protected.

Table 2

School Pairs – Iowa Tests of Basic Skills Reading Percentages

Pair A		Pair B		Pair C		Pair D		Pair E		
Alder	Aspen	Magnolia	Mulberry	Pecan	Pine	Walnut	Willow	Laurel	Linden	State Avg
65	25	63	N/A*	60	31	58	36	51	64	60

Note: *=Fewer than 6 students tested, results are FERPA protected; **=higher performing school in each pair is listed first.

was included in the study because of its identification by the Oklahoma State Department of Education as one of the five "at risk" elementary schools in the state based upon the school's overall achievement test scores. However, Linden's ITBS score on the reading section for its third grade students was at the 64th percentile. This was not only greater than the state average ITBS reading score for third graders (60 percentile), but it was also greater than its necessary paired school's third grade score on the reading section of the

ITBS, which was Laurel, 51%. Although in this case the pair's scores are the reverse of other pairs, it was hoped that including them in the study would provide some answers to the overall question of student achievement perhaps because of the ethnicity factor.

Demographic data were analyzed by type of information both group to group and in community pairs. This was done in order to provide a broad range of comparisons. Community data included population, ethnic, and economic information. District data included facts concerning school population and district programming. School data included such items as instructional methods, class makeup, and teacher information. Additionally, within each group (community, district, and school), data were sorted based upon the type of information being examined. The DeFord TORP surveys were scored individually using the scoring instructions provided with the instrument. Specific items were identified, isolated, and scored based on the responses of the teachers. Score totals were then compared to a scale which is used to determine the type of instructional perspective held by each responding teacher. Personal interview data were also analyzed pair by pair and collectively, with responses from teachers in higher performing schools contrasted with those from teachers in lower performing schools. In addition, informal classroom observations were made. Both interview data and observation information were captured in short written portraits in which a written picture of the geographic, demographic, and ideological setting of each school was portrayed. The aim of these portraits was to present the subject in such a way that readers can learn from the images captured and conveyed by the writer.

Findings presented in Tables 3 - 32 show community, district, and classroom

elements for the selected schools in the study. Data in all tables were taken from Profiles

1996 and interview sources.

Community Context

Population figures from the higher and lower performing communities showed

that towns in both groups were considerably smaller than the average Oklahoma

community of 5781.   In fact, when all five community populations in the higher or lower

groups were combined, the total figure is still less than the average size Oklahoma

community. The smallest community (Willow) at 553 was more than 5000 below the

state average; the largest community (Alder) at 1653 was more than 4000 below the state

average. Average community populations for both the higher performing group (1107)

and the lower performing group (912) were also well below the state average population

(see Tables 3 and 4) .

Table 3

Population

Category	Schools					Statistics		
Higher Performing Schools	Alder	Magnolia	Pecan	Walnut	Laurel	Total #	Avg	State Avg
Overall Population	1653	835	1254	1063	733	5538	1107	5781
Lower Performing Schools	Aspen	Mulberry	Pine	Willow	Linden			
Overall Population	1323	1233	904	533	571	4564	912	5781

Table 4

School Pairs – Population

Pair A		Pair B		Pair C		Pair D		Pair E		
Alder	Aspen	Magnolia	Mulberry	Pecan	Pine	Walnut	Willow	Laurel	Linden	State Avg
1653	1323	835	1233	1254	904	1063	533	733	571	5781

Note: The higher performing school in each pair is listed first.

When communities were compared group to group as in Tables 5 and 6,

Caucasian representation was slightly larger in the higher performing group (43%) than in

the lower performing group (34%). However, both higher and lower performing group

percentages were less than the state average (66%).

A pair by pair examination of the communities revealed that four of the pairs had

relatively similar Caucasian representation (Aspen 41, Alder, 63; Pecan 49, Pine 55;

Walnut 58, Willow 42; and Laurel 7, Linden, 4), while one pair, Magnolia (52) and

Mulberry (0), differed noticeably in their respective Caucasian representation, with

Mulberry's population being entirely Black. Results also showed that the Black

population in all other communities in the study is less than the state average. A pair by

pair examination of the Black population percentages showed similar representation for

four pairs (Aspen 0, Alder 3; Pecan 0, Pine 0; Walnut 6, Willow 9; Laurel 0, Linden 0).

Although some of the communities in both groups had small Hispanic

populations, the average for both higher and lower performing groups was nearly the

same (1%; .8%, respectively), both lower than the state's 5% average. Hispanic

populations were similarly represented in all pairs (Aspen 1, Alder 1; Magnolia 2,

Mulberry 0; Pecan 1, Pine 3; Walnut 0, Willow 0; Laurel 1, Linden 0).

Table 5

Ethnicity

Category	Schools					Statistics		
Higher Performing Schools (percent/number)	Alder	Magnolia	Pecan	Walnut	Laurel	Total #	Avg	State Avg
Caucasian	41/678	52/434	49/614	58/617	7/51	2394	43%	66%
Black	0/0	0/0	0/0	6/64	0/0	64	1%	10%
Asian	0/0	0/0	0/0	0/0	0/0	0	0%	2%
Hispanic	1/17	2/17	1/13	0/0	1/7	54	1%	5%
Native American	57/942	46/384	50/627	36/383	93/682	3018	54%	17%
Lower Performing Schools (percent/number)	Aspen	Mulberry	Pine	Willow	Linden			
Caucasian	63/833	0/0	55/497	42/224	4/23	1577	34%	66%
Black	3/40	100/1233	0/0	9/48	0/0	1321	29%	10%
Asian	0/0	0/0	0/0	0/0	0/0	0	0%	2%
Hispanic	1/13	0/0	3/27	0/0	0/0	40	.8%	5%
Native American	33/437	0/0	42/380	49/261	96/548	1626	36%	17%

Findings for this population showed large percentages of Native Americans within

each community with the exception of Mulberry (0%). Two communities (Laurel, 93%,

and Linden, 96%) had Native American populations of more than 90%. Total average

percentages of both higher and lower performing groups were also large (54% and 36%. respectively). One community pair showed a great discrepancy between Native American populations (Magnolia, 46%; Mulberry, 0%).

Table 6

School Pairs – Ethnicity Percentage

Ethnic Group	Pair A		Pair B		Pair C		Pair D		Pair E		
	Alder	Aspen	Magnolia	Mulberry	Pecan	Pine	Walnut	Willow	Laurel	Linden	State Avg
Caucasian	41	63	52	0	49	55	58	42	7	4	66
Black	0	3	0	100	0	0	6	9	0	0	10
Asian	0	0	0	0	0	0	0	0	0	0	2
Hispanic	1	1	2	0	1	3	0	0	1	0	5
Native American	57	33	46	0	50	42	36	49	93	93	17

Note: The higher performing community in each pair is listed first.

Examination of the average household income, unemployment rate, and the rate of poverty in the communities in the sample resulted in important findings (Table 7 and 8). When examined group to group, average income figures from both higher and lower performing community groups ($19506; $15308 respectively) were lower than the state average ($21176). Mulberry, a lower performing school, reported an average household income figure of $10550, which is half the state average household income figure. Laurel, a higher performing school, reported an average income figure of $21838, which was higher than the state average income. Table 8 shows two community pairs with large

differences in average income (Magnolia, $17396, and Mulberry, $10550; and Laurel, $21838, and Linden, $12040).

Table 7

Economics

Category	Schools					Statistics		
Higher Performing Schools (percent/number)	Alder	Magnolia	Pecan	Walnut	Laurel	Total #	Avg	State Avg
Average Income (dollars)	19830	17396	18594	19875	21838	N/A	19506	21176
Unemployment	6/99	22/184	8/100	9/96	5/37	516	9%	6.7%
Poverty Rate	23/380	34/284	19/238	26/276	27/198	1376	25%	17%
Lower Performing Schools (percent/number)	Aspen	Mulberry	Pine	Willow	Linden			
Average Income (dollars)	22120	10550	15455	16375	12040	N/A	15308	21176
Unemployment	8/106	14/173	13/118	10/53	21/120	570	12%	6.7%
Poverty Rate	14/185	31/382	25/226	31/165	43/246	1204	26%	17%

Table 8

School Pairs – Economic Statistics

Economics	Pair A		Pair B		Pair C		Pair D		Pair E		
	Alder	Aspen	Magnolia	Mulberry	Pecan	Pine	Walnut	Willow	Laurel	Linden	State Avg
Average Income ($)	19830	22120	17396	10550	18594	15455	19875	16375	21838	12040	21176
Unemployment	6	8	22	14	8	13	9	10	5	21	6.7
Poverty Rate	23	14	34	31	19	25	26	31	27	43	17

Note: The higher performing community in each pair is listed first.

Unemployment figures for communities in both higher and lower performing groups exceeded the state average unemployment rate (6.7%). Total average percentages for unemployment between higher and lower performing community groups are similar (9%; 12% respectively). Although this figure for lower performing schools was greater than that for higher performing schools, the higher performing group's individual unemployment percentages represented a greater range of percentages. Higher group rates varied from 5% to 22%, while lower group rates varied from 8% to 21%. The higher performing group included the town with the highest individual unemployment rate of all the communities in the study. Two community pairs had large differences in their unemployment rates (Magnolia, 22%, Mulberry 14%; and Laurel, 5%, Linden, 21%). All other pairs differed by no more than 4 percentage points.

Table 7 also shows that average community poverty rates in both high and low performing groups (25%; 26% respectively) are higher than the state average community poverty rate (17%). However, one community in the lower group had an individual poverty rate lower than the state average (Aspen, 14%). When analyzed pair to pair, Table 8 indicated two community pairs which had large differences in their poverty rates (Alder, 23%; Aspen, 14%; Laurel, 27%; and Linden, 43%). In the first pair, the lower performing community's poverty rate (Aspen) was lower than the higher performing community's poverty rate (Alder), while in the second pair, the higher performing community's poverty rate (Laurel) was lower than the lower performing community's poverty rate (Linden).

Although all but two communities in the study had an average household income less than the state average (Alder, $22120; Laurel, $21838), and all but one community

reported poverty rates in excess of the state average of 17%, one community in the higher

performing group (Laurel, 5%) and one community in the lower performing group

(Aspen, 6%) showed unemployment rates lower than the state average of 6.7%.

Another area investigated was community educational attainment (Table 9 and

10). When examined group to group, findings regarding community education statistics

in the higher performing group revealed lower average percentages of residents with

either college degrees (7%) or some college (24%) than state averages for these variables

which are 17% and 28%. The average percentage of residents with a high school diploma

(36%) exceeded the state average figure for this variable (31%) by five percent; however,

the results also showed that the average number of citizens with less than a high school

diploma (34%) also exceeded the state average (24%), this time by ten percent.

For the lower performing community group, data showed that average percentages

of residents with college degrees (5%) or some college (18%) are also lower than the state

average for these factors (17%; 28% respectively). Additionally, although one

community in this lower performing group (Aspen, 34%) had more citizens with high

school diplomas than the average Oklahoma community did, the average for the group as

a whole (23%) was less than the state average (31%). The lower performing group had a

greater average number of citizens with less than a high school diploma (43%) than did

the average community in Oklahoma (24%).

An examination of the statistics regarding education for the community pairs

showed that all pairs had similar percentages of citizens with college degrees. Only one

pair showed a large difference in the number of citizens with some college (Pecan, 21%;

Pine, 12%). Three pairs showed large differences in the percentage of their populations

Table 9

Education Level

Category			Schools				Statistics	
Higher Performing Schools (percent/**number**)	Alder	Magnolia	Pecan	Walnut	Laurel	Total #	Avg	State Avg
College Degree	8/**132**	6/**50**	6/**75**	7/**74**	7/**51**	382	7%	17%
Some College	34/**562**	12/**100**	21/**263**	18/**191**	21/**154**	1270	24%	28%
High School Diploma	27/**446**	48/**401**	45/**564**	37/**393**	26/**191**	1995	36%	31%
Less than H. S. Diploma	31/**512**	34/**284**	28/**351**	38/**404**	46/**337**	1888	34%	24%
Lower Performing Schools (percent/**number**)	Aspen	Mulberry	Pine	Willow	Linden			
College Degree	7/**93**	6/**74**	3/**27**	5/**27**	4/**23**	244	5%	17%
Some College	24/**318**	17/**210**	12/**108**	13/**69**	18/**103**	808	18%	28%
High School Diploma	34/**450**	28/**345**	10/**90**	10/**53**	23/**131**	1069	23%	31%
Less than H. S. Diploma	34/**450**	49/**604**	44/**398**	40/**213**	54/**308**	1973	43%	24%

Table 10

School Pairs – Education Level Percentages

Education	Pair A		Pair B		Pair C		Pair D		Pair E		
	Alder	Aspen	Magnolia	Mulberry	Pecan	Pine	Walnut	Willow	Laurel	Linden	State Avg
College Degree	8	7	6	6	6	3	7	5	7	4	17
Some College	34	24	12	17	21	12	18	13	21	18	28
High School Diploma	27	34	48	28	45	10	37	10	26	23	31
Less than High School	31	34	34	49	28	44	38	40	46	54	24

Note: The higher performing community in each pair is listed first.

with high school diplomas (Magnolia, 48%, and Mulberry, 28%; Pecan, 45% and Pine, 10%; and Walnut, 37%, and Willow, 10%). Magnolia (34%) and Mulberry (49%) as well as Pecan (28%) and Pine (44%) had large disparities in the percent of citizens with less than a high school education.

The community characteristics from Table 11 and 12 were obtained from Profiles 96 and provided data concerning factors for which no state averages were available. These included the number of students per community square mile, the presence or absence of a public library in the community, and the presence or absence of a preschool in the community.

Table 11

Other Relevant Community Context Findings

Category	Schools					Statistics		
Higher Performing Schools	Alder	Magnolia	Pecan	Walnut	Laurel	Total #	Avg	State Avg
Students/Square Mile (#)	8.2	2.5	.5	2.2	7.9	N/A	4.2	N/A
Public Library (Y/N)	N	N	Y	N	Y	N/A	N/A	N/A
Preschool (Y/N)	N	Y	Y	Y	Y	N/A	N/A	N/A
Lower Performing Schools	Aspen	Mulberry	Pine	Willow	Linden			
Students/Square Mile (#)	5.5	2	2.2	1	8.3	N/A	3.8	N/A
Public Library (Y/N)	N	N	N	N	N	N/A	N/A	N/A
Preschool (Y/N)	Y	Y	Y	N	Y	N/A	N/A	N/A

Table 12

School Pairs – Other Relevant Community Context Findings Statistics

Category	Pair A		Pair B		Pair C		Pair D		Pair E		
	Alder	Aspen	Magnolia	Mulberry	Pecan	Pine	Walnut	Willow	Laurel	Linden	State Avg
Student/Sq. Mi. (#)	8.2	5.5	2.5	2	.5	2.2	2.2	1	7.9	8.3	N/A
Pub. Library (Y/N)	N	N	N	N	Y	N	N	N	Y	N	N/A
Preschool (Y/N)	N	Y	Y	Y	Y	Y	Y	N	Y	Y	N/A

Note: The higher performing community in each pair is listed first.

When higher and lower performing communities were examined as groups, results indicated similar average numbers of square miles between them (4.2; 3.8 respectively). Only two communities in the higher performing group had a public library (Pecan, Laurel), while no community in the lower performing group did. Only one community in the higher performing group (Pecan) reported not having a preschool in the community, as did one community in the lower performing group (Willow).

When the communities were examined as pairs, it was found that all pairs in the study varied by less than three students per square mile. Two pairs differed as to the presence or absence of a public library in the community (Pecan [Y] and Pine [N]; and Laurel [Y] and Linden [N]), while two pairs also showed a difference regarding the presence or absence of a preschool in their communities (Alder [N] and Aspen [Y]; and Walnut [Y] and Willow [N]).

School District Context

Tables 13 and 14 provide information regarding the average number of students per teacher for districts in the study. School size varied from district to district. When schools were examined group to group, average numbers of teachers per school in higher performing schools (10) and lower performing schools (6.7) were both considerably lower than the state average for this factor (64), and in each case the higher performing schools had more teachers. The average ratio of students to teachers was nearly identical between high and low performing groups (14.5; 14.3 respectively), and in both higher and lower groups the ratio was less than the state average number of students per teacher (17.4).

Table 13

Student/Teacher Ratio

Category	Schools					Statistics		
Higher Performing Schools (Number)	Alder	Magnolia	Pecan	Walnut	Laurel	Total #	Avg	State Avg
Students	298	94	141	186	177	896	179	177.7
Teachers	15.2	5.3	10.5	9	10	50	10	64
Students/Teachers	14.9	12.5	12.5	16.7	15.8	72.4	14.5	17.4
Lower Performing Schools (Number)	Aspen	Mulberry	Pine	Willow	Linden			
Students	201	75	134	77	103	590	118	177.7
Teachers	7.5	3.5	8.1	5.5	9	33.6	6.72	64
Students/Teachers	16.7	17	13.9	13	11.1	71.7	14.3	17.4

Note: Figures which include decimals indicate the employment of part-time teachers.

As Table 14 shows, two pairs of schools showed a marked difference between the number of students in each school (Walnut, 186, and Willow, 77; Aspen, 201, and Alder, 298). Laurel (177 students) and Linden (103 students) also differed considerably, but not to the extent of the previous two pairs. In each case the higher performing school enrolled more students.

Table 14

School Pairs – Student/Teacher Ratio

Category	Pair A		Pair B		Pair C		Pair D		Pair E		
	Alder	Aspen	Magnolia	Mulberry	Pecan	Pine	Walnut	Willow	Laurel	Linden	State Avg
Students	298	201	94	75	141	134	186	77	177	103	N/A
Teachers	15.2	7.5	5.3	3.5	10.5	8.1	9	5.5	10	9	64
Students/Teachers	14.9	16.7	12.5	17	12.5	13.9	16.7	13	15.8	11.1	17.4

Note: The higher performing community in each pair is listed first; figures which include decimals indicate the employment of part-time teachers.

Tables 15 and 16 provide data regarding special programs in schools in the study. Numbers of students in gifted programs varied greatly from school to school in both higher and lower performing groups. The higher group average percentage was 12.5%; the lower group average percentage was 6%. One higher performing school's percentage of students in gifted programs exceeded the state average percent for such students. Every other school had lower numbers of students than the state average for this variable; one school in the lower performing group (Linden) had no students in gifted education programs.

Table 15

Special Programs

Category	Schools					Statistics		
Higher Performing Schools (Percent/Number)	Alder	Magnolia	Pecan	Walnut	Laurel	Total #	Avg	State Avg
Gifted	13.4/40	12/11	10.5/15	1.5/2.8	10.1/18	112	12.5%	13%
Special Education	11/33	6.5/6	16.8/24	10.5/20	27.2/48	131	15%	11.7%
Lower Performing Schools (Percent/Number)	Aspen	Mulberry	Pine	Willow	Linden			
Gifted	6.7/14	10.1/8	10/13	5.6/4	0/0	39	6%	13%
Special Education	14.4/29	11.7/9	14/19	5.6/4	21/22	83	14%	11.7%

Table 16

School Pairs – Special Programs Percentages

Category	Pair A		Pair B		Pair C		Pair D		Pair E		
	Alder	Aspen	Magnolia	Mulberry	Pecan	Pine	Walnut	Willow	Laurel	Linden	State Avg
Gifted	13.4	6.7	12	10.1	10.5	10	1.5	5.6	10.1	0	13
Special Education	11	14.4	6.5	11.7	16.8	14	10.5	5.6	27.2	21	11.7

Note: The higher performing community in each pair is listed first.

An examination of special program findings for school pairs in the study revealed two pairs with great differences in percentages of students in gifted programs (Alder, 13.4%, and Aspen, 6.7%; and Laurel, 10.1%, and Linden, 0%). One other pair (Walnut, 1.5%, and Willow, 5.6%) showed a smaller noticeable discrepancy in this area.

Average percentages of students in special education programs for both higher and lower performing groups (15%; 14% respectively) exceeded the state average (11.7%),

although, as with gifted education statistics, findings varied greatly from school to school.

Schools in the higher performing group showed a wider range of scores for special

education programs.

Magnolia (6.5%) and Mulberry (11.7%), as well as Pecan (10.5%) and Pine (5.6%)

differed noticeably in the number of students enrolled in special education programs.

In both higher and lower performing schools, the percentages of students

receiving free or reduced lunch (63%; 76% respectively) exceeded the state average

percentage for this variable (43.7%). In four pairs of schools (Alder and Aspen;

Magnolia and Mulberry; Pecan and Pine; and Walnut and Willow) the lower performing

school had a greater percentage of students receiving a free or reduced lunch, while in the

Laurel and Linden pair, the higher performing school reported a larger percentage of

students receiving a free or reduced lunch (see Tables 17 and 18).

Table 17

Free or Reduced Lunch

Category	Schools					Statistics		
Higher Performing Schools (Percent/Number)	Alder	Magnolia	Pecan	Walnut	Laurel	Total #	Avg	State Avg
Free/Reduced Lunch	37.9/113	66.5/63	53/75	74.6/139	100/177	567	63%	43.7%
Lower Performing Schools (Percent/Number)	Aspen	Mulberry	Pine	Willow	Linden			
Free/Reduced Lunch	61.5/124	109**/82**	58.8/79	83.8/64	97.9/101	N/A	76%	43.7%

Note: **=Resulting percentage greater than 100% is due to calculation method –
Denominator and numerator used were based on reported figures from differing dates.
See explanation within this chapter.

Table 18

School Pairs – Free or Reduced Lunch Percentages

Category	Pair A		Pair B		Pair C		Pair D		Pair E		
	Alder	Aspen	Magnolia	Mulberry	Pecan	Pine	Walnut	Willow	Laurel	Linden	State Avg
F/R Lunch	37.9	61.5	66.5	109	53	58.8	74.6	83.8	100	97.9	N/A

Note: The higher performing community in each pair is listed first.

Two pairs of schools varied considerably regarding the percentages of students receiving a free or reduced price lunch (Alder, 37.9%, and Aspen, 61.5%; Magnolia, 66.5%, and Mulberry, 109%). Mulberry's unusual percentage, greater than 100%, resulted from the way the State of Oklahoma performs this calculation. Figures concerning average daily membership are reported periodically to the Office of Accountability, as are figures about free or reduced lunch. Because of this, depending on which day the F/R computation is made, the resulting figure may exceed 100%. For example, if Mulberry reports an enrollment of 100 students one day, and 109 students receiving free or reduced price lunch on another day, a percentage of 109% would result if the enrollment figure for day 1 were used with the free or reduced price lunch figure for day 2. According to the Office of Accountability such calculations are not unusual. It may safely be said, however, that all of Mulberry's students receive a free or reduced price lunch.

When data were examined group to group, figures from Table 19 and 20 show that while teachers in both higher and lower performing schools receive annual salaries which are lower than the state average ($30814), teachers in the lower performing group actually receive a slightly higher average salary ($29339) than those in the higher performing,

Table 19

Salary Information

Category	Schools					Statistics		
Higher Performing Schools	Alder	Magnolia	Pecan	Walnut	Laurel	Total #	Avg	State Avg
Teacher Salary ($)	29432	27108	29829	30341	29428	N/A	29228	30814
Lower Performing Schools	Aspen	Mulberry	Pine	Willow	Linden			
Teacher Salary ($)	30178	29298	28525	29473	29221	N/A	29339	30814

Table 20

School Pairs – Salary Information

Category	Pair A	Pair B	Pair C	Pair D	Pair E	
	Alder Aspen	Magnolia Mulberry	Pecan Pine	Walnut Willow	Laurel Linden	State Avg
Teacher Salary ($)	29432 30178	27108 29298	29829 28525	30341 29473	29428 29221	30814

Note: The higher performing community in each pair is listed first.

higher achieving group ($29228). When data were considered school pair by school pair, it could also be determined that there is little difference within pairs of schools regarding teacher salary. In three pairs (Pecan and Pine; Walnut and Willow; and Laurel and Linden), the teacher in the higher performing school received a higher annual salary than the teacher in the lower performing school; in two pairs (Alder and Aspen; and Magnolia and Mulberry), the teacher in the lower performing school received a higher annual salary than the teacher in the higher performing school. However, differences in all cases were small, ranging from $207 per year (Laurel and Linden) to $2190 per year (Magnolia and Mulberry).

An examination of schools by group showed that district inservices appeared to be present in most schools, four of five in each group (Tables 21 and 22). State Department of Education visits within the previous five years were reported by only one school in the higher performing group (Walnut), but by four in the lower performing group (Aspen, Mulberry, Willow, and Linden). In the higher performing school the visit was to provide a workshop for teachers; in the four lower performing schools, the visit resulted from each

Table 21

Professional Development Information

Category	Schools					Statistics		
Higher Performing Schools	Alder	Magnolia	Pecan	Walnut	Laurel	Total #	Avg	State Avg
District Inservice (Y/N)	Y	N	Y	Y	Y	N/A	N/A	N/A
SDE Visit (Y/N)	N	N	N	Y	N	N/A	N/A	N/A
Lower Performing Schools	Aspen	Mulberry	Pine	Willow	Linden			
District Inservice (Y/N)	Y	Y	N	Y	Y	N/A	N/A	N/A
SDE Visit (Y/N)	Y	Y	N	Y	Y	N/A	N/A	N/A

Table 22

School Pairs – Professional Development Information

Category	Pair A		Pair B		Pair C		Pair D		Pair E		
	Alder	Aspen	Magnolia	Mulberry	Pecan	Pine	Walnut	Willow	Laurel	Linden	State Avg
District Inservice	Y	Y	N	Y	Y	N	Y	Y	Y	Y	N/A
SDE Visit (Y/N)	N	Y	N	Y	N	N	Y	Y	N	Y	N/A

Note: The higher performing community in each pair is listed first.

school's inclusion on the at-risk list, and was intended to provide assistance to the school as each worked toward improvement.

Two community pairs reported discrepancies concerning district inservice presentations (Magnolia [N] and Mulberry [Y]; and Pecan [Y] and Pine [N]). Three pairs differed regarding having a visit from the Oklahoma State Department of Education (Alder [N] and Aspen [Y]; Magnolia [N] and Mulberry [Y]; and Laurel [N] and Linden [Y]).

Miscellaneous findings from the study which do not fit in the previous categories are presented in the Table 23. When considered collectively, both higher and lower performing groups reported identical findings concerning the presence or absence of a school newsletter to parents, with two communities in each group providing newsletters. State statistics pertinent to this variable were not shown. Outreach programs to parents were present in two schools in the higher performing group, but only one in the lower performing group.

Table 23

Other Relevant School District Findings

Category	Schools					Statistics		
Higher Performing Schools	Alder	Magnolia	Pecan	Walnut	Laurel	Total #	Avg	State Avg
District Size (Sq. Mi.)	51	68	437	124	20	N/A	140	N/A
Newsletter/Parents (Y/N)	N	Y	N	N	Y	N/A	N/A	N/A
Outreach Programs (Y/N)	N	Y	Y	N	N	N/A	N/A	N/A
Lower Performing Schools	Aspen	Mulberry	Pine	Willow	Linden			
District Size (Sq. Mi.)	54	65	92	71	12	N/A	58.8	N/A
Newsletter/Parents (Y/N)	Y	N	Y	N	N	N/A	N/A	N/A
Outreach Programs (Y/N)	N	N	N	N	Y	N/A	N/A	N/A

Classroom Context

When compared group by group, average size of classes in both higher and lower

performing schools (17; 16 respectively) approximated the state class size average (17.4).

However, the range of class sizes was greater in the higher performing group than in the

lower performing group. The higher group included the largest class in the study

(Magnolia, 25) as well as the smallest class in the study (Walnut, 10), although the lower

performing group also included an equally small class (Pine, 10). Three higher

performing schools in each pair had more students per class than the lower performing

schools, while two higher performing schools in each pair had fewer students than the

lower performing schools (see Tables 24 and 25).

Table 24

Student Information

Category	Schools					Statistics		
Higher Performing Schools	Alder	Magnolia	Pecan	Walnut	Laurel	Total #	Avg	State Avg
Class Size (#)	19	25	16	10	15	85	17	17.4
Class 3rd Graders (#)	19	25	16	10	15	85	17	N/A
Students < Grade Level (%/#)	37/7	32/8	37.5/6	30/3	33/5	29	34	N/A
Lower Performing Schools	Aspen	Mulberry	Pine	Willow	Linden			
Class Size (#)	17	17	10	20	16	80	16	17.4
Class 3rd Graders (#)	17	3	10	10	9	49	9.8	N/A
Students < Grade Level (%/#)	53/9	33/6	100/10	60/12	33/5	42	53	N/A

Three school pairs had noticeable differences in their class sizes (Magnolia, 25, & Mulberry, 17; Pecan 16, & Pine 10; and Walnut, 10, & Willow, 20). Other pairs were similar in size.

Table 25

School Pairs – Student Information

Category	Pair A		Pair B		Pair C		Pair D		Pair E		
	Alder	Aspen	Magnolia	Mulberry	Pecan	Pine	Walnut	Willow	Laurel	Linden	State Avg
Class Size (#)	19	17	25	17	16	10	10	20	15	16	17.4
Class 3rd Grade (#)	19	17	25	3	16	10	10	10	15	9	N/A
Students < G. L. (%)	37	53	32	33	37.5	100	30	60	33	33	N/A

Note: The higher performing community in each pair is listed first.

A group to group examination showed that all classes in the higher performing group consisted totally of third graders, while three classes in the lower performing group were split classes. Three pairs of schools had classes in which one class was comprised totally of third graders while the other class in the pair was a split class. This occurred in Magnolia (3rd) and Mulberry (Split), Walnut (3rd) and Willow (Split), and in Laurel (3rd) and Linden (Split). Two of these, Willow and Linden, were third and fourth grade combination classes, while one, Mulberry, was a combination second, third, and fourth grade class.

In a group by group examination, findings showed that the percentage of students in each class estimated by their teachers as reading below grade level at the beginning of

the school year was greater in the lower performing group (53%) than in the higher

performing group (34%). In general, teachers in the higher performing group reported

that approximately one third of their students read below grade level at the beginning of

the year, while teachers in the lower performing group reported as many as 53%, 60%,

and 100% of their students were reading below grade level.

Three school pairs reported large discrepancies concerning the number of students

reading below grade level at the beginning of the school year (Alder, 37%, Aspen, 53%;

Pecan, 37.5%, Pine, 100%; and Walnut, 30%, Willow, 60%), with the teachers of

students in lower performing schools reporting that fewer students read at grade level at

the beginning of school.

When examined group by group, findings showed that, of the higher performing

classes, only two teachers interviewed (Walnut and Laurel) reported using reading groups

in which small numbers of students were grouped by ability, while in the lower

performing schools, three of the five utilized such groups (Aspen, Mulberry, and Willow)

(see Tables 26 and 27).

Three pairs in the study differed in their use of reading groups (Alder [N], Aspen

[Y]; Magnolia [N], Mulberry [Y]; and Laurel [Y], Linden [N]).

Formal reading instruction refers to time spent in the actual process of teaching

reading. Student oral reading means the amount of time students spend daily in reading

aloud during any subject. Oral reading by the teacher refers to the amount of time the

teacher spends daily in instruction or recreational activities during which she reads aloud

to the class. When examined group by group, results indicated that for higher performing

classes, daily time spent in formal reading instruction by the teacher, student oral reading,

Table 26

Reading Program Information

Category	Schools					Statistics		
Higher Performing Schools	Alder	Magnolia	Pecan	Walnut	Laurel	Total #	Avg	State Avg
Reading Groups (Y/N)	N	N	N	Y	Y	N/A	N/A	N/A
Formal Reading Min./Day	60	60	60	60	45	285	57	N/A
Student Reading Min./Day	240	60	90	120	35	545	109	N/A
Teacher Reading Min./Day	120	30	60	15	15	240	48	N/A
Lower Performing Schools	Aspen	Mulberry	Pine	Willow	Linden			
Reading Groups (Y/N)	Y	Y	N	Y	N	N/A	N/A	N/A
Formal Reading Min./Day	15	30	45	60	120	270	54	N/A
Student Reading Min./Day	30	30	45	20	120	245	49	N/A
Teacher Reading Min./Day	60	15	15	10	120	220	44	N/A

Table 27

School Pairs – Reading Program Information

Category	Pair A		Pair B		Pair C		Pair D		Pair E		
	Alder	Aspen	Magnolia	Mulberry	Pecan	Pine	Walnut	Willow	Laurel	Linden	State Avg
Reading Grp (Y/N)	N	Y	N	Y	N	N	Y	Y	Y	N	N/A
Frm. Rdg. Min./Day	60	15	60	30	60	45	60	60	45	120	N/A
Stud.Rdg. Min./Day	240	30	60	30	90	45	120	20	35	120	N/A
Tchr.Rdg. Min./Day	120	60	30	15	60	15	15	10	15	120	N/A

Note: The higher performing community in each pair is listed first.

and oral reading by the teacher exceeded the amount spent in the same activities by

teachers in the lower performing group, with one exception. Linden School's third grade

teacher reported the longest time for any class in the lower performing group spent in each of the above three categories. She reported 120 minutes per day for formal reading instruction, 120 minutes per day for student oral reading, and 120 minutes per day for teacher oral reading, a total of 6 hours per day spent in these activities. At first consideration, this might seem unlikely. However, when the fact that Linden as a school is considered "at risk" while Linden's third grade ITBS reading score is 64%, a figure higher than the state average, the reported times become more believable.

The ranges of amounts of time reported spent in formal reading instruction for classes in higher performing schools were more consistent than were times reported for the lower performing group. In the lower performing group, lengths of time as short as 15 minutes and as long as 120 minutes were stated. In the higher performing group, these times were given as ranging from 45 minutes to 60 minutes. The calculated average amount of time for both groups which resulted was nearly identical, 57 minutes for the higher performing group, and 54 minutes for the lower performing group.

Only one school pair in the study indicated identical amounts of time spent in formal reading instruction (Walnut, 60 minutes, and Willow, 60 minutes). All other pairs reported large discrepancies (Alder, 60 minutes, Aspen 15 minutes; Magnolia, 60 minutes, Mulberry, 30 minutes; Pecan, 60 minutes, Pine 45 minutes; and Laurel, 45 minutes, Linden, 120 minutes), with the higher performing groups reporting more time in 3 of 4 cases.

A group by group examination showed that teachers in the higher performing group reported spending more time devoted to student oral reading than did teachers in the lower performing group. The average time per day spent in this manner was 109 minutes for the higher group and 49 minutes for the lower group.

All school pairs in the study differed considerably in the amounts of time spent in student oral reading per day (Alder, 240 minutes, Aspen, 30 minutes; Magnolia, 60 minutes, Mulberry, 30 minutes; Pecan, 90 minutes, Pine, 45 minutes; Walnut, 120 minutes, Willow, 20 minutes; and Laurel, 35 minutes, Linden, 120 minutes).

Time spent in teacher oral reading activity varied greatly within each group in the study as well. In the higher performing groups, as many as 120 minutes per day and as few as 15 minutes per day were reported. In the lower performing group, as many as 120 minutes per day and as few as 10 minutes per day were given. However, resulting average figures for higher and lower groups were nearly the same (48 minutes; 44 minutes respectively).

In a group by group examination, findings showed that time spent in teacher oral reading activity differed greatly between pairs of schools as well with one exception (Walnut, 15 minutes, Willow, 10 minutes). All other times within pairs varied noticeably more (Alder, 120 minutes, Aspen, 60 minutes; Magnolia, 30 minutes, Mulberry, 15 minutes; Pecan, 60 minutes, Pine 15 minutes; and Laurel, 15 minutes, Linden, 120 minutes). Teachers in higher performing schools in each pair reported more time with the exception of Laurel and Linden.

Results concerning the age, experience, and type of degree held by teachers in the study, when analyzed group by group, indicated that teachers in the higher performing schools were younger as a group than were teachers in the lower performing group (see Table 28 and 29). An average age of 36.6 years was calculated for teachers in the higher performing group, while an average age of 44.2 years resulted for the lower performing group.

Table 28

Teacher Information

Category	Schools					Statistics		
Higher Performing Schools	Alder	Magnolia	Pecan	Walnut	Laurel	Total #	Avg	State Avg
Teacher Age (Yrs.)	35	31	30	48	39	183	36.6	N/A
Teacher Experience (Yrs.)	5	9	9	26	8	57	11.4	12.3
Teacher Degree	BSEd	BSEd	BSEd	BSEd/ME	BSEd	N/A	N/A	N/A
Lower Performing Schools	Aspen	Mulberry	Pine	Willow	Linden			
Teacher Age (Yrs.)	35	48	43	51	44	N/A	44.2	N/A
Teacher Experience (Yrs.)	3	24	2	28	23	80	16	12.3
Teacher Degree	BSEd/ BPE	BSEd	BSEd	BSEd	BSEd	N/A	N/A	N/A

Note: BSEd=Bachelor of Science in Education; BPE=Bachelor of Physical Education; ME=Master of Education.

Table 29

School Pairs – Teacher Information

Category	Pair A		Pair B		Pair C		Pair D		Pair E		
	Alder	Aspen	Magnolia	Mulberry	Pecan	Pine	Walnut	Willow	Laurel	Linden	State Avg
Teacher Age (Yrs.)	35	35	31	48	30	43	48	51	39	44	N/A
Teacher Exp. (Yrs.)	5	3	9	24	9	2	26	28	8	23	12.3
Teacher Degree	BSEd	BSEd/ BPE	BSEd	BSEd	BSEd	BSEd	BSEd/ ME	BSEd	BSEd	BSEd	N/A

Note: The higher performing community in each pair is listed first.

Teacher ages for two school pairs varied markedly (Magnolia, 31 years, Mulberry, 48 years; and Pecan, 30 years, Pine, 43 years). All other pairs of teachers were within five years of age of each other.

Three teachers in the lower performing group had twice the number of years' experience than the state average for this variable. Two pairs of schools reported teachers with large differences in years of experience (Magnolia, 9 years, Mulberry, 24 years; and Laurel, 8 years, Linden, 23 years). All teachers in the other pairs reported similar teaching experience. Findings showed that, when examined group to group, teachers in the higher performing schools had less experience as a group (11.4 years) than teachers in the lower performing schools (16 years). Both of these are close to the state average (12.3).

All teachers in the study held bachelors' degrees in education. Only one teacher in the higher performing group earned a master's degree (Walnut), and only one teacher in the lower performing group had a second bachelor's degree (Aspen). All teachers in the higher performing group attended college in Oklahoma, while two teachers in the lower performing group attended schools out of state, one in Arkansas and one in Kansas.

Miscellaneous findings from the classroom context are included in the following section (Tables 30 and 31). Compared group to group, most teachers in both higher and lower performing schools reported that they integrated subjects within their classrooms. Integrated instruction refers to education that is organized in such a way that it cuts across subject matter lines, bringing together various aspects of the curriculum into meaningful association to focus upon broad areas of study. It is teaching reading through math, math through science, science through social studies, and so on. Only one school pair reported

Table 30

Other Relevant Classroom Context Findings

Category	Schools					Statistics		
Higher Performing Schools	Alder	Magnolia	Pecan	Walnut	Laurel	Total #	Avg	State Avg
Integrated Subject (Y/N)	Y	Y	Y	Y	Y	N/A	N/A	N/A
Type Instruction (C/B)	C	C	C	C	C	N/A	N/A	N/A
Changed Methods (Y/N)	Y	Y	Y	Y	Y	N/A	N/A	N/A
TORP (S/D)	S	S	D	D	S	N/A	N/A	N/A
Special Focus (Y/N)	Y	Y	Y	N	Y	N/A	N/A	N/A
Lower Performing Schools	Aspen	Mulberry	Pine	Willow	Linden			
Integrated Subject (Y/N)	Y	Y	N	Y	Y	N/A	N/A	N/A
Type Instruction (C/B)	C	C	C	B	C	N/A	N/A	N/A
Changed Methods (Y/N)	Y	Y	N	Y	Y	N/A	N/A	N/A
TORP (S/D)	D	D	S	S	S	N/A	N/A	N/A
Special Focus (Y/N)	Y	N	Y	N	N	N/A	N/A	N/A

Note: S/D – S=Skills Perspective; D=Decoding Perspective.

Table 31

School Pairs – Other Relevant Classroom Context Findings

Category	Pair A		Pair B		Pair C		Pair D		Pair E		
	Alder	Aspen	Magnolia	Mulberry	Pecan	Pine	Walnut	Willow	Laurel	Linden	State Avg
Integ. Subj. (Y/N)	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N/A
Type Inst. (C/B)	C	C	C	C	C	C	C	B	C	C	N/A
Chg. Method (Y/N)	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N/A
TORP (S/D)	S	D	S	D	D	S	D	S	S	S	N/A
Special Focus (Y/N)	Y	Y	Y	N	Y	Y	N	N	Y	N	N/A

Note: The higher performing community in each pair is listed first; S/D – S=Skills Perspective; D=Decoding Perspective.

a difference in whether or not subjects were integrated in their classrooms (Pecan [Y], Pine [N]).

In a group to group analysis, all teachers in the higher performing schools and all but one teacher in the lower performing schools characterized their types of instruction as a combination of approaches to reading, rather than as a strictly basal approach. Only one pair showed a discrepancy in type of instruction (Walnut [C], Willow [B]).

When analyzed group to group, all five teachers in the higher performing classrooms revealed that they had changed instructional methods over time. In the lower performing schools, four of the five teachers indicated this as well. Only one teacher in the lower performing classes related that she uses the same instructional method that she used at the beginning of her career (Pine); however this teacher had only taught for two years at the time of the study. Of the teachers who reported that their methods had changed, all spoke of the change as if it were an evolution of methods, rather than a change from one method to another, and that the change was precipitated by experience and the needs of the students.

In both higher and lower performing classes, when compared group to group, three of five teachers' scores on the DeFord TORP showed that their perspectives relative to reading instruction were based on a decoding philosophy, while data for two of the five teachers in each group showed that their perspectives were based on a skills philosophy. Only one pair of teachers did not differ in their theoretical perspective (Laurel [S], and Linden [S]).

Group to group examination showed that, in the higher performing schools, four of the five teachers questioned replied that the presence of a special reading focus in the

schools, such as the Sequoyah Children's Book Award Program, Accelerated Reader, or Drop Everything and Read, took place; in the lower performing group, three of the five teachers stated that it did not. Two school pairs reported having differences regarding special focus reading activities present in their schools (Magnolia [Y], Mulberry [N]; and Laurel [Y], Linden [N]).

One finding from the study that was not part of the original investigation concerned the issue of whether or not the teachers in the sample lived within the communities in which they taught. This question came about as a by-product of the original "ice breaking" conversations held at the beginning of each interview. When it became apparent that not all teachers were community residents, the issue of relevancy posed itself. Of the teachers in the higher performing schools, two did reside in their school communities while three did not. Of the teachers in the lower performing schools, three did reside in their school communities, while two did not.

Informal Classroom Observations and Interviews

An informal observation of each classroom was made during the visits used to conduct teacher interviews. The purpose of these observations was to help give the researcher a better overall picture of the classroom, the classroom dynamics, and the role reading instruction played in each classroom. In some cases the observations were less successful than in others, because scheduling visits sometimes made it impossible to observe during the reading instruction periods. In the following section, the information gathered in these visits is presented.

Pair A: Alder and Aspen

The third grade classroom in Alder School appeared to be a quaint combination of 1930s-era furnishings and 1990s-era technology. The classroom was small but space was utilized creatively. Students were finishing their morning seat work assignments as I arrived, diligently trying to complete their tasks before the morning recess. All students were involved in language arts paper and pencil tasks and worksheets complementary to their reading group lesson. The room was quiet except for an occasional question from the teacher. As I watched, each student in turn finished and was allowed to exit the classroom and go out to recess. Two students found the tasks more difficult and remained behind longer than the others. The teacher spoke with me while alternately helping them finish their papers. Both did eventually finish and joined the rest of the class outside. To the researcher it appeared that these activities were routine.

Alder's third grade teacher was friendly but reserved as she showed me around her classroom, explaining as we progressed. This teacher was completing her fifth year of teaching, all of which had been done in the third grade. In telling me about her teaching philosophy, she related her belief in lots of reading and reading practice, which she differentiated as reading for pleasure and reading to learn to read. She characterized her program as including a combination of teaching methods. This district used the Scott Foresman reading curriculum as the basis for its program, but the teacher indicated that she did extensive supplementing using trade books, games, and other reading series materials with other things as she saw the need. Although reading groups were not used during this school year, the teacher stated that she changed her way of doing things

frequently, with something new added or something old removed each year. The teacher appeared confident, energetic, and enthusiastic about her program and students, and not at all affected by my intrusion upon her day and routine.

Special focus programs at Alder School included both Drop Everything and Read and Accelerated Reader, which had been started four years earlier. All students in the class participated in both programs.

This instructor appeared proud of both her school and her students. She related that resources were more than adequate and administrative support was extensive. As we finished our conversation, we were met at the classroom by the principal, who cheerfully invited my husband and me to stay for lunch, adding that it was "chicken and dumpling day, which is the best."

Aspen School's third grade classroom seemed much like Alder's except for the poorer physical condition of the school. Students were similarly occupied, but in this situation students were working to complete their tasks before lunch. The teacher moved about the room helping each student as this was needed. Students were finishing morning assignments related to reading and language arts, as well as some math papers. This class was noisier and more active than Alder, but nonetheless productive. Papers were left on the desks as students filed out to the lunchroom. In neither of these classes was I able to observe actual reading instruction taking place.

Aspen's third grade teacher was completing her third year in the profession, all years having been spent at the same school in third grade. This teacher was also friendly and enthusiastic, and eager to accommodate me.

Questioned about her reading program, she replied that reading was the biggest part of her curriculum. Houghton Mifflin materials were used in her classroom at the time, but the teacher reported that she had changed the year before from Literature Works. When asked what makes the best readers, she replied that she believed the basis for this begins in preschool. This teacher was emphatic in her responses, emphasizing repeatedly her belief that children must "read, read, read," whenever possible. She was particularly concerned that I was aware that, in her classroom, "we read at every chance." Relating that she read the classics to her students every day, she stated her feeling that children's lives should be "book rich" both at home and at school. For this reason, her students made regular visits to the small school library, and participated in book fairs two or three times a year. She was proud of Aspen's school library, which did provide a supplemental reading resource for her students, although the researcher, familiar with Oklahoma school library standards, recognized its collection as substandard.

Aspen's teacher described her reading program as a combination of methods, neither totally phonics or totally literature based. No supplemental reading activities such as reading games or overhead activities were used in her program, however, aside from her professed saturation of the school day with actual participation in reading. Her one concession to this was the use of flash cards with special education students. When asked how her reading groups were determined, the teacher indicated that she divided the students by reading level initially, then formed groups of mixed reading levels with at least one high level reader in each group. All students read from the same text, rather than using multiple levels from the same series. Additionally, the teacher added that

occasionally she changed the format to pair reading, to provide some variety for the students.

An aspect of this interview that cannot be omitted concerns the teacher's reference to her principal. While discussing her teaching methods, the teacher was asked if her methods were similar to those of her colleagues. She replied that they were, in fact, probably identical, since all teachers in the building were instructed by the principal as to how to teach the subject. When pressed for further explanation, she replied that her principal had been at the school for many years, and was conscientious about her roll as mentor to the staff, regularly visiting with them collectively and individually. During these visits the principal told them frequently "just exactly how she wants us to teach."

For the interviewer, this information prompted some confusion. Aspen School's student reading scores were the lowest received by any school in the sample. The teacher's enthusiasm and seeming dedication to the teaching of reading seemed incongruent or inconsistent with these findings. The researcher's speculation is that perhaps the principal's insistence upon her staff's use of a particular teaching method interfered with the teacher's ability to do so; perhaps, too, the principal was not a good teacher, or at least not a good reading teacher.

Regarding special focuses on reading in Aspen School, the teacher reported activities including Drop Everything and Read, and Accelerated Reader in the Title I program, adding that all students in the school participated in Title I.

Responding to questioning about the adequacy of Aspen's resources, the teacher answered that they were not. She was apologetic about this, and wanted me to understand

that the district was trying to make improvements, pointing out that they did now have an Internet connection.

Asked about community involvement in the educational process at Aspen, the teacher indicated that no such involvement existed.

If intuitive response can be considered relevant to research such as this, it must be stated that my overall reaction to Aspen School was a sad and desperate one. I contemplated my visit for the duration of my return trip, feeling depressed about this young teacher's ongoing experience and guilty about my own much better circumstances. The care giver part of me wanted very much to do something to help her, while the pragmatist inside knew this was impossible. I shall not forget Aspen.

Pair B: Magnolia and Mulberry

Magnolia School's third grade class was involved in listening to and discussing a story read to them by the teacher. This was not actual reading instruction, and not part of the teacher's formal reading program, but rather a daily activity subsequent to the noon recess period. All of the students were clearly interested in the story, raising their hands at intervals for clarification or expansion of a particular passage. From time to time the teacher would stop and ask the students what they thought a character meant by a phrase or action, or what meaning could be derived from a turn of events. The reading and interaction continued for about fifteen minutes until the end of the day's chapter, at which time a chorus of regret emanated from the class. They were guided into the day's social studies lesson at this point.

Magnolia School's third grade teacher was so intimidated by and afraid of both the interviewer and the interview that I was worried at first that we would not be able to conduct it. In a short time, however, she relaxed and we talked for a considerable length of time.

Having taught for nine years in either remedial language arts or third grade, Magnolia's teacher was this year assigned to a third grade class. When asked what makes the best readers, she answered that emphasizing the meaning of words as well as student comprehension of what was read were important factors. She expressed her attempt to always teach by example and to show expression when she read to her students. She added that it was important to her that her class knew of her love and appreciation of reading.

In describing her reading program, the teacher related that it could best be characterized as mixed, mostly basal, but not whole language. Most reading instructional activities came from the phonics workbooks which accompany the district's adopted Houghton-Mifflin reading series; no other activities were included.

Regarding the evolution of her teaching methods, the teacher reported that she uses more vocabulary instruction than she once did, and that she is now more concerned with student comprehension and the remembrance of detail than she once was.

The teacher reported that Magnolia School did not sponsor any special focus reading activities, but that she occasionally did so within her classroom. She stated that her school had adequate but not excessive resources and that the administration was very supportive of the staff. The community, however, was not involved in the district's reading program.

Mulberry School depressed me. Although the staff was friendly and helpful, making sure that I found the correct classroom for my visit, and although the students . were cheerful and appeared happy, the classroom itself was dreary and distressing. Furnishings were sparse and ancient. Supplies were used and dated. The teacher was not in the room when I arrived, and the gaggle of students there did not appear to be academically occupied. When I entered the room, several students jumped up and approached me, offering both greetings and the retrieval of the teacher, whereupon two or three of them sped down the hall, returning shortly with their unapologetic but exceedingly cheerful instructor.

Rather than guiding her students back into the room and back to their seats to continue their lessons, the teacher indicated a seat for me, and we all sat. It was apparent that the scheduled observation was to become instead a group interview, and that I, not they, were to be interviewed. Even though the surroundings were meager, and I was not able to observe the instruction of reading, this meeting proved congenial and satisfying from a human interaction standpoint. Students and teacher were warm and open if unfocused. My lasting impression of Mulberry School was that, separated as they were from typical society by both distance and economy, neither the children or teacher understood what they lacked and therefore did not miss it.

Describing her reading program, Mulberry School's third grade teacher professed it to be made up of a combination of philosophies, including whole language, basal, literature based, and phonics, to which she added generous doses of literature and writing, believing them directly connected to reading achievement and performance. The best readers, she offered, resulted from exposure to copious amounts of phonics instruction

initially, teaching the sounds first, repeating, memorizing, and writing them. The Open Court reading series was used in her classroom, including extensive use of the workbook. She also reported that from time to time the Hooked on Phonics program was added to her curriculum, depending on the needs of her students.

Other activities used included games, puzzles, and flash cards.

The teacher acknowledged her use of reading groups with her students, adding that she sometimes mixed good and poor readers as a change from traditional ability grouping. Although she no longer organized them, she stated that she had used special focus reading activities like Drop Everything and Read, and that Mulberry School as a whole no longer sponsored such programs. She also stated that the community was not involved in the school programs, and that there were no assistants.

The teacher was proud to show off the school library, remarking on its many resources. Again, as a library media specialist, I knew of its inadequacies.

Of great concern to this teacher was the change that she has seen in students over the years of her career. Believing that they no longer learn or retain lessons as well as previous students, she relied more heavily on rote memorization and repetition as a way of teaching than she had done earlier in her career.

As I looked around the classroom I was particularly struck by the visual dissonance created from two newly added computer stations amid obvious poverty otherwise, surrounded by students and a teacher blind to the irony among them.

Pair C: Pecan and Pine

Twins came to the household of Pecan's third grade teacher ten days before my scheduled classroom observation. As a result, our visit of necessity took place in her home rather than in her classroom. Each of us brought a companion that day to serve as nanny, providing the teacher and me with uninterrupted time to talk.

As a nine-year veteran of both teaching and third grade, Pecan's teacher relayed her belief that the best readers are those who come from home environments which value reading and who have backgrounds which include reading. She added that reading to young children is vitally important in this. As for the school's role in making good readers, she stated that teaching the individual child is the most important thing, adding that individual, perhaps unique, approaches must be used, whole language for one student, literature or phonics for another. The teacher stated her philosophy: the more you read, the better you become – read, read, read.

Enthusiastically describing her reading program as a combination approach including various methodologies, the teacher stressed that it was predominately literature based. Earlier in her career she had used a strict basal approach to the teaching of reading, including reading groups and extensive use of workbook activities. After a while her methods changed to include larger uses of literature from library or trade books, as well as a whole language approach to instruction. At the time of the interview she used a thematic approach, starting from reading a story in the district's Houghton Mifflin series whose theme determined the subsequent activities used in class. Activities may even include such things as drawing, cooking, or sewing. She no longer used reading groups,

but used integrated reading instruction throughout the other subject areas. She felt this would help the five students in her class that did not read on grade level at the beginning of the year.

As a school, Pecan sponsored several special focus reading activities for its students, including Drop Everything and Read daily, Accelerated Reader regularly, and the Sequoyah Children's Reading Program annually. Pecan is very proud of its school library, still small by state standards and not professionally staffed. The teacher was also happy to tell me about Pecan's paid aides throughout the school, and their community's occasional but consistent involvement in other aspects of the school's program throughout the year.

The teacher described her administration as supportive, adding that the district does provide staff development opportunities when possible, and does encourage teachers to attend out-of-district workshops or meetings, paying the costs involved as well. The district also supplied adequate resources for both teachers and students.

As I prepared to leave, the teacher began again to describe her feelings about the teaching of reading to children. As a result of her belief that reading is the most important subject in school, since it is part of every other subject, she told me that she spent more time teaching it than anything else in the school day. She felt strongly that success in learning to read predicts success in mastering all other subjects that children must learn. These statements were sincere and unsolicited, but not hard to believe from someone whose professed enjoyment from her job was evident.

Pine School was dark inside, although the April day shone outside. Hallway after musty intersecting hallway added to the darkness and hindered my search for the third grade classroom, but they heightened the intrigue of this old school. It was apparent that

the building had been expanded many times since its 1920 beginnings, and each subsequent addition seemed to have been done without much concern for the previous ones. These halls varied in height and width as well as altitude: each change in direction also required three steps up or two down. The overall effect was interesting but tedious and depressing.

The third grade classroom at Pine was an interesting combination of old and new, as were others in the study. Entering the room required stepping from a wooden hall floor across a metal threshold into a tiled room, circa 1955. The room was large with one wall made of windows above the four-foot wainscot. Furnishings representing every decade were present, including several desks still connected by rails and sporting inkwells. Next to the teacher's desk was a state-of-the-art computer station complete with printer. The ten students in the class were just finishing their morning seat work when I arrived. The teacher greeted me at the door, and then returned to the front of the room to finalize her instructions to the children regarding dismissal to recess. After a noisy conclusion and storage of supplies, all of the students left the room on their way to the playground.

The teacher showed me around her classroom. It was obvious that she had made every attempt to brighten the room, adding several colorful bulletin boards, and hanging plants by the window. Area rugs were also placed around the room. Student decorations were everywhere on walls, hanging from the ceiling, and even encircling the teacher's desk.

The classroom had been subdivided into four or five smaller areas used for centers or other specific purposes such as storytelling, art, or play. Although this gave the room a choppy look, it was probably a successful way of utilizing the large space for only ten

students. Indeed, I would have liked this luxury of so much square footage per child in my own classroom. The room, like the halls, was dark.

We began our interview, only to be interrupted by a student needing assistance with a shirt button. That finished, we started again.

Pine School's third grade teacher was completing her second year of instruction, which comprised her career at the time. Asked about her teaching philosophy, she replied that her approach depends upon the student. With some students a hands-on approach is required, while with others a more removed approach can be used. A consistent use of visual prompts was reported, including having students draw or create webs after reading in order to help them pay attention and to keep what they've read in mind.

Although characterizing her reading program as encompassing a combination of approaches, the teacher stated that her method was mainly basal. For this, the Scott Foresman basal series was used by the teacher, as it was by all teachers in the school. Pine School's teacher also said that she had not changed instructional methods since she began teaching.

Special focus reading activities were not in place throughout Pine School, but the teacher stated that Drop Everything and Read was a daily ritual in her class after recess. Accelerated Reader was used in the small, unstaffed, and unorganized school library, which the teacher described as adequate; she also reported having sufficient but not excessive material for teaching her class. A part-time tutor/helper was greatly valued by the teacher as well. However, other than this, the community was not involved in the operation of the school. No inservice activities or workshops were provided by the district, and encouragement or support for attending them was not given.

Because of her lack of long-term experience and her feeling that this reflected negatively on her teaching ability, the teacher was eager for me to know of her effort and commitment to her students. It was important that I know about her daily use of phonics instruction with her class, as she explained, to "fill in the gaps" in their reading proficiency. She began this part of her program after finding that none of her students read on grade level at the beginning of the year. She proudly showed me a list of recent reading test scores showing gains for all but one of her children. When asked if she enjoyed her job, she replied with an enthusiastic yes, but followed with a bittersweet comment about not returning next year because her husband had been transferred out of state. One wonders who will step in next year to accept the task and ensure the students' progress.

Pair D: Walnut and Willow

Observation of an actual class in progress was not possible at Walnut School because of a scheduling conflict. Instead, it was necessary to simply meet with the teacher and discuss her methods and programming.

Walnut's third grade teacher had taught at the school for twenty-six years, responsible for various grade levels along the way, but always teaching reading. With the Houghton-Mifflin series as the text basis for her instruction, she was able to create what she described as a combination program, utilizing phonics and literature. The teacher emphasized that she did not use whole language methodologies. She stated that children and adults alike need reading in all areas of life, and also that reading for enjoyment is important.

Activities used at Walnut School included phonics and workbook lessons, the Jostens computer assisted instruction lab, the use of audiotapes, poetry reading, oral reading of stories, and exercises with the overhead projector. Additionally, the teacher reported the availability and use of adult assistants in her classroom who listened to each child individually for about fifteen minutes per day during the time the rest of the class was involved in their reading groups. Asked about how these groups were determined, the teacher replied that she used many different ways, so the groups would be configured differently at different times. She admitted to changing her methods all the time, seizing any available opportunity to present material in various ways.

Although reading was integrated throughout all subjects at Walnut School, there was no special focus activity such as Drop Everything and Read or Accelerated Reader.

The teacher stated that the district administration was extremely supportive, and encouraged the staff to attend educational seminars outside the district, since they were unable to provide them in Walnut.

Walnut had a small school library, not extensive according to state standards or compared to libraries in which the researcher has taught, but according to the teacher, adequate, as were the rest of the resources in the school. Among the available resources were hired teachers' assistants, who provided classroom help two to three hours per day in the primary grades. However, other than this, it was reported that the community is not involved in Walnut's reading program.

A memorable fact concerning Walnut was that the teacher involved traveled ninety miles each way on a daily basis in order to retain her position there. Her family's move away from Walnut did not persuade her to resign, which suggests a satisfaction

with her work and a respect for the school. Small when considered with other schools in my experience, and lacking in esthetic amenities, Walnut did appear adequate and comfortable to those who work there.

Small, paneled classrooms make up the elementary wing of Willow School, which is located immediately off the school gym floor. Simply opening the door on the sidelines placed a visitor in the classrooms. Remarkable was the use of an abundance of institutional blue paint on walls and ceilings as well as the previously mentioned gymnasium, office area and restroom we visited.

The third grade classroom displayed a fascinating patchwork carpet apparently made of samples collected over an extended period of time. The samples were of random sizes and colors, and although one could speculate that this carpet came as a result of an economically motivated circumstance, the resulting feel of the room was surprisingly pleasant and seemed entirely appropriate.

Ten students were seated at various places around the room in pairs or threesomes, some working in an instructional exchange with the teacher, others involved in silent reading. A parent volunteer was sitting with one child, helping him with his paper. The bulletin board was covered with student work. There was no window in the room, only artificial light provided by hanging fixtures. The interruption caused by my arrival prompted the teacher to conclude her lesson, and we began our interview as the students left for recess, accompanied by the peal of the same school bell I heard in the fifties. There were no electronics here.

Willow School's third grade teacher had a great deal of teaching experience, all of it at this site. Responding to my off-hand question concerning whether or not things had

changed since she started teaching, she answered at length, saying that the students had changed a lot. Continuing, she stated that their behavior had changed more than anything, with both manners and respect for others deteriorating over time, while problems with attitude and discipline increasing. Believing that these problems at Willow were probably not as pronounced as they were in a larger, more urban setting, she nonetheless regretted their presence, and offered as causes both television and video games as chosen alternatives to more traditional rural pastimes such as farming, or even sports.

When asked what makes the best readers, Willow's teacher replied that working to ensure accurate comprehension is the most important thing. She asked rhetorically why we should read at all if we can't understand. Phonics skills, she said, are important and need to be practiced extensively, but comprehension is ultimately more necessary. As a result, in her class, she stresses and tests student comprehension regularly. However, in a somewhat contradictory addendum, she characterized her reading program as entirely basal in nature. Of course, comprehension is an important aspect of basal reading programs, but one of the hallmarks of this type of instruction is its foundation of phonics.

During the hour of formalized reading instruction in her class each day, activities such as overhead projector lessons and computer-assisted practice were used as supplements to the basal program. She added that her students responded to the interaction with the overhead projector. Other activities included the use of supplementary workbooks accompanying the district's Silver Burdette series, and vocabulary exercises such as word search or crossword puzzles. Reading groups were the mainstay of her program, the groupings determined by her at the beginning of the year after listening to the students read, and after talking with the second grade teacher.

In contrast to her earlier teaching practices, the teacher indicated that she now tried to incorporate more instruction in critical thinking than she had in the past, and added that students need this instruction now more than ever. Students need to be capable of more higher order thinking now and don't seem to be equipped to do so.

This friendly, verbal teacher continued our conversation without being prompted, eagerly telling of her supportive administrator, adequate resources, and budding school library started by a colleague. However, she bemoaned the lack of parental involvement in the school and the lack of specialized reading focus such as Accelerated Reader or Drop Everything and Read. I believe the interview might have continued much longer if I hadn't needed to leave. It was apparent to me that this teacher enjoyed her career and was satisfied that she was making a difference in the lives of her students in spite of their performance on tests of achievement. I went away thinking that success is measured differently in Willow, and perhaps in other communities in the study as well.

<u>Pair E: Laurel and Linden</u>

School had just been dismissed when I arrived at Laurel School, and I found the third grade teacher busily cleaning her classroom and beginning to prepare for the following day. As I entered the small classroom, she showed me around, pointing out various items of interest, including bulletin boards displaying student class work and small activity centers. Among the centers was a listening skills area and a classroom library area. Student furniture was mismatched, although all of the chairs were new and of the same type present in the researcher's suburban elementary school. The classroom

walls were made of painted cinder blocks; floors were covered with modern indoor-outdoor carpeting. There was typical after-school clutter.

An eight-year veteran in the profession, Laurel's teacher had spent her career in the same county. Questioned about her philosophy of instruction, she answered that the key to producing good readers is in starting early. In her experience, the best student readers are children who have been read to from a very early age, and who have books available to them at home.

This teacher described her reading program, as a combination approach whose foundation was basal in nature and which used the district's adopted Scott Foresman series. she added that her program was supplemented by the use of computers, library books from Laurel's small unstaffed library, and trade books. Reading groups determined by the teacher were used. Additionally, activities such as making big books and character maps, playing memory games, rewriting story beginnings and endings, using story words to write definitions or sentences, reading to younger students, and writing original stories were used as supplements. The teacher remarked that she spent more time teaching reading than she was supposed to, but she felt this was necessary since about a third of her students read below grade level at the beginning of the year. The teacher reported that, at the beginning of her career, she taught reading strictly from the basal readers, but that over time her methods evolved, changing to a completely whole language approach, and finally to encompass a combination of methods in order to meet the individual needs of students.

Laurel School participated in the Drop Everything and Read program, and was to begin using the Accelerated Reader program the following fall. The teacher interviewed

reported having at least minimal support from her administration regarding her attendance at out of district workshops or seminars, remarking that the administration was "open to the idea." Occasionally the district did sponsor such workshops, but they were generally put on by textbook sales people rather than college or State Department of Education personnel.

Two community involvement programs were in place at Laurel School, one formalized, the other very informal. A district-sponsored community outreach program in computer literacy for both children and adults was available to anyone who wished to participate. The other program, which the teacher referred to as the "Granny Plan," took place in her classroom when the teacher's mother, a retired educator, came daily to the class from nine to twelve to read with every child individually. Laurel's teacher was personally very proud of this. Besides the community involvement in the school, a tutoring program staffed by two of Laurel's teachers was in place, providing help for students who needed it from 3:30 to 5:00 p.m. each day.

Laurel's teacher was very relaxed and informal during the interview. We visited long after the "official" interview concluded and the tape recorder had been turned off, sharing details about various children's books, and discussing a week-long workshop I was not familiar with. She was particularly concerned that I understood how seriously she took her role of helping children learn to be good readers. I was impressed with her commitment, and wished I had been able to see her actually in the process of working with her students.

The third grade classroom at Linden School was like none I had seen before. Reminiscent of one I had occupied twenty years earlier in a large urban school district, it

was furnished with carpenter-shop shelving and sky blue walls. However, the resemblance ended there. Half of the room was a working kitchen, with two ranges, a refrigerator, a sink and a dining area, all situated on a raised platform about three feet high. The teacher explained that, over the years, the room had served other purposes, including the teaching of both home economics and drama. When asked if the appliances still worked, she replied that they did. I wondered how difficult it was to keep her active third graders out of harm's way in such proximity to the gas ranges.

Linden's classroom looked as they typically do at the end of a school day. Desks were no longer in their rows and papers protruded from them. An occasional pencil or crayon could be seen on the floor and books on the classroom shelves were in disarray. The trash can by the door overflowed.

The teacher showed me around her room. All about the classroom area were shelves and cabinets of various sizes and shapes, all completely full of books, materials, supplies, or teaching resources. It looked as though nothing was ever thrown away. The outside wall of the room was half windows and half display area, covered with row after row of identical student produced class work or art projects. Paper chains, mobiles, and other art class items hung from the ceiling, giving the room a jungle look. I did not know how the children reacted to the sensory overload of the room, but I had difficulty concentrating on the interview.

Linden's third grade teacher was finishing her twenty-third year at the school. She had taught various grade levels throughout the years, as well as several different subjects.

Linden School's student population was predominately Native American, and the Cherokee language was used there. This fact shaped the teacher's philosophy regarding

the instruction of reading. According to her, the best way to produce good readers was to know the students and their backgrounds. She added that the Linden district was a deprived area which complicated the process of instruction and hindered academic achievement. Cultural differences also make progress difficult, since, according to her, Native American attitudes toward school and formal education differ from more traditional attitudes in the United States. When I asked her to explain the differences, she replied that Native Americans engage in more one-on-one educational pursuits, rather than use a classroom format. She also remarked that scores on achievement tests did not prove or disprove "success" for children as far as Native Americans were concerned. Indeed, I sensed an attitude in this Native American teacher different from the other teachers in the study. She was almost passive aggressive in her demeanor, and occasionally resistant to the interview process. It was difficult for me to determine how much of this was cultural and how much of it might have been simply the teacher's apprehension about being interviewed. Linden School had been under close State Department of Education scrutiny for the two years preceding my visit, and it was possible that the teacher was simply tired of being investigated.

This teacher described her reading program as a combination approach in which she used everything she had at her disposal to meet the individual needs of her students, which she emphasized more than once that she knew keenly. She used the old Macmillan basal series in her program, as well as the Riverside series when needed. Activities varied from student to student and from day to day, and included the use of a basal reader, various visual activities including those utilizing the overhead projector or the chalkboard, workbook activities, and lessons duplicated on the copy machine. She

reported that she did not use reading groups, but rather that her students read orally as much as two hours per day throughout their subjects, adding that, because of the language difference, her student needed to hear English as much as possible. To this end she also spent large amounts of time reading to them as well. Seventy percent of her students did not read on grade level at the beginning of the school year.

The teacher related that she had dramatically changed her methods of teaching reading over the years. She stated that she no longer stressed phonics as much as she did soon after graduating from teacher's college. Apparently the teaching of phonics was viewed negatively by the Native American culture, in which teaching students orally and by molding the program to fit their individual needs was preferred. I confessed to not completely understanding this.

Linden school did not sponsor any special focus reading activities at the time of my visit. The school did have a small unstaffed library, and the teacher reported having adequate resources but no community support or involvement in the school

When asked questions regarding her district administration's support and encouragement, the teacher's negative attitude resurfaced. She indicated that she was provided with very little appreciation for her efforts or encouragement or means for her to attend workshops or seminars. Our conversation concluded with her firmly stated wish that everyone would just leave her alone so she could teach.

Summary

Findings from the study proved to be copious. Examination of these findings identified two key elements which relate to the problem of low reading achievement

among students in the study: regardless of race or ethnicity, children of lesser economic circumstances are much more likely than children of better economic circumstances to perform at lower levels on standardized achievement tests; and children in larger classrooms or classrooms in which more than one grade level is present, are at greater risk of poor academic performance than are children in smaller classes or classes composed entirely of a single grade. These elements as well as others will be addressed in the following discussion.

CHAPTER V

DISCUSSION

This study revealed important findings associated with the data collected and examined from the community, school district, and classroom contexts researched. Findings from the community context indicated that economic factors related to income and unemployment play a role in the academic performance of students in each community. Additionally, the issue of ethnicity as it concerns the language spoken by students at home affects student performance on achievement tests.

From the school district context, results revealed that the percentage of students in a school who receive a free or reduced price lunch is greater in schools whose students produce achievement test scores which are lower than the state average scores. Also, findings showed that schools with larger percentages of students in gifted education classes score higher on tests of academic performance.

Next, from the classroom context, results pointed to three conclusions. First, findings indicated that the amount of time spent in reading instruction and activities is of great importance to student academic performance in reading. Furthermore, results showed that children in multigrade, split classes perform at lower levels on standardized achievement tests than students in single grade classrooms. Thirdly, students in classes in

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which a large percentage of students read below grade level at the beginning of the school year score at lower levels on achievement tests.

Community Context

Average Household Income

This research study examined the achievement test performance of third grade students compared to various community elements taken from the statistics published by the Oklahoma Office of Accountability. One element examined was average household income. Data concerning this variable were taken from Profiles 96. As explained in Chapter III, data were compared in two ways: the higher performing group to the lower performing group and as school pairs (Chapter IV, Tables 7 and 8). It was apparent from the outset that average household income was related to poorer academic performance for two reasons. First, it was immediately noticed that eight of ten communities in the study had average household income levels lower than the state average. Since five the five lower performing schools were already designated as "at risk" for failure, it can be assumed that low family income correlates with lack of achievement for those schools. Also, two of the schools in the other, not-at-risk schools had lower than state average incomes and lower than state average reading scores on the Iowa Tests of Basic Skills (ITBS). One may conclude that a relationship can be seen between low income and lack of student achievement in these schools as well. Additionally, even though three of the schools in the higher performing groups did have ITBS scores which met or exceeded the state average score, two things can be noted. First, the scores for these three schools were not substantially higher than the state average. One score was equal to the state's

60% average, and the other two were 63% and 65%. Secondly, the state average third grade ITBS score is not an exceptionally high score when compared with the rest of the nation.

Unemployment

Average unemployment figures for communities in both higher and lower performing groups exceeded the state average unemployment rate; the lower group's average percentage was double the state average rate. However, these "average" statistics are deceptive when individual communities are investigated separately.

In the higher performing group, only one community, Magnolia, showed an unemployment rate substantially greater than the state average. The other communities reported rates that were very near the state average or even below it. Magnolia's 22% rate prompts a question about the reason for one community having such an inflated figure. Finding an answer would provide important information, but this was not part of the scope of this research. This inflated figure also means that the average unemployment rate computed for the higher performing group of schools may not actually characterize the typical unemployment rate for communities in this group. It is apparent, though, that the higher performing schools with their lower average unemployment rates showed higher ITBS scores than the lower performing group. The lower performing communities all had unemployment rates higher than the state average of 6.7 %. Three communities in the group had rates that were double the state average. In this case, higher unemployment figures equated with lower ITBS scores.

Explaining the relationship between the poverty rates of communities and the test performance of students is challenging. As with other variables from the tables, simply looking at averages for the higher and lower performing groups in the study does not necessarily result in a definitive conclusion about the poverty/achievement connection. For example, although the total group percentages are nearly the same, the ranges of scores varied considerably between the two groups. Poverty rates in both groups are higher than the state average community poverty rate, which does suggest a link between high poverty rates and low academic performance. But the statistics are also confounding: Aspen, the school with the lowest performance on the reading section of the ITBS (25%) had the lowest poverty rate of any community in the study (14%) and the largest average income.

These findings about average household income and community unemployment are congruent with other research conclusions concerning the impact of negative economic factors on achievement (Schellenberg, 1998; Taylor & Wang, 1997; Knapp, 1995; Bracey, 1991; Berliner & Biddle, 1995; Hughes, 1998).

Ethnicity

Findings from the study regarding ethnicity were generally inconclusive in terms of making a connection between race and achievement. The findings regarding ethnicity are important; however, analyzing the Caucasian populations of all communities showed that this factor may play a role in enhanced student academic performance but results were not dramatic. Caucasian representation in both higher and lower performing groups was less than the state average community Caucasian population, but representation in the

higher performing groups was slightly larger than that in the lower performing group. Since none of the communities in either the higher or lower performing groups had an Asian population, it can be said that, for this study, this factor does not play a role in determining student academic achievement. The same can be implied for the Hispanic population. Although some of the communities in both groups had small Hispanic populations, the average of each group, one percent for the higher performing group and .8 percent for the lower performing group, was nearly the same. These figures are lower than the state average for this variable.

Results concerning the Black and Native American populations in the sample were not so easily interpreted. A cursory inspection of the average numbers of Blacks in higher and lower achieving school groups tended to indicate that an obvious conclusion could be drawn: the greater the number of Blacks in a community, the lower the achievement test scores. These findings would be supported by those of Yap (1997), Burns, Griffin, and Snow (1999), and Payne (1998). However, a closer look at individual community figures provided a different picture.

Within the group of lower performing communities was Mulberry, a town that is 100% Black. All other communities in this group were less than ten percent black. Two, in fact, had no Black citizens. Straight averaging of these five community populations by ethnicity results in a skewed representation of the group's total average Black population. In fact, if the population of Mulberry is eliminated from the calculation of the group's average, the resulting total average percentage for the other four lower performing communities becomes slightly more than three percent Black, which is not considerably different from that of the higher performing group, one percent. Additionally, taken

further, these two average percentages, one percent and three percent, prove much lower than the state average Black population of ten percent. As a conclusion it seems that, with the exception of Mulberry, the connection between the greater Black population of a given community and lower academic achievement or performance was not proven. These results, then, are contrary to findings by those listed above.

Large percentages of Native Americans were reported within each community except Mulberry. Total average percentages of both higher and lower performing groups were also large. However, the total percentage of Native Americans reported in the lower performing groups is not truly indicative of the "average" for all communities represented. When the 100% Black population of Mulberry is removed from the computation, the remaining communities' average is nearly 49%, a figure similar to that of the high performing communities' 54%. Additionally, these averages for lower performing communities and higher performing communities are more than double the state Native American population average. Since all higher and lower communities except Mulberry have these large numbers of Native Americans, the finding suggests that there is no relationship between large Native American populations and lower student achievement. However, there exists an anomaly in this equation that cannot be overlooked.

Ninety-six percent of the citizens in Linden's community, and 93% of the citizens in Laurel's community are Native American. The teacher reports that English is the second language in most homes and in the schools. This fact makes taking achievement tests written in English very difficult for many children. It also suggests a correlation to low academic achievement as measured by such tests. In this pair, Laurel, with a 51% ITBS reading score, was the higher performing school. Although this score was less than

the state ITBS reading average of 60%, Laurel School was not identified as at risk. On the other hand, Linden, with a 64% ITBS reading score, was classified as a lower performing school because Linden was identified as at risk by the state due to its school's overall poor performance on the ITBS. While schools have the responsibility to accommodate the linguistic needs of students with limited proficiency in English, students' abilities and needs vary as do the capacities of different communities to support literacy development.

School District Context

Percentage of Students Receiving Free or Reduced Lunch

In both higher and lower performing schools the average percentages of students receiving a free or reduced price lunch exceeded the state average percentage for this variable. Only in Alder School in the higher performing group did the results show a percentage lower than the state's. Furthermore, in the six schools whose average reading ITBS scores were below the state average reading ITBS score, percentages of students receiving a free or reduced lunch ranged from 58.8% to 100%, all well above the 43.7% state average. Even in the three schools whose average ITBS reading scores were at or above 60%, the percentage of students receiving a free or reduced lunch ranged from 53% to 97.9%. Since, even in the higher performing schools, the ITBS scores were not actually "high" when compared to scores across the nation, a conclusion can be made that the percentage of students who receive a free or reduced price lunch in this study does relate to lesser academic performance. The issue of free or reduced price lunch is related

to the issues of poverty, average household income and the unemployment rate of the citizens in the communities studied, which were also found to be factors which influence student academic achievement. Research concerning free or reduced price lunch and its relationship to student achievement is found within other studies by researchers including Schellenberg (1998), Taylor and Wang (1997), Knapp (1995), Bracey (1991), Berliner and Biddle (1995), and Hughes (1995).

Percentage of Students in Gifted Programs

As stated in Chapter IV, results of the study showed that the percentages of students who qualified for gifted education programs in their schools related to higher student academic achievement test scores. For example, in four of the five school pairs in the study, the higher performing school's percentage of students enrolled in gifted education programs was greater than the same measure in the lower performing school. Also, in the same four school pairs, the higher performing school's percentage of students enrolled in gifted programs was at or near the state average percentage for students enrolled in such programs. It was also shown that, in the lower performing schools, three of the five school's percentages were less than half the state average enrollment in gifted programs. One school in the lower performing group had no students in gifted programs. Since greater numbers of students were enrolled in gifted education programs in schools with higher ITBS scores, an association between the two variables can be shown. This seems logical. A conclusion can be made in this study, then, that schools with more students in gifted programs produce higher scores on reading achievement tests.

Classroom Context

Instructional Time

The amount of time devoted to classroom reading activities in their various forms corresponded to differences in student academic performance for schools in the study, a finding congruent with those of many other researchers (Anderson, Wilson & Fielding, 1988; Chomsky, 1978; Dowhower, 1987; Herman, 1985; Homan, 1991; Rashotte & Torgeson, 1985; Reutzel & Hollingsworth, 1991; Sindelar, Monda, & O'Shea, 1990; Thomas & Clapp, 1989).

Questions were asked of the teachers regarding their reading instruction formats. During the school day teachers engaged in different ways of teaching and practicing reading with their students. These included at least three different methods. First, there were formal reading instruction sessions, in which the teacher was actively engaged and focused on the process of teaching students to read. Next were student oral reading activities, during which the students read aloud in class. These could take place in any subject area and afforded students the opportunity to practice their reading skills. Last were times during the school day in which teachers read orally to students. Oral reading by a teacher, whether during an after-recess story time, or as part of a lesson in any subject area, served as a model for children. It allowed them to hear not only syntax, expression, and how the language sounds, but also showed them that reading is not only informative, but also enjoyable. Trelease, in an article by Schwartz (1995) states his belief that reading aloud to children is the single most important activity for building the knowledge required for eventual success in reading.

Time spent in these different reading practices overlapped; in other words, a separate part of the day was not always set aside for student oral reading. Rather, this practice took place at various times during the day. This meant that it was possible for different activities or practices to occur simultaneously. Conducting simultaneous activities also explained why it was not possible to simply add together the times reported by a teacher to find a total figure for each day spent in reading instruction.

However, it can be seen from the findings that teachers in the higher performing schools in the study routinely spent more time involved in the various elements of teaching reading or reading practice than teachers in the lower performing schools. As a conclusion, it can be stated that, in this study, more time spent on reading tasks equated with greater student academic performance in reading on achievement tests.

One school in the study seemed to verify this conclusion. Linden School's third grade teacher reported the longest time for any class in the lower performing group spent in any of the three categories discussed in this section This information explains why Linden's third grade reading ITBS score was in fact higher than the state average score, even though the school was labeled at risk. These findings support those of the higher performing group of schools and are also consistent with those of Shany and Biemiller (1995), Reutzel and Hollingsworth (1991), and Anderson, Wilson, and Fielding (1988).

Split/Multigrade Classrooms

Many researchers have shown that small class size is beneficial and relates positively to increased student achievement (Achilles, 1996; Butler & Handley, 1989; Egelson, 1996; Lindjord, 1998; Weis, 1990; Ziegler, 1997). Others agree but have found

that implementing the practice is too costly for many school districts (Nye, Boyd-Zaharias, Fulton, & Wallenhorst, 1992). Still others believe findings concerning the issue of class size and its relationship to student achievement are inconclusive (Costello, 1992; Tomlinson, 1990). However, one aspect of the discussion concerning class size and its relationships to student academic achievement involves the issue of split or multigrade classrooms, an important factor in this study.

In the higher performing schools, each class was composed entirely of third graders. In the lower performing schools, three of the five classes in the sample were split, multigrade classrooms, composed of students in two or even three different grade levels. It seems obvious that, in this study, a parallel can be drawn between multigrade classrooms and reduced student academic performance. In a class full of lively children, it is difficult enough to prepare adequately for every lesson and discipline involved in teaching a single grade level. Even with single grade classrooms, schools and their students routinely become at risk. It is much more difficult to successfully accomplish lesson planning when a teacher must do it for two or even three grade levels. In these schools, split level classes were not implemented as a philosophical approach to place students of different ages together for instruction. They were implemented administratively to accommodate small numbers of students at a grade level without hiring a teacher to work with them exclusively. Logic dictates that this is a huge task at best, one that is done less successfully more often than not. Results in this study say so. Although Karlin (1972) would agree, Miller (1991), believing the benefits of multigrade grouping outweigh the costs, would not.

Percentage of Students Below Grade Level

Children start down the reading path at different places. They don't come to
school as a matched set, or all on the same page. Some students come to a new school
year reading below grade level and are handicapped from the beginning. Every teacher in
this study reported that fully one third of her students began the school year reading below
third grade level. Two teachers reported that at least 50% of their students were below
grade level. One teacher stated that 100% of her students were below level. With this in
mind, it seems unfair to expect that great enough gains could be made during a school
year to propel these children forward in their ability to a point equal to that of their
on-level classmates. It seems unlikely that the desired progress could be made. Findings
from this study would likely inspire such researchers as Clay (1985) or Felton (1993) who
believe there are many effective strategies for helping struggling readers. Even though the
number of students who read below grade level at the beginning of the year in this study
was large, perhaps this condition could be remedied if such strategies were implemented.

Implications for Educators

The findings of this study include important implications for instruction in reading
and other subjects that takes place in small, rural, isolated schools.

It is important for educators to understand the implications of poverty among their
students, and to know how these implications limit, color, and shape their educational
effectiveness. Poverty which comes from living in a family with an unemployed
breadwinner, or with one who can only earn a small salary, can mean children come to

school hungry or sick and unable to learn. These ramifications of poverty, documented by Schellenberg (1998), Bracey (1991), and Berliner and Biddle (1995), decrease teacher effectiveness and affect the educational process as a whole. Beyond making educators aware of these facts, school districts must also develop and refine strategies that will help them hedge the effects of negative economics and carry out the mission of educating all students. Determining these strategies was not part of this study. In 24 years as an educator, the researcher has not received from a school district source any type of information regarding the impact of poverty on children, even during years spent in lower income schools. What attempts were made at reduction or alleviating the problems of children in meager circumstances, such as breakfast programs, free or reduced lunch, free distribution of clothing or free medical care, did not produce real change in the classroom. Understanding the attitudes and culture of the poor would have provided assistance. New strategies are needed.

Since the factor of time has been associated here with student academic performance, it becomes necessary for administrators and teachers to structure their programs in such a way that sufficient time is allowed for effective reading instruction. This is difficult to do today, when so many restrictions exist regarding public school educational procedures. When it is mandated that so many programs be implemented and offered within a school day, finding an extra minute for any subject becomes a challenge. Perhaps it could be said that as a nation we have legislated ourselves away from the basics by attempting to provide too broad a scope of instruction in our public schools. The issue of a back to the basics approach regarding our school time should be considered.

However, the findings from this study point to an important conclusion: Where increased reading test scores are desired, increased amounts of reading time must be found.

Another practice in public schools that must be addressed concerns the use of multigrade classrooms. Although this practice has been used successfully in some schools, in this study the method of structuring classes which include more than one grade level proved counterproductive to increased academic achievement. Before such a practice is considered, thorough research into the subject and professional development for teachers is suggested.

Limitations of the Study

Several limitations exist in this study. The principal limitation is the necessity of employing a small selected sample and depending partially upon self-report participation. These practices raise questions regarding the interpretation and analysis of data and the generalizability of the findings. This study is also limited by its reliance on the Iowa Tests of Basic Skills (ITBS) as a means of defining academic achievement. Furthermore, the study involved too large a number of variables; it would have been more productive or definitive if a smaller number of factors for a larger number of subjects had been studied in greater depth. Also, although every effort was made to select as similar instructional settings as possible, the ten classrooms represented ten different schools and ten different school districts. The different locations may have affected the results.

Recommendations for Future Research

Findings of this study indicate that differences in instructional environment can cause differences in student achievement. These findings are consistent with the wide body of research (Achilles, 1996; Anderson, Wilson & Fielding, 1988; Applebee, 1998; Bennett, 1998; Berliner & Biddle, 1995; Bracey, 1991; Butler & Handley, 1989; Carbo, 1996; DeAngelo, 1997; Egelson, 1996; Karlin, 1972; Knapp, 1995; Lindjord, 1998; Matson, 1996; Pamphlet, 1994; Reutzel & Hollingsworth, 1991; Schellenberg, 1998; Shany & Biemiller, 1995; Shefelbine, 1995; Weis, 1990; Ziegler, 1997) indicating that issues of poverty, ethnicity, class size, and instructional environment found in different communities, districts, and classrooms play a part in determining academic achievement among students. However, since there is little research of this type specifically concerning small Oklahoma schools, it is recommended that further research studies examine the connection between differences in instructional environments and achievement in the state. Further research using small rural schools nationally would also be beneficial.

Also, continuing study into determining what strategies are effective in schools whose students come from families living in poverty would be beneficial. An increasing number of researchers including Hughes (1995) have found that it is possible for schools and students to succeed in school and to perform well on standardized tests despite dramatic negative circumstances in either the community or the school.

Future studies should include more grade levels, either researching many classes in the same level or across levels, and should be conducted within or among school

districts, to draw a clearer picture of the role instructional environment plays in determining successful academic performance. Additionally, a larger number of schools representing rural Oklahoma should be included to improve generalizability of findings. Furthermore, studies should be conducted slightly earlier in the school year if possible to avoid problems with scheduling and classroom observation. Of course, the studies would have to wait until after ITBS results were known. Longitudinal studies could also be useful.

In addition, more definitive research could result from including different questions in the teacher interviews and eliminating certain demographic data derived from published sources. As it was, some questions did not turn out to be as important as first thought, e.g., Where did you go to college?, Are you a member of any professional organizations? Some demographic information was not relevant, e.g., How many square miles are in your school district? Instead, other information would have been useful, such as school district questions concerning expenditures for various programs or personnel. Also, classroom context questions might be added such as: Did you have a mentor teacher? How do you prepare for your split classes? What language do the students in your class speak at home? Where does the family income come from for students in your class, e.g., is it from unemployment insurance or welfare?, and, What is the level of educational attainment of the parents of your students?

It could be beneficial for future studies to examine more closely the issue of whether or not teachers reside in the communities in which they are employed. Also, further investigation into the impact of "ruralness" on small schools might be helpful in isolating reasons for lower student academic achievement.

Research investigating the influence of the presence of gifted students in regular elementary classrooms on achievement would be useful. Longitudinal studies conducted in the same schools as that of this research would provide information about the continuing effects of poverty, ethnicity, and ruralness on the education and achievement of the students studied here. Likewise, replication of this research in the third grade classes in the same schools but in a subsequent year might show the effects of increased teacher experience on the academic achievement of her students.

Conducting a similar study in third grade classrooms in urban at-risk schools might shed further light on the topic of instructional environment and its academic achievement.

Other studies regarding multigrade, combination classrooms are needed. For example, research into what is needed to prepare teachers for success in such classrooms would be of benefit.

A study exploring types of existing professional development opportunities for rural teachers is needed, as well as further investigation into the differences individual teachers make in their classrooms.

More research concerning the poverty/achievement connection must be made. Also, studies of the anomalies found in this research such as why Magnolia school was higher performing despite high unemployment in the community, or why Aspen school was lower performing although community poverty rates were low and incomes were high would be interesting.

Finally, an investigation into a correlation between district "per- pupil" expenditures and academic achievement could provide evidence to support increased funding for education.

Summary

The answer to the fundamental question posed for this case study cannot be written in a simple sentence. The issue of why one school performs better than another is very complicated. It seems that in the research there is a tremendous body of knowledge about specific circumstances (poverty, ethnicity, etc.) and the relationship of each to academic achievement, but a tremendous lack of research concerning the impact of simultaneous multiple factors upon academic achievement.

At least eight probable causes of poor student reading performance have been identified from this study. These include the presence of low average household income among parents of school students; community unemployment; lack of time-intense attention to reading instruction or reading practice; classes which include more than one grade level; large numbers of children who begin the school year reading below grade level; problems associated with students who do not speak English as their native language; increased numbers of students receiving a free or reduced price lunch; and decreased numbers of students in class who qualify for gifted education programs.

And at least one anomaly existed for each identified cause. Examples include the one Black community present in the study which made a definite conclusion about Blacks in communities and their relationship to achievement difficult; the higher than average reading scores for the third grade class at Linden, a school identified as at risk by the

State Department of Education; and Aspen's at risk status despite its relatively high income and low unemployment and poverty rates.

In spite of the contradictions it does seem that changes must be made in schools in which students routinely perform poorly on standardized achievement tests. Teachers and administrators must be made aware of the impacts of poverty. Greater amounts of time need to be structured within the school day for reading-related pursuits. Attempts should be made to avoid forming classes which include more than one grade level unless the teacher is committed to this format and has been provided professional development opportunities and time to implement this program.

Further research into the reasons for poor student performance on achievement tests must be conducted. Attention to the incidence of poverty in this research must be given, as well as attention to school size, local culture, and teacher instructional style.

Conclusions

This study examined the following statement:

Students in third grade classrooms in selected Oklahoma schools achieve higher average scores in reading on a standardized achievement test than do students in third grade classrooms in other schools selected for the demographic similarity because of differences in instructional environment.

The study successfully proved this statement. However, along the way many initially unapparent influences on academic achievement were discovered. As a result, conclusions are difficult to draw. Perhaps it can correctly be said that, because the issue

of reading instruction is very complicated, interrelated, and multidimensional, it is

difficult to express in a simple way why one school is doing better than another.

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APPENDIXES

APPENDIX A

TEACHER QUESTIONNAIRE

Teacher Questions

District_____   Date_____

1.   What is your age?

2.   What is your educational background (i.e., where did you receive your teacher training, what is your area of concentration, what type of degree do you have?

3.   Describe your teaching experience (i.e., how many years have you taught, how many years have you taught reading, etc.).

4.   What is your philosophy of instruction as it relates to the teaching of reading (what makes the best readers)?

5.   Describe your reading program (i.e., do you consider it to be whole language, basal, literature based, phonics, or a combination?).

6.   Have you changed methods of reading instruction since you began teaching?

7.   Are your methods similar to those of your colleagues?

8.   How much time do you devote to reading instruction each day?

9.   How much time do you devote to student oral reading each day?

10.   How much time do you devote to teacher oral reading each day?

11.   Do you have reading groups? How are they determined?

12.   What activities do you use in your reading program? Give examples.

13.   Are subjects integrated throughout or across the curriculum in your school?

14.   Is there any special focus on reading in your school, e.g. Drop Everything and Read, Accelerated Reader, Sequoyah activities?

15.   How big is your class?

16.   How many of your students did not read on grade level when they entered your class (estimate)?

17.   Are you a member of any professional organizations?

18.   What is the district curriculum for reading (publisher, types of materials, etc.)? What do you use?

19.   Do all teachers in your building/district use the same methods and materials for the teaching of reading?

20. Does your district provide inservice activities or workshops about reading instruction? Do you attend?

21. How much encouragement do you receive from your district to attend college or state sponsored area educational seminars?

22. Do you have adequate resources?

23. Do you have a school library?

24. In the last five years, have you had a personal visit by a representative of the Oklahoma State Department of Education in your school? In your classroom? Please give an approximate date, if you can remember, and the nature or purpose of the visit(s).

25. In what ways is the community involved in your reading program?

26. Do you have tutors in your school?

27. Is there a preschool program in your community?

28. Is there a public library in your community?

29. Is there anything else about your reading program that you would like to add?

APPENDIX B

THE DEFORD THEORETICAL ORIENTATION

TO READING PROFILE (TORP)

The DeFord Theoretical Orientation to Reading Profile

Directions: Read the following statements, and circle one of the responses that will indicate the relationship of the statement to your feelings about reading and reading instruction. Select *one* best answer that reflects the strength of agreement or disagreement. *SA* means Strongly Agree; *SD* means Strongly Disagree.

1.	A child needs to be able to verbalize the rules of phonics in order to to assure proficiency in processing new words.	1 2 3 4 5 SA SD
2.	An increase in reading errors is usually related to a decrease in comprehension.	1 2 3 4 5 SA SD
3.	Dividing words into syllables according to rules is a helpful instructional practice for reading new words.	1 2 3 4 5 SA SD
4.	Fluency and expression are necessary components of reading that indicate good comprehension.	1 2 3 4 5 SA SD
5.	Materials for early reading should be written in natural language without concern for short, simple words and sentences.	1 2 3 4 5 SA SD
6.	When children do not know a word, they should be instructed to sound out its parts.	1 2 3 4 5 SA SD
7.	It is a good practice to allow children to edit what is written into their own dialect when learning to read.	1 2 3 4 5 SA SD
8.	The use of a glossary or dictionary is necessary in determining the meaning and pronunciation of new words.	1 2 3 4 5 SA SD
9.	Reversals (e.g., saying "saw" for "was") are significant problems in the teaching of reading.	1 2 3 4 5 SA SD
10.	It is a good practice to correct a child as soon as an oral reading mistake is made.	1 2 3 4 5 SA SD
11.	It is important for a word to be repeated a number of times after is has been introduced to insure that it will become part of sight vocabulary.	1 2 3 4 5 SA SD
12.	Paying close attention to punctuation marks is necessary to understanding story content.	1 2 3 4 5 SA SD
13.	It is a sign of an ineffective reader when words and phrases are repeated.	1 2 3 4 5 SA SD
14.	Being able to label words according to grammatical function (nouns, etc.) is useful in proficient reading.	1 2 3 4 5 SA SD

15. When coming to a word that's unknown, the reader should be encouraged to guess based upon meaning and go on.
<u>1 2 3 4 5</u>
SA   SD

16. Young readers need to be introduced to the root form of words (run, long) before they are asked to read inflected forms (running, longest).
<u>1 2 3 4 5</u>
SA   SD

17. It is not necessary for a child to know the letters of the alphabet in order to learn to read.
<u>1 2 3 4 5</u>
SA   SD

18. Flashcard drill with sight words is an unnecessary part of practice in reading instruction.
<u>1 2 3 4 5</u>
SA   SD

19. Ability to use accent patterns in multi-syllable words (pho to graph, pho to gra phy, and pho to gra phic) should be developed as a part of reading instruction.
<u>1 2 3 4 5</u>
SA   SD

20. Controlling text through consistent spelling patterns (The fat cat ran back. The fat cat sat on a hat.) is a means by which children can best learn to read.
<u>1 2 3 4 5</u>
SA   SD

21. Formal instruction in reading is necessary to insure the adequate development of all the skills used in reading.
<u>1 2 3 4 5</u>
SA   SD

22. Phonic analysis is the most important form of analysis used when meeting new words.
<u>1 2 3 4 5</u>
SA   SD

23. Children's initial encounters with print should focus on meaning, not upon exact graphic representation.
<u>1 2 3 4 5</u>
SA   SD

24. Word shapes (word configuration, b i g) should be taught in reading to aid in word recognition.
<u>1 2 3 4 5</u>
SA   SD

25. It is important to teach skills in relation to other skills.
<u>1 2 3 4 5</u>
SA   SD

26. If a child says "house" for the written word "home," the response should be left uncorrected.
<u>1 2 3 4 5</u>
SA   SD

27. It is not necessary to introduce new words before they appear in the reading text.
<u>1 2 3 4 5</u>
SA   SD

28. Some problems in reading are caused by readers dropping the the inflectional endings from words (e.g., jumps, jumped).
<u>1 2 3 4 5</u>
SA   SD

The DeFord Theoretical Orientation to Reading Profile (T.O.R.P.) (from *"Validating the Construct of Theoretical Orientation in Reading Instruction"* by D. E. DeFord, 1987, Reading Research Quarterly, 20(3), pp. 351-367. Copyright 1985 by International Reading Association.)

APPENDIX C

SCHOOL DISTRICT REPORT CARDS AND

<u>PROFILES 1996</u> DISTRICT REPORTS

ALDER SCHOOL

NA = Not Applicable
FTR = Failed to Respond
?? = Incomplete Data Provided by School

DNA = Data Not Available
** = Data Protected by Privacy Law

Educational Attainment of Adults (Age 20+)

■ District □ State Average

Information Feedback from Your School District

Newsletter for parents and the community ? No
Community/parent outreach program(s) ? No
Achievement tests offered for grade(s) other than 3 and 7 ? Yes
Summer school program for remediation? No
Summer school program for non-remediation? No

Information Feedback from Your School

Information packet or handbook ? Yes
Newsletter for parents and the community ? Yes
Were the school's facilities available for use by the community ? Yes
Community/parent outreach program(s) ? No

Support from Your Community

	Your School	Your District	State Average
Community/Corporate sponsored program(s) ? PTA/PTO program(s)?	Yes 1		

1995-96 Juvenile Offenders & Offenses

	Your School	Your District	State Average
There was 1 offender in every ___ students.	298.0	106.8	40.7
Each offender committed an average of ___ offenses.	1.0	1.0	1.3
___ % of offenders were gang members.	0.0%	0.0%	7.0%

1995-96 District Finances

Your school district had 19% of its revenue coming from Local and County sources, while the state average was 31%. Your school district used 53% of its budget on instruction, while the state average was 59%.

Check the Profiles 1996 - District Report for a detailed breakdown of your district's revenues and expenditures

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The following information was taken from or calculated using data provided by this school, or district to the State Department of Education, the Regents for Higher Education, or the Department of Vocational Technical Education.

Your school was accredited with 0 deficiency(ies).

Classroom & Administration Characteristics

	Your School	District Total (All Schools)	Elem. School State Average
Student Enrollment	298	437	360
Number of Teachers	15.2	28.0	21.1
Teacher Attendance Rate	FTR	FTR	93.7%
Average Salary of Teachers	$29,432	$30,480	$31,550
% Teachers with Advanced Degree	30.8%	28.6%	36.4%
Average Years Teaching Experience	13.7	15.6	12.6
Number of Other Professional Staff	1.0	2.0	1.7
Number of Teaching Assistants	6.0	9.0	2.1
Number of Administrators	1.0	3.0	1.4

Iowa Test of Basic Skills (ITBS) Achievement Test

3rd Grade : 96% Tested (State Average: 89% Tested)

7th Grade : 100% Tested (State Average: 90% Tested)

■ Your School   □ State Average

Oklahoma Core Curriculum Test

5th Grade : 93% Tested (State Average: 89% Tested)   8th Grade : 91% Tested (State Average: 90% Tested)

■ Your School   □ State Average

ASPEN SCHOOL

NA = Not Applicable
DNA = Data Not Available
FTR = Failed to Respond
** = Data Protected by Primary Law
?? = Incomplete Data Provided by School

Educational Attainment of Adults (Age 20+)

■ District   □ State Average

Information Feedback from Your School District

Newsletter for parents and the community?	Yes
Community/parent outreach program(s)?	No
Achievement tests offered for grade(s) other than 3 and 7?	Yes
Summer school program for remediation?	No
Summer school program fee for non-promotion?	No

Information Feedback from Your School

Information packet or handbook?	Yes
Newsletter for parents and the community?	Yes
Were the school's facilities available for use by the community?	Yes
Community/parent outreach program(s)?	No

Support from Your Community

Community/Corporate sponsored program(s)?	Yes
PTA/PTO program(s)?	9

1995-96 Juvenile Offenders & Offenses

	Your School	Your District	State Average
There was 1 offender in every ____ students.	101.0	73.0	40.7
Each offender committed an average of ____ offenses.	1.0	1.0	1.3
% of offenders were gang members.	0.0%	0.0%	7.0%

1995-96 District Finances

Your school district had 19% of its revenue coming from Local and County sources, while the state average was 31%. Your school district used 61% of its budget on instruction, while the state average was 96%.

Check the *Profiles 1996 - District Report* for a detailed breakdown of your district's revenues and expenditures.

The following information was taken from or calculated using data provided by the school, or district, to the State Department of Education, the Regents for Higher Education, or the Department of Vocational-Technical Education.

Classroom & Administration Characteristics

Your school was accredited with ? deficiency(ies).

	Your School	District Total (All Schools)	Elem. School State Average
Student Enrollment	201	292	370
Number of Teachers	1	18.0	20.7
Teacher Attendance Rate	FTR	FTR	95.7%
Average Salary of Teachers	$30,178	$31,091	$30,588
% Teachers with Advanced Degree	40.3%	22.3%	31.2%
Average Years Teaching Experience	16.6	16.1	12.5
Number of Other Professional Staff	1.0	1.0	1.5
Number of Teaching Assistants	2.0	2.0	2.9
Number of Administrators	3.0	3.0	1.3

Iowa Test of Basic Skills (ITBS) Achievement Test

3rd Grade: 86% Tested (State Average: 89% Tested)

7th Grade: 92% Tested (State Average: 90% Tested)

■ Your School   □ State Average

Oklahoma Core Curriculum Test

5th Grade: 100% Tested (State Average: 89% Tested)   8th Grade: 100% Tested (State Average: 90% Tested)

■ Your School   □ State Average

MAGNOLIA SCHOOL

Educational Attainment of Adults (Age 20+)

Research has shown there is a strong connection between the educational attainment of parents and the educational success of their children. This and many other socioeconomic factors from census data are reported in the *Profiles 1996 - District Report* released by the Office of Accountability and available at your local public library.

Information Feedback from Your School District

Newsletter for parents and the community ?	Yes
Community/parent outreach program(s) ?	Yes
Achievement tests offered for grade(s) other than 3 and 7 ?	Yes
Summer school program for remediation?	No
Summer school program for non-remediation?	No

Information Feedback from Your School

Information packet or handbook ?	Yes
Newsletter for parents and the community ?	No
Were the school's facilities available for use by the community ?	Yes
Community/parent outreach program(s) ?	No

Support from Your Community

Community/Corporate sponsored program(s) ?	Yes
PTA/PTO program(s) ?	20

1995-96 Juvenile Offenders & Offenses

	Your School	Your District	State Average
There was 1 offender in every ___ students.	No Offender	40.5	40.7
Each offender committed an average of ___ offenses.	0.0	1.0	1.3
___% of offenders were gang members.	0.0%	0.0%	7.0%

1995-96 District Finances

Your school district had 16% of its revenue coming from Local and County sources, while the state average was 31%. Your school district used 54% of its budget on Instruction, while the state average was 59%. Check the *Profiles 1996 - District Report* for a detailed breakdown of your district's revenues and expenditures.

The following information was taken from or calculated using data provided by this school, or district, to the State Department of Education, the Regents for Higher Education, or the Department of Vocational-Technical Education.

Classroom & Administration Characteristics
Your school was accredited with 8 deficiencies).

	Your School	District Total (All Schools)	Elem. School State Average
Student Enrollment	94	162	315
Number of Teachers	5.3	13.5	18.1
Teacher Attendance Rate	95.7%	96.0%	94.7%
Average Salary of Teachers	$27,108	$28,005	$30,492
% Teachers with Advanced Degree	19.1%	14.8%	34.6%
Average Years Teaching Experience	3.7	8.0	12.1
Number of Other Professional Staff	1.0	1.0	1.2
Number of Teaching Assistants	1.0	3.0	3.1
Number of Administrators	1.0	2.2	1.1

Iowa Test of Basic Skills (ITBS) Achievement Test

3rd Grade : 100% Tested (State Average: 89% Tested)

7th Grade : 87% Tested (State Average: 90% Tested)

■ Your School   □ State Average

Oklahoma Core Curriculum Test

5th Grade : 82% Tested (State Average: 89% Tested)

8th Grade : 100% Tested (State Average: 90% Tested)

■ Your School   □ State Average

MULBERRY SCHOOL

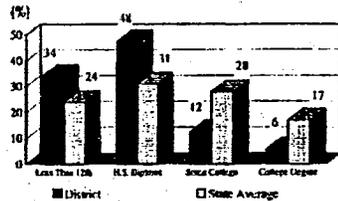## Educational Attainment of Adults (Age 20+)

(%) 49

Research has shown there is a strong correlation between the educational attainment of parents and the educational success of their children. This and many other socioeconomic factors from census data are reported in the *Profiles 1996 - District Report* released by the Office of Accountability and available at your local public library.

Less Than 12th   H.S. Diploma   Some College   College Degree

■ District   □ State Average

Information Feedback from Your School District

Newsletter for parents and the community ?	No
Community/parent outreach program(s) ?	No
Achievement tests offered for grade(s) other than 3 and 7 ?	Yes
Summer school program for remediation?	Yes
Summer school program for non-remediation?	No

Information Feedback from Your School

Information packet or handbook ?	FTR
Newsletter for parents and the community ?	FTR
Were the school's facilities available for use by the community ?	FTR
Community/parent outreach program(s) ?	FTR

Support from Your Community

Community/Corporate sponsored program(s) ?	FTR
PTA/PTO program(s) ?	FTR

1995-96 Juvenile Offenders & Offenses

	Your School	Your District	State Average
There was 1 offender in every ___ students.	No Offender	39.7	40.7
Each offender committed an average of ___ offenses.	0.0	1.0	1.3
___% of offenders were gang members.	0.0%	0.0%	7.0%

1995-96 District Finances

Your school district had 18% of its revenue coming from Local and County sources, while the state average was 31%. Your school district used 58% of its budget on Instruction, while the state average was 59%. Check the *Profiles 1996 - District Report* for a detailed breakdown of your district's revenues and expenditures.

Classroom & Administration Characteristics

Your school was accredited with 1 deficiency(ies).

	Your School	District Total (All Schools)	Elem. School State Average
Student Enrollment	75	119	315
Number of Teachers	3.5	7.5	18.1
Teacher Attendance Rate	FTR	FTR	94.7%
Average Salary of Teachers	$29,298	$29,806	$30,492
% Teachers with Advanced Degree	0.0%	13.3%	34.6%
Average Years Teaching Experience	15.3	14.5	12.1
Number of Other Professional Staff	0.0	1.0	1.2
Number of Teaching Assistants	0.0	4.0	3.1
Number of Administrators	0.0	1.0	1.1

Iowa Test of Basic Skills (ITBS) Achievement Test

3rd Grade : ** Tested (State Average: 89% Tested)

Reading   Language   Social Studies   Sources of Information   Math   Science   Composite

7th Grade : 100% Tested (State Average: 90% Tested)

Reading   Language   Social Studies   Sources of Information   Math   Science   Composite

■ Your School   □ State Average

Oklahoma Core Curriculum Test

5th Grade - 100% Tested (State Average: 89% Tested)   8th Grade : 100% Tested (State Average: 90% Tested)

Math   Science   Reading   Writing   Math   Science   Reading   Writing

■ Your School   □ State Average

190

PECAN SCHOOL

NA = Not Applicable
FTR = Failed to Respond
?? = Incomplete Data Provided by School

DNA = Data Not Available
** = Data Protected by Privacy Law

Educational Attainment of Adults (Age 20+)

■ District   ▨ State Average

Information Feedback from Your School District

Newsletter for parents and the community ?	No
Community/parent outreach program(s) ?	Yes
Achievement tests offered for grade(s) other than 3 and 7 ?	Yes
Summer school program for retention?	No
Summer school program for non-remediation?	No

Information Feedback from Your School

Information packet or handbook ?	Yes
Newsletter for parents and the community ?	No
Were the school's facilities available for use by the community ?	Yes
Community/parent outreach program(s) ?	Yes

Support from Your Community

Community/Corporate sponsored program(s) ?	No
PTA/PTO program(s) ?	o

1995-96 Juvenile Offenders & Offenses

	Your School	Your District	State Average
There was 1 offender in every ___ students.	70.3	48.6	40.7
Each offender committed an average of ___ offenses.	1.0	1.2	1.3
% of offenders were gang members.	0.0%	0.0%	7.0%

1995-96 District Finances

Your school district had 30% of its revenue coming from Local and County sources, while the state average was 31%. Your school district used 50% of its budget on instruction, while the state average was 59%.

(See the Profiles 1996 District Report for a detailed breakdown of your district's revenues and expenditures.)

The following information was taken from or calculated using data provided by this school or district, to the State Department of Education, the Regents for Higher Education, or the Department of Vocational-Technical Education.
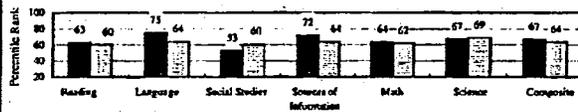
(Your school was unranked with a disclaimer.)

Classroom & Administration Characteristics

	Your School	District Total (All Schools)	Elem. School State Average
Student Enrollment	141	243	315
Number of Teachers	10.3	19.0	18.1
Teacher Attendance Rate	99.0%	98.6%	94.7%
Average Salary of Teachers	$29,829	$29,167	$30,492
% Teachers with Advanced Degree	0.0%	3.3%	34.6%
Average Years Teaching Experience	12.7	9.2	12.1
Number of Other Professional Staff	0.3	1.9	1.2
Number of Teaching Assistants	1.0	2.0	3.1
Number of Administrators	1.0	2.0	1.1

Iowa Test of Basic Skills (ITBS) Achievement Test

Oklahoma Core Curriculum Test

PINE SCHOOL

NA = Not Applicable
DNA = Data Not Available
PTR = Failed to Respond
** = Data Protected by Privacy Law
?? = Incomplete Data Provided by School

Educational Attainment of Adults (Age 20+)

Information Feedback from Your School District

	Your School	Your District	State Average
Newsletter for parents and the community ?	Yes	No	
Community/parent outreach program(s) ?	Yes		
Achievement tests offered for grade(s) other than 3 and 7 ?	No		
Summer school program for remediation?	No		
Summer school program for non-remediation?			

Information Feedback from Your School

Information packet or handbook ?	Yes		
Newsletter for parents and the community ?	Yes		
Were the school's facilities available for use by the community ?	Yes		
Community/parent outreach program(s) ?			

Support from Your Community

	Your School	Your District	State Average
Community/Corporate sponsored program(s) ?	Yes		
PTA/PTO program(s) ?	0		

1995-96 Juvenile Offenders & Offenses

	Your School	Your District	State Average
There was 1 offender in every ___ students.	No Offender	191.0	40.7
Each offender committed an average of ___ offense.	0.0	1.0	1.3
% of offenders who were gang members.	0.0%	0.0%	7.0%

1995-96 District Finances

Classroom & Administrative Characteristics

	Your School	District Total (All Schools)	Elem. School State Average
Student Enrollment	134	191	315
Number of Teachers	8.1	14.5	18.1
Teacher Attendance Rate	98.0%	95.4%	94.7%
Average Salary of Teachers	$28,525	$28,552	$30,492
% Teachers with Advanced Degree	33.0%	27.66	34.6%
Average Years Teaching Experience	11.1	11.4	12.1
Number of Other Professional Staff	0.0	0.5	1.2
Number of Teaching Assistants	0.0	2.0	3.1
Number of Administrators	1.0	1.0	1.1

Iowa Test of Basic Skills (ITBS) Achievement Test
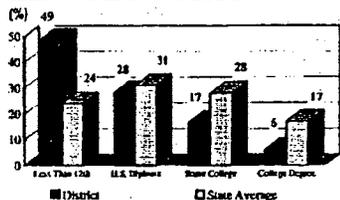

Oklahoma Core Curriculum Test

WALNUT SCHOOL

NA = Not Applicable
PTR = Failed to Respond
?? = Incomplete Data Provided by School

DNA = Data Not Available
** = Data Protected by Primary Law

Educational Attainment of Adults (Age 20+)

■ District   ■ State Average

Information Feedback from Your School District

Newsletter for parents and the community ?	No
Community/parent outreach program(s) ?	No
Achievement tests offered for grades 0 other than 3 and 7 ?	Yes
Summer school program for remediation?	No
Summer school program for non-remediation?	No

Information Feedback from Your School

Information packet or handbook ?	Yes
Newsletter for parents and the community ?	Yes
Were the school's facilities available for use by the community ?	Yes
Community/parent outreach program(s) ?	No

Support from Your Community

Community/Corporate sponsored program(s) ?	Yes
PTA/PTO program(s) ?	0

1995-96 Juvenile Offenders & Offenses

	Your School	Your District	State Average
There was 1 offender in every ___ students.	No Offender	134.0	40.7
Each offender committed an average of ___ offenses	0.0	1.0	1.3
___ % of offenders were prog members.	0.0%	0.0%	7.0%

1995-96 District Finances

Your school district had 16% of its revenue coming from Local and County sources, while the state average was 31%. Your school district used 55% of its budget on instruction, while the state average was 59%. Check the Profiles 1996 - District Report for a detailed breakdown of your district's revenues and expenditures.

The following information was taken from or calculated using data provided by each school or district, to the State Department of Education, the Regents for Higher Education, or the Department of Vocational-Technical Education.

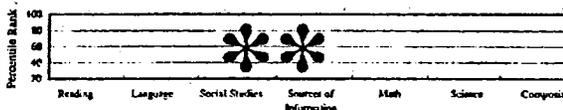**Classroom & Administration Characteristics**
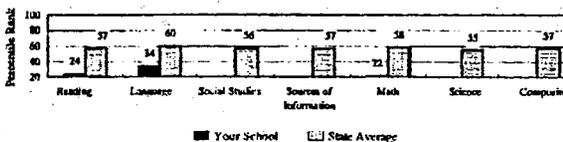
Your school was accredited with 0 deficiencies.

	Your School	District Total (All Schools)	Elem. School State Average
Student Enrollment	186	768	315
Number of Teachers	9.0	16.0	48.1
Teacher Attendance Rate	96.0%	96.0%	94.7%
Average Salary of Teachers	$30,341	$29,827	$30,492
% Teachers with Advanced Degree	44.4%	31.3%	34.6%
Average Years Teaching Experience	14.0	12.1	12.1
Number of Other Professional Staff	1.0	2.0	1.2
Number of Teaching Assistants	3.0	3.0	3.1
Number of Administrators	1.0	3.0	1.1

Iowa Test of Basic Skills (ITBS) Achievement Test

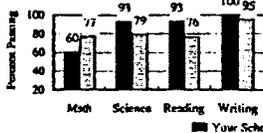3rd Grade - 74% Tested (State Average: 89% Tested)
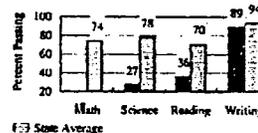

7th Grade - 57% Tested (State Average: 90% Total)

■ Your School   □ State Average

Oklahoma Core Curriculum Test

5th Grade: 81% Tested (State Average: 89% Tested)   8th Grade: 98% Tested (State Average: 90% Tested)

■ Your School   □ State Average

LAUREL SCHOOL

Educational Attainment of Adults (Age 20+)

Research has shown there is a strong correlation between the educational attainment of parents and the educational success of their children. This and many other socioeconomic factors from census data are reported in the *Profiles 1996 - District Report* released by the Office of Accountability and available at your local public library.

Legend: ■ District   □ State Average

Information Feedback from Your School District

Newsletter for parents and the community ?	Yes
Community/parent outreach program(s) ?	No
Achievement tests offered for grade(s) other than 3 and 7 ?	Yes
Summer school program for remediation?	Yes
Summer school program for non-remediation?	Yes

Information Feedback from Your School

Information packet or handbook ?	Yes
Newsletter for parents and the community ?	Yes
Were the school's facilities available for use by the community ?	Yes
Community/parent outreach program(s) ?	No

Support from Your Community

Community/Corporate sponsored program(s) ?	Yes
PTA/PTO program(s) ?	0

1995-96 Juvenile Offenders & Offenses

	Your School	Your District	State Average
There was 1 offender in every ____ students.	No Offender	No Offender	40.7
Each offender committed an average of ____ offenses.	0.0	0.0	1.3
____ % of offenders were gang members.	0.0%	0.0%	7.0%

1995-96 District Finances

Your school district had 9% of its revenue coming from Local and County sources, while the state average was 31%. Your school district used 60% of its budget on Instruction, while the state average was 59%.

Check the *Profiles 1996 - District Report* for a detailed breakdown of your district's revenues and expenditures.

Classroom & Administration Characteristics
Your school was accredited with 0 deficiency(ies).

	Your School	District Total (All Schools)	Elem. School State Average
Student Enrollment	177	177	368
Number of Teachers	10.0	10.0	21.3
Teacher Attendance Rate	FTR	FTR	95.7%
Average Salary of Teachers	$29,428	$29,428	$31,550
% Teachers with Advanced Degree	10.0%	10.0%	36.4%
Average Years Teaching Experience	7.8	7.8	12.6
Number of Other Professional Staff	1.3	1.3	1.7
Number of Teaching Assistants	6.0	6.0	2.1
Number of Administrators	1.5	1.5	1.4

Iowa Test of Basic Skills (ITBS) Achievement Test

3rd Grade : 70% Tested (State Average: 89% Tested)

7th Grade: 58% Tested (State Average: 90% Tested)

Legend: ■ Your School   □ State Average

Oklahoma Core Curriculum Test

5th Grade : 74% Tested (State Average: 89% Tested)

8th Grade : 100% Tested (State Average: 90% Tested)

Legend: ■ Your School   □ State Average

LINDEN SCHOOL

NA = Not Applicable
FTR = Failed to Respond
?? = Incomplete Data Provided by School

DNA = Data Not Available
** = Data Protected by Privacy Law

Educational Attainment of Adults (Age 20+)

☐ District ☐ State Average

Less Than 12th H.S. Diploma Some College College Degree

Information Feedback from Your School District

Newsletter for parents and the community ?	No
Community/parental outreach program(s) ?	Yes
Achievement tests offered for grade(s) other than 3 and 7 ?	Yes
Summer school program for remediation?	No

Information Feedback from Your School

Information packet or handbook ?	FTR
Newsletters for parents and the community ?	FTR
Were the school's facilities available for use by the community ?	FTR
Community/parental outreach program(s) ?	FTR

Support from Your Community

Community/Corporate sponsored program(s) ?	FTR
PTA/PTO program(s) ?	FTR

1995-96 Juvenile Offenders & Offenses

	Your School	Your District	State Average
There was 1 offender in every _____ students.	34.3	34.3	40.7
Each offender committed an average of _____ offenses.	1.3	1.3	1.3
_____ % of offenders were gang members.	67.0%	67.0%	7.0%

1995-96 District Finances

Classroom & Administration Characteristics

	Your School	District Total (All Schools)	Elem. School State Average
Student Enrollment	103	103	370
Number of Teachers	9.0	9.0	20.7
Teacher Attendance Rate	FTR	FTR	95.7%
Average Salary of Teachers	$29,221	$29,221	$30,588
% Teachers with Advanced Degree	22.2%	22.2%	35.2%
Average Years Teaching Experience	17.1	17.1	12.5
Number of Other Professional Staff	0.0	0.0	1.5
Number of Teaching Assistants	2.0	2.0	2.9
Number of Administrators	2.0	2.0	1.3

Iowa Test of Basic Skills (ITBS) Achievement Test

3rd Grade : ?? Tested (State Average: 89% Tested)

7th Grade : ?? Tested (State Average: 90% Tested)

☐ Your School ☐ State Average

Oklahoma Core Curriculum Test

5th Grade : 75% Tested (State Average: 89% Tested) 8th Grade : 38% Tested (State Average: 90% Tested)

☐ Your School ☐ State Average

Profiles 1996 - District Report

ALDER

SCHOOL

The School District
This District offers grades KG-12. It is comprised of 1 Elementary School(s), 0 MS/JHS, and 1 High School(s). The District covers 51 square miles, with 8.2 students per square mile.

1994-95 ADM: 429
1995-96 ADM: 418

The District Community
The "District Community" refers to all persons who resided within the boundaries of this school district as of the 1990 Census.

Socioeconomic Data

	District Community	State Average
Population	1,653	5,781
Population per square mile	32.4	80.7
Ethnic Makeup:		
Caucasian	41%	66%
Black	0%	10%
Asian	0%	2%
Hispanic	1%	5%
Native American	57%	17%
Average Household Income	$19,830	$21,176
Average Property Valuation Per Student	$8,464	$19,888
Unemployment Rate	6%	7%
Poverty Rate	23%	17%

1995-96 Juvenile Offenders & Offenses

There was 1 offender in every __ students.	106.8	40.7
Each offender committed an average of __ offenses	1.0	1.3
__ % of offenders were gang members.	0%	7%

Educational Attainment of Adults (Age 20+)

		State Avg.
College Degree	8%	17%
Some College	34%	28%
H.S. Diploma	27%	31%
Less Than 12th	31%	24%

Programs

	District		Community Group Avg.	State Avg.
Gifted/Talented	13.4%		12.8%	13.7%
Special Education	11.0%		13.6%	11.7%
Free/Reduced Lunch	67.9%		66.1%	43.7%
District Newsletter	No	Yes:	56.0%	56.7%
Community/Parent Outreach Programs	No	Yes:	49.0%	60.1%
Summer School for Remediation	No	Yes:	17.0%	28.3%
Summer School for Non-Remediation	No	Yes:	17.5%	27.2%
Advanced Placement Courses Offered	3.00		0.04	0.69
Achievement Tests (such as ITBS) Given in Grades Other than 3rd & 7th :	Yes	Yes:	83.0%	78.6%

Classroom Teachers & Professional Support

	District	Community Group Avg.	State Avg.
# of Teachers (FTE)	28.0	19.2	64.0
Students per Teacher	14.9	14.2	17.4
Average Salary of Teachers (including Fringe)	$30,480	$30,095	$30,814
Teachers with Advanced Degree	28.6%	32.3%	35.0%
Average Years of Teaching Experience	15.6	11.8	12.3
# of Other Professional Staff (FTE)	2.0	1.0	5.3
# of Teacher Assistants (FTE)	9.0	3.5	10.4

Administration

	District	Community Group Avg.	State Avg.
# of School & District Administrators	3.0	2.3	5.6
Average Salary of Administrators (including Fringe)	$53,443	$46,264	$49,745
Teachers per Administrator	9.3	8.3	11.5

District Revenue

	District	Community Group Avg.	State Avg.
Local & County	18.7%	23.2%	31.3%
State	71.4%	62.3%	59.4%
Federal	9.9%	14.5%	9.3%

District Expenditures

	District		Community Group Avg.		State Average	
	%	$/ADM	%	$/ADM	%	$/ADM
Instruction	52.9%	$2,849	57.6%	$3,037	58.6%	$2,556
Student Support	6.3%	$339	3.1%	$166	5.3%	$232
Instructional Support	2.4%	$128	2.1%	$109	2.8%	$123
District Administration	5.1%	$275	7.5%	$396	4.0%	$177
School Administration	6.9%	$369	4.3%	$225	5.4%	$234
District Support	17.2%	$928	15.9%	$838	16.2%	$708
Other	9.3%	$499	9.6%	$504	7.6%	$334
Total	100.0%	$5,386	100.0%	$5,276	100.0%	$4,250
Debt Service in Addition to Above		$0		$47		$147
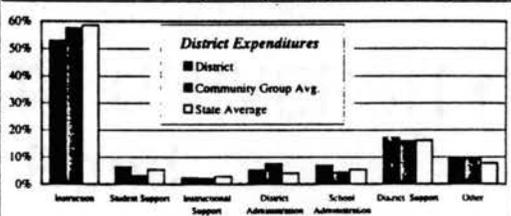
District Expenditures

District
Community Group Avg.
State Average

Avg. H.S. Curriculum (# of Courses & Units Offered in Selected Subject Areas)

	District		Community Group Avg.		State Average	
	Courses	Units	Courses	Units	Courses	Units
Language Arts	11.0	7.0	6.2	5.6	10.5	7.1
Science	5.0	5.0	4.5	4.4	7.4	5.5
Math	5.0	5.0	5.3	5.0	5.8	6.1
Social Studies	8.0	6.5	3.9	3.3	7.6	4.8
Fine Arts	1.0	1.0	2.3	2.3	4.8	4.2
Languages	2.0	2.0	1.5	1.5	3.6	3.0
Total	32.0	26.5	24.7	22.9	42.6	30.7

ALDER SCHOOL *Profiles 1996 - District Report*

Student Performance

Iowa Test of Basic Skills (ITBS) by National Percentile Rank

3rd Grade: 96% Tested (State Average: 89% Tested)

Percentile Rank

	Reading	Language	Social Studies	Sources of Info.	Math	Science	Composite
District	65	81	68	71	72	57	69
Community Group	51	63	57	59	62	58	59
State	60	64	60	64	62	69	64

■ District ■ Community Group □ State

7th Grade: 100% Tested (State Average: 90% Tested)

Percentile Rank

	Reading	Language	Social Studies	Sources of Info.	Math	Science	Composite
District	57	62	58	56	62	51	57
Community Group	54	56	51	51	54	50	52
State	57	60	56	57	58	55	57

■ District ■ Community Group □ State

Oklahoma Core Curriculum Tests by Percent Passing

5th Grade: 93% Tested
State Average: 89% Tested

8th Grade: 91% Tested
State Average: 90% Tested

11th Grade: 96% Tested
State Average: 89% Tested

Percent Passing

Math Science Reading Writing

■ District ■ Community Group □ State

Other High School Performance Measures

	District	Community Group Average	State Average
Dropout Rate	4.0%	4.2%	5.4%
Graduation Rate	78.1%	84.9%	74.0%
Average GPA of Seniors	2.9	3.0	2.9
Advanced Placement Tests Taken	24	0.2	7.0
Number Scoring College Credit	3	0.0	3.2
Number of Vo-Tech Enrollments	23	43.9	95.3
Number of Vo-Tech Completers	6	9.8	26.3
% Taking ACT	39.3%	54.7%	57.2%
Average ACT Score	18.9	18.8	20.5
% Completing College Bound Curriculum	4.0%	60.3%	66.0%
Out-of-State College Going Rate	12.0%	3.2%	8.0%
Oklahoma College Going Rate	37.0%	42.2%	51.0%
Oklahoma College Freshmen with GPA 2.0 or Greater	63.0%	68.0%	70.0%
Oklahoma College Completion Rate	60.0%	33.9%	33.0%

Profiles 1996 - District Report

ASPEN SCHOOL

The District Community

The "District Community" refers to all persons who resided within the boundaries of this school district as of the 1990 Census.
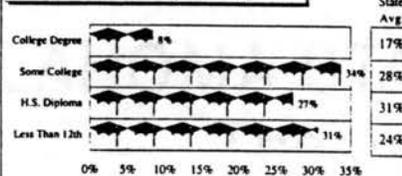
Socioeconomic Data

	District Community	State Average
Population	1,323	5,781
Population per square mile	24.5	80.7
Ethnic Makeup:		
Caucasian	63%	66%
Black	3%	10%
Asian	0%	2%
Hispanic	1%	5%
Native American	33%	17%
Average Household Income	$22,120	$21,176
Average Property Valuation Per Student	$9,851	$19,888
Unemployment Rate	8%	7%
Poverty Rate	14%	17%

1995-96 Juvenile Offenders & Offenses

There was 1 offender in every ___ students.	73.0	40.7
Each offender committed an average of ___ offenses.	1.0	1.3
___% of offenders were gang members.	0%	7%

Educational Attainment of Adults (Age 20+)

	State Avg.
College Degree	7% · 17%
Some College	24% · 28%
H.S. Diploma	34% · 31%
Less Than 12th	34% · 24%

0% 5% 10% 15% 20% 25% 30% 35%
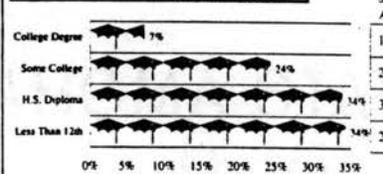
The School District

This District offers grades KG-12. It is comprised of 1 Elementary School(s), 0 MS/JHS, and 1 High School(s). The District covers 54 square miles, with 5.5 students per square mile.

1994-95 ADM: 276
1995-96 ADM: 299

Programs

	District	Community Group Avg.	State Avg.
Gifted/Talented	6.7%	12.8%	13.7%
Special Education	14.4%	13.6%	11.7%
Free/Reduced Lunch	61.5%	66.1%	43.7%
District Newsletter	Yes	56.0%	56.7%
Community/Parent Outreach Programs	No	Yes: 49.0%	60.1%
Summer School for Remediation	No	Yes: 17.0%	28.3%
Summer School for Non-Remediation	No	Yes: 17.5%	27.2%
Advanced Placement Courses Offered	0.00	0.01·	0.69
Achievement Tests (such as ITBS) Given in Grades Other than 3rd & 7th:	Yes	Yes: 83.0%	78.6%

Classroom Teachers & Professional Support

	District	Community Group Avg.	State Avg.
# of Teachers (FTE)	18.0	19.2	64.0
Students per Teacher	16.7	14.2	17.4
Average Salary of Teachers (including Fringe)	$31,091	$30,095	$30,814
Teachers with Advanced Degree	22.3%	32.3%	35.0%
Average Years of Teaching Experience	16.1	11.8	12.3
# of Other Professional Staff (FTE)	1.0	1.0	5.3
# of Teacher Assistants (FTE)	2.0	3.5	10.4

Administration

	District	Community Group Avg.	State Avg.
# of School & District Administrators	3.0	2.3	5.6
Average Salary of Administrators (including Fringe)	$42,588	$46,264	$49,745
Teachers per Administrator	6.0	8.3	11.5

District Revenue **

	District	Community Group Avg.	State Avg.
Local & County	19.3%	23.2%	31.3%
State	59.8%	62.3%	59.4%
Federal	20.9%	14.5%	9.3%

District Expenditures **

	District %	District $/ADM	Community Group Avg. %	Community Group Avg. $/ADM	State Average %	State Average $/ADM
Instruction	60.8%	$3,116	57.6%	$3,037	58.6%	$2,556
Student Support	5.0%	$254	3.1%	$166	5.3%	$232
Instructional Support	2.3%	$119	2.1%	$109	2.8%	$123
District Administration	9.3%	$476	7.5%	$396	4.0%	$177
School Administration	3.1%	$158	4.3%	$225	5.4%	$234
District Support	11.7%	$599	15.9%	$838	16.2%	$708
Other	7.9%	$406	9.6%	$504	7.6%	$334
Total	100.0%	$5,127	100.0%	$5,276	100.0%	$4,250
Debt Service in Addition to Above		$0		$47		$147

District Expenditures

- District
- Community Group Avg.
- State Average

Instruction · Student Support · Instructional Support · District Administration · School Administration · District Support · Other

70% 60% 50% 40% 30% 20% 10% 0%

Avg. H.S. Curriculum (# of Courses & Units Offered in Selected Subject Areas)

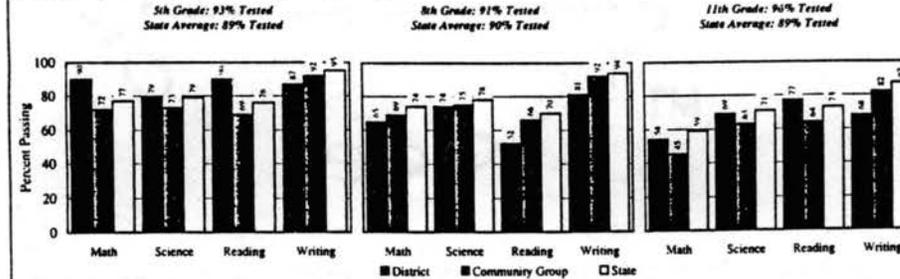|	District Courses	District Units	Community Group Avg. Courses	Community Group Avg. Units	State Average Courses	State Average Units
Language Arts	6.0	6.0	6.2	5.6	10.5	7.1
Science	5.0	5.0	4.5	4.4	7.4	5.5
Math	4.0	4.0	5.1	5.0	8.8	6.1
Social Studies	5.0	5.0	4.9	4.3	7.6	4.8
Fine Arts	3.0	3.0	3.3	3.2	4.4	4.2
Languages	2.0	2.0	1.5	1.5	3.6	3.0
Total	25.0	25.0	24.7	22.9	42.6	30.7

ASPEN SCHOOL *Profiles 1996 - District Report*

Student Performance

Iowa Test of Basic Skills (ITBS) by National Percentile Rank

3rd Grade: 86% Tested (State Average: 89% Tested)

Percentile Rank

	Reading	Language	Social Studies	Sources of Info.	Math	Science	Composite
District	25	40	37	40	39	33	33
Community Group	51	63	57	59	62	58	59
State	60	64	60	64	62	69	64

■ District ■ Community Group □ State

7th Grade: 92% Tested (State Average: 90% Tested)

Percentile Rank

	Reading	Language	Social Studies	Sources of Info.	Math	Science	Composite
District	43	45	49	47	45	46	44
Community Group	54	56	51	51	54	50	52
State	57	60	56	57	58	55	57

■ District ■ Community Group □ State

Oklahoma Core Curriculum Tests by Percent Passing

5th Grade: 100% Tested
State Average: 89% Tested

8th Grade: 100% Tested
State Average: 90% Tested

11th Grade: 100% Tested
State Average: 89% Tested

Percent Passing

(Math, Science, Reading, Writing)
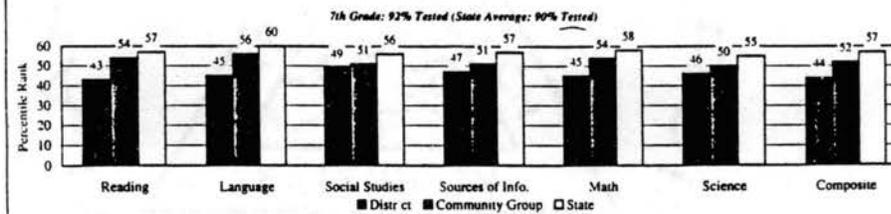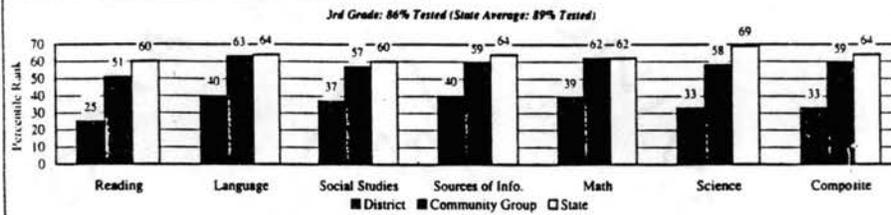
■ District ■ Community Group □ State

Other High School Performance Measures

	District	Community Group Average	State Average
Dropout Rate	3.4%	4.2%	5.4%
Graduation Rate	79.2%	84.9%	74.0%
Average GPA of Seniors	3.4	3.0	2.9
Advanced Placement Tests Taken	0	0.2	7.0
Number Scoring College Credit	0	0.0	3.2
Number of Vo-Tech Enrollments	42	43.9	95.3
Number of Vo-Tech Completers	6	9.8	26.3
% Taking ACT	26.1%	54.7%	57.2%
Average ACT Score	19.1	18.8	20.5
% Completing College Bound Curriculum	53.0%	60.3%	66.0%
Out-of-State College Going Rate	0.0%	3.2%	8.0%
Oklahoma College Going Rate	18.0%	42.2%	51.0%
Oklahoma College Freshmen with GPA 2.0 or Greater	**	68.0%	70.0%
Oklahoma College Completion Rate	DNA	33.9%	33.0%

Profiles 1996 - District Report

MAGNOLIA SCHOOL

The School District

This District offers grades KG-12. It is comprised of 1 Elementary School(s), 0 MS/JHS, and 1 High School(s). The District covers 68 square miles, with 2.5 students per square mile.

1994-95 ADM: 167
1995-96 ADM: 169

Programs

	District		Community Group Avg.	State Avg.
Gifted/Talented	1.2%		12.8%	13.7%
Special Education	6.5%		13.6%	11.7%
Free/Reduced Lunch	66.5%		66.1%	43.7%
District Newsletter	Yes	Yes:	56.0%	56.7%
Community/Parent Outreach Programs	Yes	Yes:	49.0%	60.1%
Summer School for Remediation	No	Yes:	17.0%	28.3%
Summer School for Non-Remediation	No	Yes:	17.5%	27.2%
Advanced Placement Courses Offered	0.00		0.04	0.69
Achievement Tests (such as ITBS) Given in Grades Other than 3rd & 7th :	Yes	Yes:	83.0%	78.6%

Classroom Teachers & Professional Support

	District		Community Group Avg.	State Avg.
# of Teachers (FTE)	13.5		19.2	64.0
Students per Teacher	12.5		14.2	17.4
Average Salary of Teachers (including Fringe)	$28,005		$30,095	$30,814
Teachers with Advanced Degree	14.8%		32.3%	35.0%
Average Years of Teaching Experience	8.0		11.8	12.3
# of Other Professional Staff (FTE)	1.0		1.0	5.3
# of Teacher Assistants (FTE)	3.0		3.5	10.4

Administration

	District		Community Group Avg.	State Avg.
# of School & District Administrators	2.2		2.3	5.6
Average Salary of Administrators (including Fringe)	$40,275		$46,264	$49,745
Teachers per Administrator	6.2		8.3	11.5

District Revenue [*]

	District		Community Group Avg.	State Avg.
Local & County	15.7%		23.2%	31.3%
State	68.9%		62.3%	59.4%
Federal	15.4%		14.5%	9.3%

District Expenditures [*]

	District %	District $/ADM	Community Group Avg %	Community Group Avg $/ADM	State Average %	State Average $/ADM
Instruction	54.1%	$3,005	57.6%	$3,037	58.6%	$2,556
Student Support	8.9%	$495	3.1%	$166	5.3%	$232
Instructional Support	0.2%	$12	2.1%	$109	2.8%	$123
District Administration	2.8%	$158	7.5%	$396	4.0%	$177
School Administration	8.8%	$490	4.3%	$225	5.4%	$234
District Support	15.5%	$864	15.9%	$838	16.2%	$708
Other	9.6%	$531	9.6%	$504	7.6%	$334
Total	100.0%	$5,555	100.0%	$5,276	100.0%	$4,250
Debt Service in Addition to Above		$0		$47		$147

District Expenditures

■ District
■ Community Group Avg.
□ State Average

(Instruction, Student Support, Instructional Support, District Administration, School Administration, District Support, Other)

Avg. H.S. Curriculum (# of Courses & Units Offered in Selected Subject Areas)

	District Courses	District Units	Community Group Avg. Courses	Community Group Avg. Units	State Average Courses	State Average Units
Language Arts	5.0	5.0	6.2	5.6	10.5	7.1
Science	5.0	5.0	4.5	4.4	7.4	5.5
Math	6.0	6.0	5.3	5.0	8.8	6.1
Social Studies	6.0	6.0	4.9	4.3	7.6	4.8
Fine Arts	3.0	2.5	2.3	2.2	4.8	3.2
Languages	1.0	1.0	1.5	1.5	3.6	3.0
Total	26.0	25.5	24.7	22.9	42.6	30.7

The District Community

The "District Community" refers to all persons who resided within the boundaries of this school district as of the 1990 Census.

Socioeconomic Data

	District Community	State Average
Population	835	5,781
Population per square mile	12.3	80.7
Ethnic Makeup:		
Caucasian	52%	66%
Black	0%	10%
Asian	0%	2%
Hispanic	2%	5%
Native American	46%	17%
Average Household Income	$17,396	$21,176
Average Property Valuation Per Student	$7,602	$19,888
Unemployment Rate	22%	7%
Poverty Rate	34%	17%

1995-96 Juvenile Offenders & Offenses

	District	State
There was 1 offender in every ___ students.	40.5	40.7
Each offender committed an average of ___ offenses.	1.0	1.3
___% of offenders were gang members.	0%	7%

Educational Attainment of Adults (Age 20+)

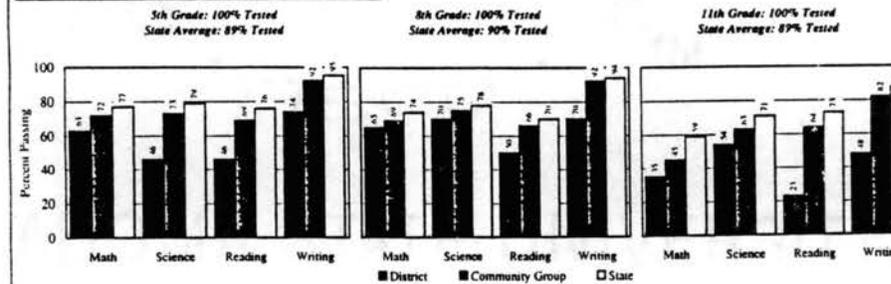|		State Avg.
College Degree	6%	17%
Some College	12%	28%
H.S. Diploma	48%	31%
Less Than 12th	34%	24%

MAGNOLIA SCHOOL *Profiles 1996 - District Report*

Student Performance

Iowa Test of Basic Skills (ITBS) by National Percentile Rank

3rd Grade: 100% Tested (State Average: 89% Tested)

Categories: Reading, Language, Social Studies, Sources of Info., Math, Science, Composite
Legend: ■ District ■ Community Group ☐ State

Values shown: Reading 63, 51, 60; Language 75, 63, 64; Social Studies 53, 57, 60; Sources of Info. 72, 59, 64; Math 64, 62, 62; Science 67, 58, 69; Composite 67, 59, 64

7th Grade: 87% Tested (State Average: 90% Tested)

Categories: Reading, Language, Social Studies, Sources of Info., Math, Science, Composite
Legend: ■ District ■ Community Group ☐ State

Values shown: Reading 54, 54, 57; Language 64, 56, 60; Social Studies 59, 51, 56; Sources of Info. 58, 51, 57; Math 64, 54, 58; Science 43, 50, 55; Composite 57, 52, 57

Oklahoma Core Curriculum Tests by Percent Passing

5th Grade: 82% Tested State Average: 89% Tested	8th Grade: 100% Tested State Average: 90% Tested	11th Grade: 100% Tested State Average: 89% Tested

Categories: Math, Science, Reading, Writing
Legend: ■ District ■ Community Group ☐ State

Other High School Performance Measures

	District	Community Group Average	State Average
Dropout Rate	7.4%	4.2%	5.4%
Graduation Rate	61.9%	84.9%	74.0%
Average GPA of Seniors	2.9	3.0	2.9
Advanced Placement Tests Taken	0	0.2	7.0
Number Scoring College Credit	0	0.0	3.2
Number of Vo-Tech Enrollments	2	43.9	95.3
Number of Vo-Tech Completers	1	9.8	26.3
% Taking ACT	58.3%	54.7%	57.2%
Average ACT Score	19.7	18.8	20.5
% Completing College Bound Curriculum	46.0%	60.3%	66.0%
Out-of-State College Going Rate	8.0%	3.2%	8.0%
Oklahoma College Going Rate	41.0%	42.2%	51.0%
Oklahoma College Freshmen with GPA 2.0 or Greater	60.0%	68.0%	70.0%
Oklahoma College Completion Rate	30.0%	33.9%	33.0%

Profiles 1996 - District Report

MULBERRY SCHOOL

The School District

This District offers grades KG-12. It is comprised of 1 Elementary School(s), 0 MS/JHS, and 1 High School(s). The District covers 65 square miles, with 2.0 students per square mile.

1994-95 ADM: 133
1995-96 ADM: 128

Programs

	District		Community Group Avg.	State Avg.
Gifted/Talented	10.1%		12.8%	13.7%
Special Education	11.7%		13.6%	11.7%
Free/Reduced Lunch	109.1%		66.1%	43.7%
District Newsletter	No	Yes:	56.0%	56.7%
Community/Parent Outreach Programs	No	Yes:	49.0%	60.1%
Summer School for Remediation	Yes	Yes:	17.0%	28.3%
Summer School for Non-Remediation	No	Yes:	17.5%	27.2%
Advanced Placement Courses Offered	0.00		0.04	0.69
Achievement Tests (such as ITBS) Given in Grades Other than 3rd & 7th :	Yes	Yes:	83.0%	78.6%

Classroom Teachers & Professional Support

	District	Community Group Avg.	State Avg.
# of Teachers (FTE)	7.5	19.2	64.0
Students per Teacher	17.1	14.2	17.4
Average Salary of Teachers (including Fringe)	$29,806	$30,095	$30,814
Teachers with Advanced Degree	13.3%	32.3%	35.0%
Average Years of Teaching Experience	14.5	11.8	12.3
# of Other Professional Staff (FTE)	1.0	1.0	5.3
# of Teacher Assistants (FTE)	4.0	3.5	10.4

Administration

	District	Community Group Avg.	State Avg.
# of School & District Administrators	1.0	2.3	5.6
Average Salary of Administrators (including Fringe)	$48,000	$46,264	$49,745
Teachers per Administrator	7.5	8.3	11.5

District Revenue

	District	Community Group Avg.	State Avg.
Local & County	18.0%	23.2%	31.3%
State	66.2%	62.3%	59.4%
Federal	15.7%	14.5%	9.3%

District Expenditures

	District %	District $/ADM	Community Group Avg. %	Community Group Avg. $/ADM	State Average %	State Average $/ADM
Instruction	58.4%	$3,279	57.6%	$3,037	58.6%	$2,556
Student Support	2.1%	$120	3.1%	$166	5.3%	$232
Instructional Support	0.5%	$28	2.1%	$109	2.8%	$123
District Administration	13.7%	$769	7.5%	$396	4.0%	$177
School Administration	0.0%	$0	4.3%	$225	5.4%	$234
District Support	16.6%	$933	15.9%	$838	16.2%	$708
Other	8.7%	$487	9.6%	$504	7.6%	$334
Total	100.0%	$5,617	100.0%	$5,276	100.0%	$4,250
Debt Service in Addition to Above		$0		$47		$147

The District Community

The "District Community" refers to all persons who resided within the boundaries of this school district as of the 1990 Census.

Socioeconomic Data

	District Community	State Average
Population	1,233	5,781
Population per square mile	19.0	80.7
Ethnic Makeup:		
Caucasian	0%	66%
Black	100%	10%
Asian	0%	2%
Hispanic	0%	5%
Native American	0%	17%
Average Household Income	$10,550	$21,176
Average Property Valuation Per Student	$18,447	$19,888
Unemployment Rate	14%	7%
Poverty Rate	31%	17%

1995-96 Juvenile Offenders & Offenses

	District	State Avg.
There was 1 offender in every ___ students.	39.7	40.7
Each offender committed an average of ___ offenses.	1.0	1.3
___ % of offenders were gang members.	0%	7%

Educational Attainment of Adults (Age 20+)

	District	State Avg.
College Degree	6%	17%
Some College	17%	28%
H.S. Diploma	28%	31%
Less Than 12th	49%	24%

District Expenditures

District
Community Group Avg.
State Average

Avg. H.S. Curriculum (# of Courses & Units Offered in Selected Subject Areas)

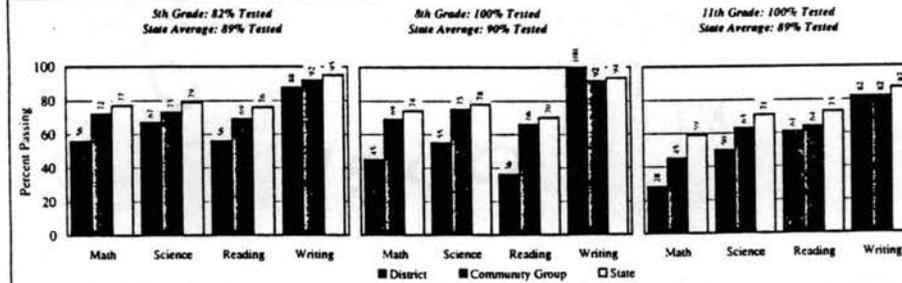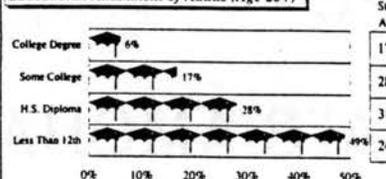|	District Courses	District Units	Community Group Avg. Courses	Community Group Avg. Units	State Average Courses	State Average Units
Language Arts	5.0	5.0	6.2	5.6	10.5	7.1
Science	2.0	2.0	4.5	4.4	7.4	5.5
Math	3.0	3.0	5.3	5.0	8.8	6.1
Social Studies	3.0	3.0	4.9	4.3	7.6	4.8
Fine Arts	1.0	1.0	2.3	2.2	4.8	4.2
Languages	1.0	1.0	1.5	1.5	3.6	3.0
Total	15.0	15.0	24.7	22.9	42.6	30.7

MULBERRY SCHOOL *Profiles 1996 - District Report*

Student Performance

Iowa Test of Basic Skills (ITBS) by National Percentile Rank

3rd Grade: 100% Tested (State Average: 89% Tested)

Reading | Language | Social Studies | Sources of Info. | Math | Science | Composite

■ District ■ Community Group □ State

7th Grade: 100% Tested (State Average: 90% Tested)

Reading | Language | Social Studies | Sources of Info. | Math | Science | Composite

■ District ■ Community Group □ State

Oklahoma Core Curriculum Tests by Percent Passing

5th Grade: 100% Tested
State Average: 89% Tested

8th Grade: 100% Tested
State Average: 90% Tested

11th Grade: 91% Tested
State Average: 89% Tested

Math | Science | Reading | Writing

■ District ■ Community Group □ State

Other High School Performance Measures

	District	Community Group Average	State Average
Dropout Rate	0.0%	4.2%	5.4%
Graduation Rate	90.9%	84.9%	74.0%
Average GPA of Seniors	DNA	3.0	2.9
Advanced Placement Tests Taken	0	0.2	7.0
Number Scoring College Credit	0	0.0	3.2
Number of Vo-Tech Enrollments	37	43.9	95.3
Number of Vo-Tech Completers	4	9.8	26.3
% Taking ACT	**	54.7%	57.2%
Average ACT Score	**	18.8	20.5
% Completing College Bound Curriculum	DNA	60.3%	66.0%
Out-of-State College Going Rate	DNA	3.2%	8.0%
Oklahoma College Going Rate	41.0%	42.2%	51.0%
Oklahoma College Freshmen with GPA 2.0 or Greater	**	68.0%	70.0%
Oklahoma College Completion Rate	45.0%	33.9%	33.0%

Profiles 1996 - District Report

PECAN SCHOOL

The District Community

The "District Community" refers to all persons who resided within the boundaries of this school district as of the 1990 Census.

Socioeconomic Data

	District Community	State Average
Population	1,254	5,781
Population per square mile	2.9	80.7
Ethnic Makeup:		
Caucasian	49%	66%
Black	0%	10%
Asian	0%	2%
Hispanic	1%	5%
Native American	50%	17%
Average Household Income	$18,594	$21,176
Average Property Valuation Per Student	$32,346	$19,888
Unemployment Rate	8%	7%
Poverty Rate	19%	17%

1995-96 Juvenile Offenders & Offenses

There was 1 offender in every ___ students.	48.6	40.7
Each offender committed an average of ___ offenses	1.2	1.3
___% of offenders were gang members.	0%	7%

Educational Attainment of Adults (Age 20+)

		State Avg
College Degree	6%	17%
Some College	21%	28%
H.S. Diploma	45%	31%
Less Than 12th	28%	24%

Office of Accountability

3033 N. Walnut Avenue, Suite 103 E
Oklahoma City, OK 73105-2833
Phone: (405) 522-4578
Fax: (405) 522-4581

The School District

This District offers grades KG-12. It is comprised of 1 Elementary School(s), 0 MS/JHS, and 1 High School(s). The District covers 437 square miles, with 0.5 students per square mile.

1994-95 ADM: 231
1995-96 ADM: 238

Programs

	District		Community Group Avg.	State Avg.
Gifted/Talented	10.5%		12.8%	13.7%
Special Education	16.8%		13.6%	11.7%
Free/Reduced Lunch	53.0%		66.1%	43.7%
District Newsletter	No	Yes:	56.0%	56.7%
Community/Parent Outreach Programs	Yes	Yes:	49.0%	60.1%
Summer School for Remediation	No	Yes:	17.0%	28.3%
Summer School for Non-Remediation	No	Yes:	17.5%	27.2%
Advanced Placement Courses Offered	0.00		0.04	0.69
Achievement Tests (such as ITBS) Given in Grades Other than 3rd & 7th :	Yes	Yes:	83.0%	78.6%

Classroom Teachers & Professional Support

	District	Community Group Avg.	State Avg.
# of Teachers (FTE)	19.0	19.2	64.0
Students per Teacher	12.5	14.2	17.4
Average Salary of Teachers (including Fringe)	$29,167	$30,095	$30,814
Teachers with Advanced Degree	5.3%	32.3%	35.0%
Average Years of Teaching Experience	9.2	11.8	12.3
# of Other Professional Staff (FTE)	1.9	1.0	5.3
# of Teacher Assistants (FTE)	2.0	3.5	10.4

Administration

	District	Community Group Avg.	State Avg.
# of School & District Administrators	2.0	2.3	5.6
Average Salary of Administrators (including Fringe)	$45,424	$46,264	$49,745
Teachers per Administrator	9.5	8.3	11.5

District Revenue **

	District	Community Group Avg.	State Avg.
Local & County	30.2%	23.2%	31.3%
State	65.0%	62.3%	59.4%
Federal	4.8%	14.5%	9.3%

District Expenditures **

	District %	District $/ADM	Community Group Avg %	Community Group Avg $/ADM	State Average %	State Average $/ADM
Instruction	50.2%	$3,064	57.6%	$3,037	58.6%	$2,556
Student Support	5.2%	$320	3.1%	$166	5.3%	$232
Instructional Support	1.7%	$102	2.1%	$109	2.8%	$123
District Administration	15.5%	$945	7.5%	$396	4.0%	$177
School Administration	2.3%	$139	4.3%	$225	5.4%	$234
District Support	19.8%	$1,205	15.9%	$838	16.2%	$708
Other	5.3%	$322	9.6%	$504	7.6%	$334
Total	100.0%	$6,097	100.0%	$5,276	100.0%	$4,350
Debt Service in Addition to Above		$0		$47		$147

Avg. H.S. Curriculum (# of Courses & Units Offered in Selected Subject Areas)

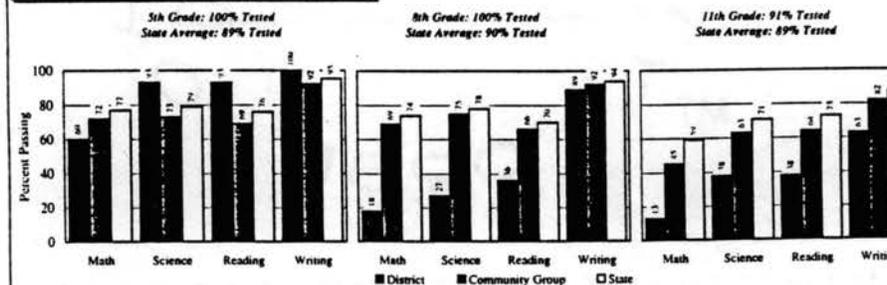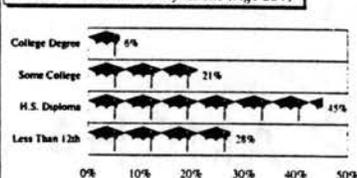|	District Courses	District Units	Community Group Avg Courses	Community Group Avg Units	State Average Courses	State Average Units
Language Arts	6.0	6.0	6.2	5.6	10.5	7.1
Science	5.0	5.0	4.3	4.4	7.4	5.5
Math	6.0	6.0	5.3	5.0	8.8	6.1
Social Studies	6.0	6.0	4.9	4.3	7.6	4.8
Fine Arts	5.0	5.0	2.3	2.2	4.8	4.2
Languages	2.0	2.0	1.5	1.5	3.6	3.0
Total	30.0	30.0	24.7	22.9	42.6	30.7

PECAN SCHOOL *Profiles 1996 - District Report*

Student Performance

Iowa Test of Basic Skills (ITBS) by National Percentile Rank

3rd Grade: 100% Tested (State Average: 89% Tested)

District ■ **Community Group** ☐ **State**

7th Grade: 88% Tested (State Average: 90% Tested)

District ■ **Community Group** ☐ **State**
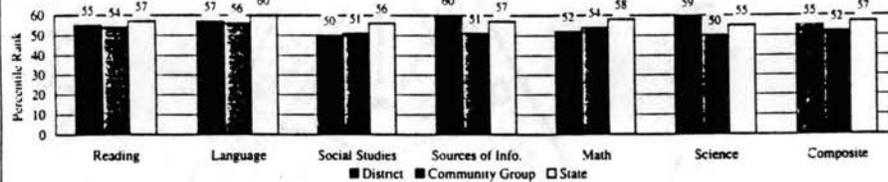
Oklahoma Core Curriculum Tests by Percent Passing

5th Grade: 89% Tested	*8th Grade: ?? Tested*	*11th Grade: 94% Tested*
State Average: 89% Tested	*State Average: 90% Tested*	*State Average: 89% Tested*
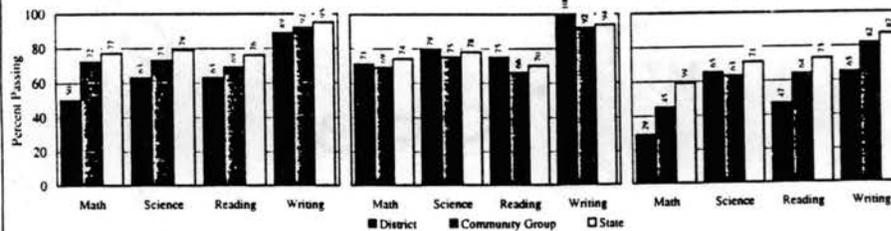
District ■ **Community Group** ☐ **State**

Other High School Performance Measures

	District	Community Group Average	State Average
Dropout Rate	4.2%	4.2%	5.4%
Graduation Rate	60.0%	84.9%	74.0%
Average GPA of Seniors	3.1	3.0	2.9
Advanced Placement Tests Taken	0	0.2	7.0
Number Scoring College Credit	0	0.0	3.2
Number of Vo-Tech Enrollees	22	43.9	95.3
Number of Vo-Tech Completers	6	9.8	26.3
% Taking ACT	56.5%	54.7%	57.2%
Average ACT Score	19.7	18.8	20.5
% Completing College Bound Curriculum	48.0%	60.3%	66.0%
Out-of-State College Going Rate	0.0%	3.2%	8.0%
Oklahoma College Going Rate	33.0%	42.2%	51.0%
Oklahoma College Freshmen with GPA 2.0 or Greater	63.0%	68.0%	70.0%
Oklahoma College Completion Rate	DNA	33.9%	35.2%

Profiles 1996 - District Report

PINE SCHOOL

The School District

This District offers grades EC-12. It is comprised of 1 Elementary School(s), 0 MS/JHS, and 1 High School(s). The District covers 92 square miles, with 2.2 students per square mile.

1994-95 ADM: 170
1995-96 ADM: 201

The District Community

The "District Community" refers to all persons who resided within the boundaries of this school district as of the 1990 Census.

Socioeconomic Data

	District Community	State Average
Population	904	5,781
Population per square mile	9.8	80.7
Ethnic Makeup:		
Caucasian	55%	66%
Black	0%	10%
Asian	0%	2%
Hispanic	3%	5%
Native American	42%	17%
Average Household Income	$15,455	$21,176
Average Property Valuation Per Student	$12,231	$19,888
Unemployment Rate	13%	7%
Poverty Rate	25%	17%

1995-96 Juvenile Offenders & Offenses

There was 1 offender in every __ students.	191.0	40.7
Each offender committed an average of __ offenses	1.0	1.3
__ % of offenders were gang members.	0%	7%

Educational Attainment of Adults (Age 20+)

		State Avg.
College Degree	3%	17%
Some College	12%	28%
H.S. Diploma	41%	31%
Less Than 12th	44%	24%

Office of Accountability

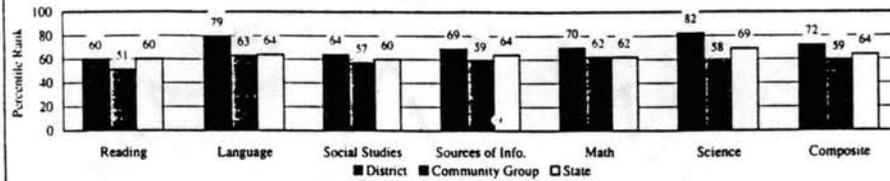3033 N. Walnut Avenue, Suite 103 E
Oklahoma City, OK 73105-2833
Phone: (405) 522-4578
Fax: (405) 522-4581

Programs

	District	Community Group Avg.	State Avg.
Gifted/Talented	10.0%	12.8%	13.7%
Special Education	14.0%	13.6%	11.7%
Free/Reduced Lunch	58.8%	66.1%	43.7%
District Newsletter	Yes	Yes: 56.0%	56.7%
Community/Parent Outreach Programs	No	Yes: 49.0%	60.1%
Summer School for Remediation	No	Yes: 17.0%	28.3%
Summer School for Non-Remediation	No	Yes: 17.5%	27.2%
Advanced Placement Courses Offered	0.00	0.04	0.69
Achievement Tests (such as ITBS) Given in Grades Other than 3rd & 7th :	Yes	Yes: 83.0%	78.6%

Classroom Teachers & Professional Support

	District	Community Group Avg.	State Avg.
# of Teachers (FTE)	14.5	19.2	64.0
Students per Teacher	13.9	14.2	17.4
Average Salary of Teachers (including Fringe)	$28,552	$30,095	$30,814
Teachers with Advanced Degree	27.6%	32.3%	35.0%
Average Years of Teaching Experience	11.4	11.8	12.3
# of Other Professional Staff (FTE)	0.5	1.0	5.3
# of Teacher Assistants (FTE)	2.0	3.5	10.4

Administration

	District	Community Group Avg.	State Avg.
# of School & District Administrators	3.0	2.3	5.6
Average Salary of Administrators (including Fringe)	$37,057	$46,264	$49,745
Teachers per Administrator	4.8	8.3	11.5

District Revenue **

	District	Community Group Avg.	State Avg.
Local & County	24.6%	23.2%	31.3%
State	61.0%	62.3%	59.4%
Federal	14.4%	14.5%	9.3%

District Expenditures **

	District %	District $/ADM	Community Group Avg %	Community Group Avg $/ADM	State Average %	State Average $/ADM
Instruction	64.3%	$2,924	57.6%	$3,037	58.6%	$2,556
Student Support	5.4%	$247	3.1%	$166	5.3%	$232
Instructional Support	0.3%	$14	2.1%	$109	2.8%	$123
District Administration	5.9%	$270	7.5%	$396	4.0%	$177
School Administration	0.2%	$8	4.3%	$225	5.4%	$234
District Support	14.5%	$661	15.9%	$838	16.2%	$708
Other	9.3%	$421	9.6%	$504	7.6%	$334
Total	100.0%	$4,544	100.0%	$5,276	100.0%	$4,250
Debt Service in Addition to Above		$155		$47		$147
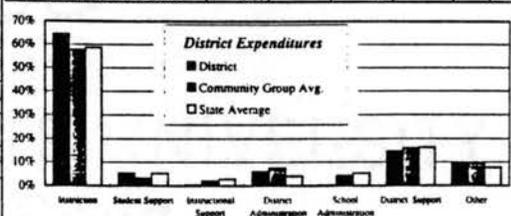
District Expenditures
- District
- Community Group Avg.
- State Average

Avg. H.S. Curriculum (# of Courses & Units Offered in Selected Subject Areas)

|	District Courses	District Units	Community Group Avg. Courses	Community Group Avg. Units	State Average Courses	State Average Units
Language Arts	8.0	8.0	6.2	5.6	10.5	7.1
Science	3.0	3.0	4.5	4.4	7.4	5.5
Math	2.0	2.0	4.3	4.0	8.3	6.1
Social Studies	5.0	5.0	4.9	4.3	7.5	4.8
Fine Arts	0.0	0.0	2.3	2.2	4.3	4.2
Languages	2.0	2.0	1.5	1.5	3.6	3.0
Total	20.0	20.0	24.7	22.9	42.6	30.7

PINE SCHOOL *Profiles 1996 - District Report*

Student Performance

Iowa Test of Basic Skills (ITBS) by National Percentile Rank

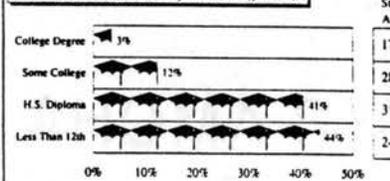**3rd Grade: 100% Tested (State Average: 89% Tested)**

Reading, Language, Social Studies, Sources of Info., Math, Science, Composite
■ District ■ Community Group □ State

7th Grade: ?? Tested (State Average: 90% Tested)

Reading, Language, Social Studies, Sources of Info., Math, Science, Composite
■ District ■ Community Group □ State

Oklahoma Core Curriculum Tests by Percent Passing

5th Grade: ?? Tested State Average: 89% Tested	8th Grade: ?? Tested State Average: 90% Tested	11th Grade: ?? Tested State Average: 89% Tested

Math, Science, Reading, Writing
■ District ■ Community Group □ State
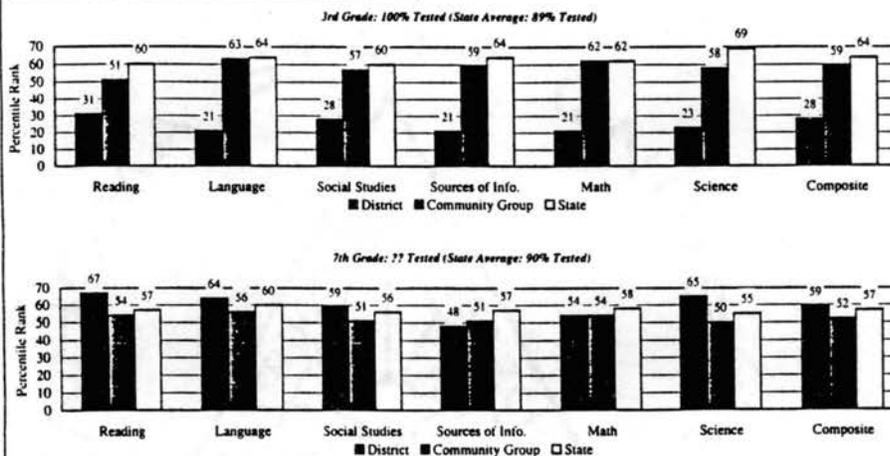
Other High School Performance Measures

	District	Community Group Average	State Average
Dropout Rate	0.0%	4.2%	5.4%
Graduation Rate	92.3%	84.9%	74.0%
Average GPA of Seniors	DNA	3.0	2.9
Advanced Placement Tests Taken	0	0.2	7.0
Number Scoring College Credit	0	0.0	3.2
Number of Vo-Tech Enrollments	7	43.9	95.3
Number of Vo-Tech Completers	3	9.8	26.3
% Taking ACT	**	54.7%	57.2%
Average ACT Score	**	18.8	20.5
% Completing College Bound Curriculum	100.0%	60.3%	66.0%
Out-of-State College Going Rate	0.0%	3.2%	8.0%
Oklahoma College Going Rate	22.0%	42.2%	51.0%
Oklahoma College Freshmen with GPA 2.0 or Greater	67.0%	68.0%	70.0%
Oklahoma College Completion Rate	33.0%	33.9%	33.0%

Profiles 1996 - District Report

WALNUT SCHOOL

The School District

This District offers grades KG-12. It is comprised of 1 Elementary School(s), 0 MS/JHS, and 1 High School(s). The District covers 124 square miles, with 2.2 students per square mile.

1994-95 ADM: 249
1995-96 ADM: 267

The District Community

The "District Community" refers to all persons who resided within the boundaries of this school district as of the 1990 Census.

Socioeconomic Data

	District Community	State Average
Population	1,063	5,781
Population per square mile	8.6	80.7
Ethnic Makeup:		
Caucasian	58%	66%
Black	6%	10%
Asian	0%	2%
Hispanic	0%	5%
Native American	36%	17%
Average Household Income	$19,875	$21,176
Average Property Valuation Per Student	$11,412	$19,888
Unemployment Rate	9%	7%
Poverty Rate	26%	17%

1995-96 Juvenile Offenders & Offenses

There was 1 offender in every __ students.	134.0	40.7
Each offender committed an average of __ offenses.	1.0	1.3
__ % of offenders were gang members.	0%	7%

Educational Attainment of Adults (Age 20+)

		State Avg.
College Degree	7%	17%
Some College	18%	28%
H.S. Diploma	37%	31%
Less Than 12th	38%	24%

Programs

	District		Community Group Avg.	State Avg.
Gifted/Talented	1.5%		12.8%	13.7%
Special Education	10.5%		13.6%	11.7%
Free/Reduced Lunch	74.6%		66.1%	43.7%
District Newsletter	No	Yes:	56.0%	56.7%
Community/Parent Outreach Programs	No	Yes:	49.0%	60.1%
Summer School for Remediation	No	Yes:	17.0%	28.3%
Summer School for Non-Remediation	No	Yes:	17.5%	27.2%
Advanced Placement Courses Offered	0.00		0.04	0.69
Achievement Tests (such as ITBS) Given in Grades Other than 3rd & 7th :	Yes	Yes:	83.0%	78.6%

Classroom Teachers & Professional Support

	District	Community Group Avg.	State Avg.
# of Teachers (FTE)	16.0	19.2	64.0
Students per Teacher	16.7	14.2	17.4
Average Salary of Teachers (including Fringe)	$29,827	$30,095	$30,814
Teachers with Advanced Degree	31.3%	32.3%	35.0%
Average Years of Teaching Experience	12.1	11.8	12.3
# of Other Professional Staff (FTE)	2.0	1.0	5.3
# of Teacher Assistants (FTE)	5.0	3.5	10.4

Administration

	District	Community Group Avg.	State Avg.
# of School & District Administrators	3.0	2.3	5.6
Average Salary of Administrators (including Fringe)	$52,391	$46,264	$49,745
Teachers per Administrator	5.3	8.3	11.5

District Revenue

	District	Community Group Avg.	State Avg.
Local & County	15.8%	23.2%	31.3%
State	62.6%	62.3%	59.4%
Federal	21.6%	14.5%	9.3%

District Expenditures

	District %	District $/ADM	Community Group Avg. %	Community Group Avg. $/ADM	State Average %	State Average $/ADM
Instruction	52.5%	$2,877	57.6%	$3,037	58.6%	$2,556
Student Support	3.9%	$215	3.1%	$166	5.3%	$232
Instructional Support	2.2%	$121	2.1%	$109	2.8%	$123
District Administration	7.1%	$389	7.5%	$396	4.0%	$177
School Administration	4.8%	$265	4.3%	$225	5.4%	$234
District Support	19.8%	$1,083	15.9%	$838	16.2%	$708
Other	9.6%	$525	9.6%	$504	7.6%	$334
Total	100.0%	$5,476	100.0%	$5,276	100.0%	$4,250
Debt Service in Addition to Above		$0		$47		$147

District Expenditures
- District
- Community Group Avg.
- State Average

Avg. H.S. Curriculum (# of Courses & Units Offered in Selected Subject Areas)

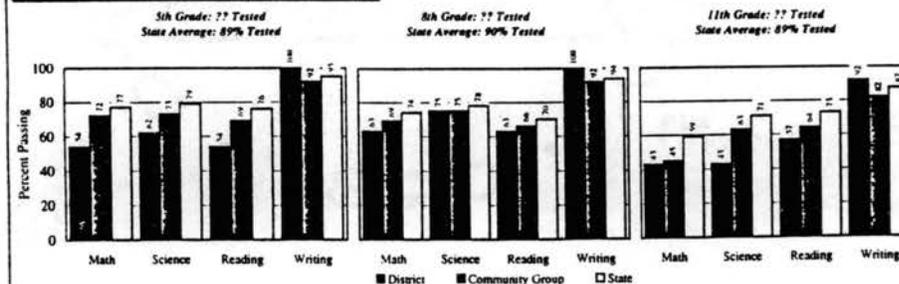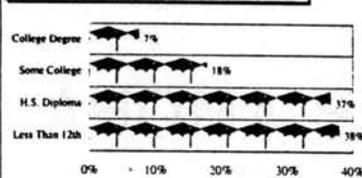|	District Courses	District Units	Community Group Avg. Courses	Community Group Avg. Units	State Average Courses	State Average Units
Language Arts	5.0	5.0	6.2	5.6	10.5	7.1
Science	4.0	4.0	4.5	4.4	7.4	5.5
Math	5.0	5.0	5.3	5.0	8.8	6.1
Social Studies	4.0	4.0	4.9	4.3	7.6	4.8
Fine Arts	1.0	1.0	2.3	2.2	4.8	4.2
Languages	2.0	2.0	1.5	1.5	3.6	3.0
Total	21.0	21.0	24.7	22.9	42.6	30.7

WALNUT SCHOOL *Profiles 1996 - District Report*

Student Performance

Iowa Test of Basic Skills (ITBS) by National Percentile Rank

3rd Grade: 74% Tested (State Average: 89% Tested)

Reading · Language · Social Studies · Sources of Info. · Math · Science · Composite

■ District ■ Community Group □ State

7th Grade: 57% Tested (State Average: 90% Tested)

Reading · Language · Social Studies · Sources of Info. · Math · Science · Composite

■ District ■ Community Group □ State

Oklahoma Core Curriculum Tests by Percent Passing

| 5th Grade: 81% Tested | 8th Grade: 88% Tested | 11th Grade: 93% Tested |
| State Average: 89% Tested | State Average: 90% Tested | State Average: 89% Tested |

Math · Science · Reading · Writing
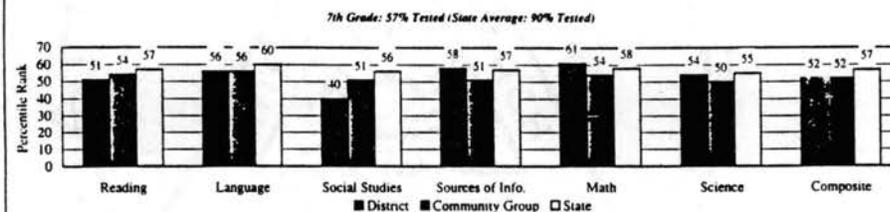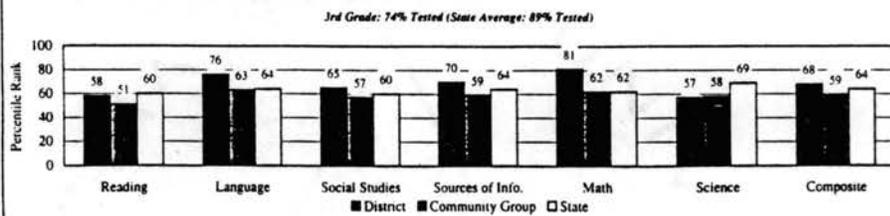
■ District ■ Community Group □ State

Other High School Performance Measures

	District	Community Group Average	State Average
Dropout Rate	0.0%	4.2%	5.4%
Graduation Rate	84.6%	84.9%	74.0%
Average GPA of Seniors	2.7	3.0	2.9
Advanced Placement Tests Taken	0	0.2	7.0
Number Scoring College Credit	0	0.0	3.2
Number of Vo-Tech Enrollments	13	43.9	95.3
Number of Vo-Tech Completers	6	9.8	26.3
% Taking ACT	**	54.7%	57.2%
Average ACT Score	**	18.8	20.5
% Completing College Bound Curriculum	27.0%	60.3%	66.0%
Out-of-State College Going Rate	0.0%	3.2%	8.0%
Oklahoma College Going Rate	26.0%	42.2%	51.0%
Oklahoma College Freshmen with GPA 2.0 or Greater	50.0%	68.0%	70.0%
Oklahoma College Completion Rate	40.0%	33.9%	33.0%

Profiles 1996 - District Report

WILLOW SCHOOL

The School District

This District offers grades KG-8. It is comprised of 1 Elementary School(s), 0 MS/JHS, and 0 High School(s). The District covers 71 square miles, with 1.0 students per square mile.

1994-95 ADM: 76
1995-96 ADM: 72

Programs	District		Community Group Avg.	State Avg.
Gifted/Talented	5.6%		12.8%	13.7%
Special Education	5.6%		13.6%	11.7%
Free/Reduced Lunch	83.8%		66.1%	43.7%
District Newsletter	No	Yes:	56.0%	56.7%
Community/Parent Outreach Programs	No	Yes:	49.0%	60.1%
Summer School for Remediation	No	Yes:	17.0%	28.3%
Summer School for Non-Remediation	No	Yes:	17.5%	27.2%
Advanced Placement Courses Offered	NA		0.04	0.69
Achievement Tests (such as ITBS) Given in Grades Other than 3rd & 7th :	Yes	Yes:	83.0%	78.6%

Classroom Teachers & Professional Support

	District	Community Group Avg.	State Avg.
# of Teachers (FTE)	5.5	19.2	64.0
Students per Teacher	13.0	14.2	17.4
Average Salary of Teachers (including Fringe)	$29,473	$30,095	$30,814
Teachers with Advanced Degree	45.5%	32.3%	35.0%
Average Years of Teaching Experience	14.5	11.8	12.3
# of Other Professional Staff (FTE)	0.0	1.0	5.3
# of Teacher Assistants (FTE)	2.0	3.5	10.4

Administration

	District	Community Group Avg.	State Avg.
# of School & District Administrators	1.0	2.3	5.6
Average Salary of Administrators (including Fringe)	$44,500	$46,264	$49,745
Teachers per Administrator	5.5	8.3	11.5

District Revenue *

	District	Community Group Avg.	State Avg.
Local & County	26.2%	23.2%	31.3%
State	55.7%	62.3%	59.4%
Federal	18.1%	14.5%	9.3%

District Expenditures *

	District %	District $/ADM	Community Group Avg. %	Community Group Avg. $/ADM	State Average %	State Average $/ADM
Instruction	63.8%	$3,721	57.6%	$3,037	58.6%	$2,556
Student Support	0.0%	$2	3.1%	$166	5.3%	$232
Instructional Support	0.0%	$0	2.1%	$109	2.8%	$123
District Administration	7.5%	$438	7.5%	$396	4.0%	$177
School Administration	0.0%	$2	4.3%	$225	5.4%	$234
District Support	19.5%	$1,140	15.9%	$838	16.2%	$708
Other	9.0%	$528	9.6%	$504	7.6%	$334
Total	100.0%	$5,830	100.0%	$5,276	100.0%	$4,250
Debt Service in Addition to Above		$0		$47		$147

District Expenditures
■ District
■ Community Group Avg.
□ State Average

Symbol Key

- NA = Not Applicable
- FTR = Failed to Respond
- ?? = Incomplete Data Provided by School
- DNA = Data Not Available from Providing Agency
- ** = Data Protected by Privacy Law (Fewer than 6 Students)
- FTE = Full Time Equivalent
- ADM = Average Daily Membership (Average Number of Students)

The District Community

The "District Community" refers to all persons who resided within the boundaries of this school district as of the 1990 Census.

Socioeconomic Data

	District Community	State Average
Population	553	5,781
Population per square mile	7.8	80.7
Ethnic Makeup:		
Caucasian	42%	66%
Black	9%	10%
Asian	0%	2%
Hispanic	0%	5%
Native American	49%	17%
Average Household Income	$16,375	$21,176
Average Property Valuation Per Student	$28,258	$19,888
Unemployment Rate	10%	7%
Poverty Rate	31%	17%

1995-96 Juvenile Offenders & Offenses

	No Offenders	
There was 1 offender in every ___ students.		40.7
Each offender committed an average of ___ offenses.	0.0	1.3
___ % of offenders were gang members.	0%	7%

Educational Attainment of Adults (Age 20+)

		State Avg.
College Degree	5%	17%
Some College	13%	28%
H.S. Diploma	41%	31%
Less Than 12th	40%	24%

Office of Accountability

3033 N. Walnut Avenue, Suite 103 E
Oklahoma City, OK 73105-2833
Phone: (405) 522-4578
Fax: (405) 522-4581

Avg. H.S. Curriculum (# of Courses & Units Offered in Selected Subject Areas)

	District Courses	District Units	Community Group Avg. Courses	Community Group Avg. Units	State Average Courses	State Average Units
Language Arts	NA	NA	6.2	5.6	10.5	7.1
Science	NA	NA	4.5	4.4	7.4	5.5
Math	NA	NA	5.3	5.0	8.8	6.1
Social Studies	NA	NA	4.9	4.3	7.6	4.8
Fine Arts	NA	NA	2.3	2.2	4.8	4.2
Languages	NA	NA	1.5	1.5	3.6	3.0
Total	NA	NA	24.7	22.9	42.6	30.7

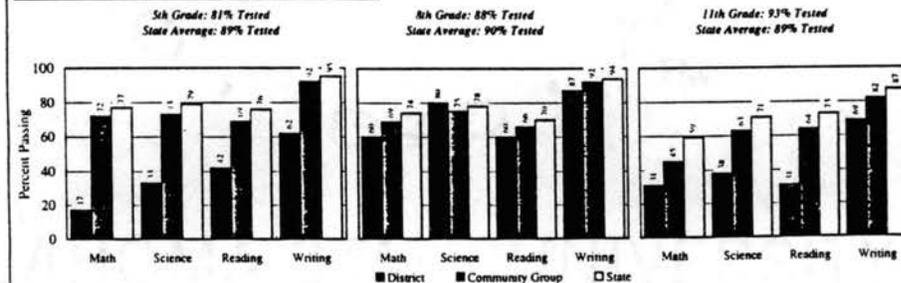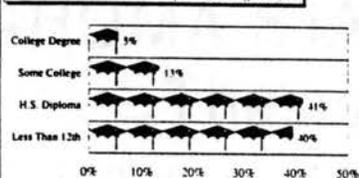# WILLOW SCHOOL *Profiles 1996 - District Report*

Student Performance

Iowa Test of Basic Skills (ITBS) by National Percentile Rank

3rd Grade: 91% Tested (State Average: 89% Tested)

Percentile Rank (0–70)

	Reading	Language	Social Studies	Sources of Info.	Math	Science	Composite
District	36	45	53	39	40	56	44
Community Group	51	63	57	59	62	58	59
State	50	64	60	64	62	69	64

■ District ■ Community Group □ State

7th Grade: 100% Tested (State Average: 90% Tested)

Percentile Rank (0–60)

	Reading	Language	Social Studies	Sources of Info.	Math	Science	Composite
District	41	52	40	46	59	53	47
Community Group	54	56	51	51	54	50	52
State	57	60	56	57	58	55	57

■ District ■ Community Group □ State

Oklahoma Core Curriculum Tests by Percent Passing

5th Grade: 100% Tested
State Average: 89% Tested

8th Grade: 100% Tested
State Average: 90% Tested

11th Grade: Not Offered
State Average: 89% Tested

Percent Passing (0–100)

	Math	Science	Reading	Writing
5th Grade District	72			
8th Grade				
11th Grade	NA	NA	NA	NA

■ District ■ Community Group □ State

Other High School Performance Measures

	District	Community Group Average	State Average
Dropout Rate	NA	4.2%	5.4%
Graduation Rate	NA	84.9%	74.0%
Average GPA of Seniors	NA	3.0	2.9
Advanced Placement Tests Taken	NA	0.2	7.0
Number Scoring College Credit	NA	0.0	3.2
Number of Vo-Tech Enrollments	NA	43.9	95.3
Number of Vo-Tech Completers	NA	9.8	26.3
% Taking ACT	NA	54.7%	57.2%
Average ACT Score	NA	18.8	20.5
% Completing College Bound Curriculum	NA	60.3%	66.0%
Out-of-State College Going Rate	NA	3.2%	8.0%
Oklahoma College Going Rate	NA	42.2%	51.0%
Oklahoma College Freshmen with GPA 2.0 or Greater	NA	68.0%	70.0%
Oklahoma College Completion Rate	NA	33.9%	33.0%

Profiles 1996 - District Report

LAUREL
SCHOOL

Symbol Key

NA = Not Applicable
FTR = Failed to Respond
?? = Incomplete Data Provided by School
DNA = Data Not Available from Providing Agency
*** = Data Protected by Privacy Law (Fewer than 6 Students)*
FTE = Full Time Equivalent
ADM = Average Daily Membership (Average Number of Students)

The District Community

The "District Community" refers to all persons who resided within the boundaries of this school district as of the 1990 Census.

Socioeconomic Data

	District Community	State Average
Population	733	5,781
Population per square mile	36.7	80.7
Ethnic Makeup:		
Caucasian	7%	66%
Black	0%	10%
Asian	0%	2%
Hispanic	1%	5%
Native American	93%	17%
Average Household Income	$21,838	$21,176
Average Property Valuation Per Student	$4,569	$19,888
Unemployment Rate	5%	7%
Poverty Rate	27%	17%

1995-96 Juvenile Offenders & Offenses

There was 1 offender in every ___ students.	No Offenders	40.7
Each offender committed an average of ___ offenses	0.0	1.3
___ % of offenders were gang members.	0%	7%

Educational Attainment of Adults (Age 20+)

		State Avg
College Degree	7%	17%
Some College	21%	28%
H.S. Diploma	26%	31%
Less Than 12th	46%	24%

The School District

This District offers grades EC-8. It is comprised of 1 Elementary School(s), 0 MS/JHS, and 0 High School(s). The District covers 20 square miles, with 7.9 students per square mile.

1994-95 ADM: 134
1995-96 ADM: 158

Programs

	District		Community Group Avg.	State Avg.
Gifted/Talented	10.1%		12.8%	13.7%
Special Education	27.2%		13.6%	11.7%
Free/Reduced Lunch	100.1%		66.1%	43.7%
District Newsletter	Yes	Yes:	56.0%	56.7%
Community/Parent Outreach Programs	No	Yes:	49.0%	60.1%
Summer School for Remediation	Yes	Yes:	17.0%	28.3%
Summer School for Non-Remediation	Yes	Yes:	17.5%	27.2%
Advanced Placement Courses Offered	NA		0.04	0.69
Achievement Tests (such as ITBS) Given in Grades Other than 3rd & 7th :	Yes	Yes:	83.0%	78.6%

Classroom Teachers & Professional Support

	District	Community Group Avg	State Avg
# of Teachers (FTE)	10.0	19.2	64.0
Students per Teacher	15.8	14.2	17.4
Average Salary of Teachers (including Fringe)	$29,428	$30,095	$30,814
Teachers with Advanced Degree	10.0%	32.3%	35.0%
Average Years of Teaching Experience	7.8	11.8	12.3
# of Other Professional Staff (FTE)	1.3	1.0	5.3
# of Teacher Assistants (FTE)	6.0	3.5	10.4

Administration

	District	Community Group Avg	State Avg
# of School & District Administrators	1.5	2.3	5.6
Average Salary of Administrators (including Fringe)	$42,342	$46,264	$49,745
Teachers per Administrator	6.8	8.3	11.5

District Revenue *

	District	Community Group Avg	State Avg
Local & County	8.6%	23.2%	31.3%
State	64.3%	62.3%	59.4%
Federal	27.2%	14.5%	9.3%

District Expenditures *

	District		Community Group Avg		State Average	
	%	$/ADM	%	$/ADM	%	$/ADM
Instruction	60.1%	$3,443	57.6%	$3,037	58.6%	$2,556
Student Support	1.9%	$107	3.1%	$166	5.3%	$232
Instructional Support	1.1%	$62	2.1%	$109	2.8%	$123
District Administration	9.2%	$525	7.5%	$396	4.0%	$177
School Administration	2.1%	$121	4.3%	$225	5.4%	$234
District Support	16.4%	$937	15.9%	$838	16.2%	$708
Other	9.3%	$531	9.6%	$504	7.6%	$334
Total	100.0%	$5,726	100.0%	$5,276	100.0%	$4,250
Debt Service in Addition to Above		$0		$47		$147

District Expenditures

■ District
■ Community Group Avg.
□ State Average

(Instruction, Student Support, Instructional Support, District Administration, School Administration, District Support, Other)

Avg. H.S. Curriculum (# of Courses & Units Offered in Selected Subject Areas)

	District		Community Group Avg		State Average	
	Courses	Units	Courses	Units	Courses	Units
Language Arts	NA	NA	6.2	5.6	10.5	7.1
Science	NA	NA	4.5	4.4	7.4	5.5
Math	NA	NA	5.3	5.0	8.8	6.1
Social Studies	NA	NA	4.9	4.3	7.6	4.8
Fine Arts	NA	NA	2.3	2.2	4.8	4.2
Languages	NA	NA	1.5	1.5	3.6	3.0
Total	NA	NA	24.7	22.9	42.6	30.7

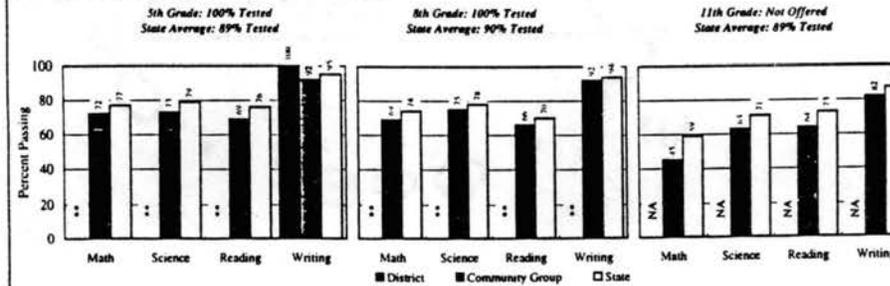# LAUREL SCHOOL *Profiles 1996 - District Report*

Student Performance

Iowa Test of Basic Skills (ITBS) by National Percentile Rank
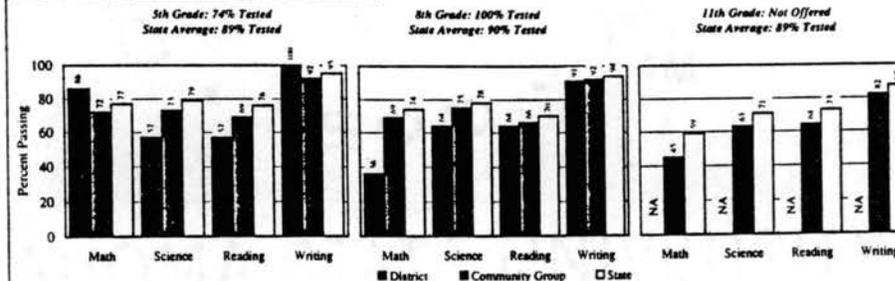
3rd Grade: 70% Tested (State Average: 89% Tested)

	Reading	Language	Social Studies	Sources of Info.	Math	Science	Composite
District	51	86	58	60	67	53	64
Community Group	51	63	57	59	62	58	59
State	60	64	60	64	62	69	64

7th Grade: 58% Tested (State Average: 90% Tested)

	Reading	Language	Social Studies	Sources of Info.	Math	Science	Composite
District	40	44	49	57	43	54	47
Community Group	54	56	51	51	54	50	52
State	57	60	56	57	58	55	57

Oklahoma Core Curriculum Tests by Percent Passing

5th Grade: 74% Tested — State Average: 89% Tested

8th Grade: 100% Tested — State Average: 90% Tested

11th Grade: Not Offered — State Average: 89% Tested

Categories: Math, Science, Reading, Writing
Legend: District ■ Community Group ■ State □

Other High School Performance Measures

	District	Community Group Average	State Average
Dropout Rate	NA	4.2%	5.4%
Graduation Rate	NA	84.9%	74.0%
Average GPA of Seniors	NA	3.0	2.9
Advanced Placement Tests Taken	NA	0.2	7.0
Number Scoring College Credit	NA	0.0	3.2
Number of Vo-Tech Enrollments	NA	43.9	95.3
Number of Vo-Tech Completers	NA	9.8	26.3
% Taking ACT	NA	54.7%	57.2%
Average ACT Score	NA	18.8	20.5
% Completing College Bound Curriculum	NA	60.3%	66.0%
Out-of-State College Going Rate	NA	3.2%	8.0%
Oklahoma College Going Rate	NA	42.2%	51.0%
Oklahoma College Freshmen with GPA 2.0 or Greater	NA	68.0%	70.0%
Oklahoma College Completion Rate	NA	33.9%	33.0%

Profiles 1996 - District Report

LINDEN SCHOOL

The School District

This District offers grades EC-8. It is comprised of 1 Elementary School(s), 0 MS/JHS, and 0 High School(s). The District covers 12 square miles, with 8.3 students per square mile.

1994-95 ADM: 101
1995-96 ADM: 100

Programs	District		Community Group Avg.	State Avg.
Gifted/Talented	0.0%		12.8%	13.7%
Special Education	21.0%		13.6%	11.7%
Free/Reduced Lunch	97.9%		66.1%	43.7%
District Newsletter	No	Yes	56.0%	56.7%
Community/Parent Outreach Programs	Yes	Yes	49.0%	60.1%
Summer School for Remediation	Yes	Yes	17.0%	28.3%
Summer School for Non-Remediation	No	Yes	17.5%	27.2%
Advanced Placement Courses Offered	NA		0.04	0.69
Achievement Tests (such as ITBS) Given in Grades Other than 3rd & 7th :	Yes	Yes	83.0%	78.6%

Classroom Teachers & Professional Support

	District	Community Group Avg.	State Avg.
# of Teachers (FTE)	9.0	19.2	64.0
Students per Teacher	11.1	14.2	17.4
Average Salary of Teachers (including Fringe)	$29,221	$30,095	$30,814
Teachers with Advanced Degree	22.2%	32.3%	35.0%
Average Years of Teaching Experience	17.1	11.8	12.3
# of Other Professional Staff (FTE)	0.0	1.0	5.3
# of Teacher Assistants (FTE)	2.0	3.5	10.4

Administration

	District	Community Group Avg.	State Avg.
# of School & District Administrators	2.0	2.3	5.6
Average Salary of Administrators (including Fringe)	$47,067	$46,264	$49,745
Teachers per Administrator	4.5	8.3	11.5

District Revenue "

	District	Community Group Avg.	State Avg.
Local & County	8.4%	23.2%	31.3%
State	76.3%	62.3%	59.4%
Federal	15.3%	14.5%	9.3%

District Expenditures "

	District %	District $/ADM	Community Group Avg %	Community Group Avg $/ADM	State Average %	State Average $/ADM
Instruction	53.5%	$3,719	57.6%	$3,037	58.6%	$2,556
Student Support	5.3%	$369	3.1%	$166	5.3%	$232
Instructional Support	0.2%	$17	2.1%	$109	2.8%	$123
District Administration	13.6%	$946	7.5%	$396	4.0%	$177
School Administration	6.1%	$426	4.3%	$225	5.4%	$234
District Support	11.6%	$807	15.9%	$838	16.2%	$708
Other	9.5%	$663	9.6%	$504	7.6%	$334
Total	100.0%	$6,946	100.0%	$5,276	100.0%	$4,250
Debt Service in Addition to Above		$6		$47		$147

District Expenditures
■ District
■ Community Group Avg.
□ State Average

Symbol Key

NA = Not Applicable
FTR = Failed to Respond
?? = Incomplete Data Provided by School
DNA = Data Not Available from Providing Agency
** = Data Protected by Privacy Law (Fewer than 6 Students)
FTE = Full Time Equivalent
ADM = Average Daily Membership (Average Number of Students)

The District Community

The "District Community" refers to all persons who resided within the boundaries of this school district as of the 1990 Census.
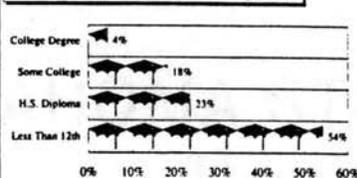
Socioeconomic Data

	District Community	State Average
Population	571	5,781
Population per square mile	47.6	80.7
Ethnic Makeup:		
Caucasian	4%	66%
Black	0%	10%
Asian	0%	2%
Hispanic	0%	5%
Native American	96%	17%
Average Household Income	$12,040	$21,176
Average Property Valuation Per Student	$4,535	$19,888
Unemployment Rate	21%	7%
Poverty Rate	43%	17%

1995-96 Juvenile Offenders & Offenses

	District	State
There was 1 offender in every __ students.	34.3	40.7
Each offender committed an average of __ offenses.	1.3	1.3
__ % of offenders were gang members.	67%	7%

Educational Attainment of Adults (Age 20+)

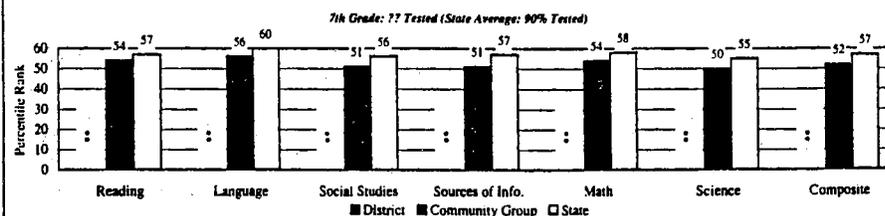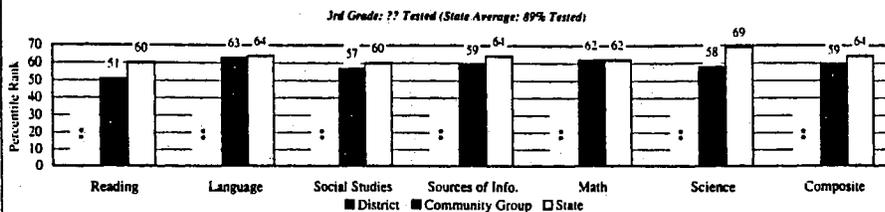|		State Avg.
College Degree	4%	17%
Some College	18%	28%
H.S. Diploma	23%	31%
Less Than 12th	54%	24%

Office of Accountability

3033 N. Walnut Avenue, Suite 103 E
Oklahoma City, OK 73105-2833
Phone: (405) 522-4578
Fax: (405) 522-4581

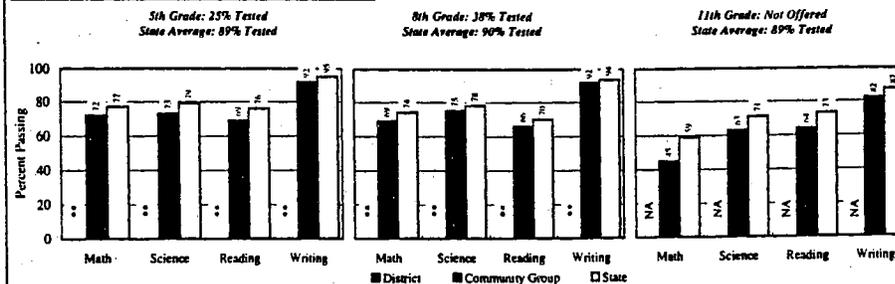### Avg. H.S. Curriculum (# of Courses & Units Offered in Selected Subject Areas)

	District Courses	District Units	Community Group Avg. Courses	Community Group Avg. Units	State Average Courses	State Average Units
Language Arts	NA	NA	6.2	5.6	10.5	7.1
Science	NA	NA	4.5	4.4	7.4	5.5
Math	NA	NA	5.3	5.0	8.8	6.1
Social Studies	NA	NA	4.9	4.3	7.6	4.8
Fine Arts	NA	NA	2.3	2.2	4.8	4.2
Languages	NA	NA	1.5	1.5	3.6	3.0
Total	NA	NA	24.7	22.9	42.6	30.7

LINDEN SCHOOL *Profiles 1996 - District Report*

Student Performance

Iowa Test of Basic Skills (ITBS) by National Percentile Rank

3rd Grade: ?? Tested (State Average: 89% Tested)

7th Grade: ?? Tested (State Average: 90% Tested)

Oklahoma Core Curriculum Tests by Percent Passing

5th Grade: 25% Tested — State Average: 89% Tested

8th Grade: 38% Tested — State Average: 90% Tested

11th Grade: Not Offered — State Average: 89% Tested

Other High School Performance Measures

	District	Community Group Average	State Average
Dropout Rate	NA	4.2%	5.4%
Graduation Rate	NA	84.9%	74.0%
Average GPA of Seniors	NA	3.0	2.9
Advanced Placement Tests Taken	NA	0.2	7.0
Number Scoring College Credit	NA	0.0	3.2
Number of Vo-Tech Enrollments	NA	43.9	95.3
Number of Vo-Tech Completers	NA	9.8	26.3
% Taking ACT	NA	54.7%	57.2%
Average ACT Score	NA	18.8	20.5
% Completing College Bound Curriculum	NA	60.3%	66.0%
Out-of-State College Going Rate	NA	3.2%	8.0%
Oklahoma College Going Rate	NA	42.2%	51.0%
Oklahoma College Freshmen with GPA 2.0 or Greater	NA	68.0%	70.0%
Oklahoma College Completion Rate	NA	33.9%	33.0%

APPENDIX D

PRESS RELEASE – DAILY OKLAHOMAN

NOVEMBER 19, 1997

State Evaluation Teams to Visit 8 Low-Scoring Public Schools[1]

Jim Killackey
11/19/1997

State evaluations teams will visit eight Oklahoma public schools where students scored poorly on the Iowa Test of Basic Skills for a second consecutive academic year.

"We want to do everything we can to help these schools achieve success," state schools Superintendent Sandy Garrett said Tuesday.

The low-performing list includes #####'s ###### Intermediate School and ###### Elementary School, and ######'s ###### Elementary School. The other elementary schools are in ######, ######, ######, ###### and ######.[2]

A school is considered low performing if its students score below the 25th percentile in Oklahoma and at or below the 49th percentile on the national average on the Iowa tests, which are given each spring to students in the third and seventh grades.

During the coming weeks, teams from the state Education Department will visit the eight schools, offering help in curriculum, instruction and student assessment, Garrett said.

The eight schools are required to submit progress reports in April and will receive a second state visit before the end of the academic year.

The schools had low scores during the last two years.

By law, if a school is low performing for three consecutive years, it becomes a "high-challenge" school.

A school on the list for five years in a row can face state intervention. The state Board of Education has closed two schools for low test scores - Alluwe in 1992 and Langston in 1993.

Garrett said 40 other schools are on the low-performing list for the first time. That list includes Tulsa's Cherokee, Lindsey, Marshall, McKinley, Peary, Penn, Roosevelt, Hamilton and Madison schools and Oklahoma City's Westwood Elementary School.

Elementary or middle schools listed are in Bell, Greasy, Geary, Cement, Gracemont, Goodland, Grant, Robin Hill, Bishop, Stony Point, Gypsy, Keifer, Kinta, Mannsville, Red Oak, Haworth, Tom, Boynton, Delaware, Crutcho, Millwood, Schulter, Perkins-Tryon, Pleasant Grove, Nashoba, Hammon, Gum Springs, Dunca Lee, Davidson and Bartlesville Phillips.

Representatives from the 40 schools met with state education officials in September to receive information on professional development and federal aid.

"While these schools represent a small portion of our total school sites of more than 1,800, the futures of the boys and girls at these schools are equally important," Garrett said.

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[2] School names have been blocked to protect anonymity of survey participants.

APPENDIX E

INSTITUTIONAL REVIEW BOARD

APPROVAL FORM

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
HUMAN SUBJECTS REVIEW

Date: 03-19-98   **IRB #:** ED-98-096

Proposal Title: A STUDY OF THE RELATIONSHIP BETWEEN READING INSTRUCTION
METHODS AND READING ACHIEVEMENT IN OKLAHOMA

Principal Investigator(s): Leah Engelhardt, Marianne M. Morgan

Reviewed and Processed as: Exempt

**Approval Status Recommended by Reviewer(s):** Approved

ALL APPROVALS MAY BE SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT
NEXT MEETING, AS WELL AS ARE SUBJECT TO MONITORING AT ANY TIME DURING THE
APPROVAL PERIOD.
APPROVAL STATUS PERIOD VALID FOR DATA COLLECTION FOR A ONE CALENDAR YEAR
PERIOD AFTER WHICH A CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE
SUBMITTED FOR BOARD APPROVAL.
ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

Comments, Modifications/Conditions for Approval or Disapproval are as follows:
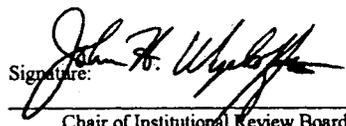
Signature: _____   Date: April 14, 1998
            Chair of Institutional Review Board
cc: Marianne M. Morgan

APPENDIX F

LETTER TO DISTRICT SUPERINTENDENTS

March 20, 1998

_____, Superintendent
_____Public Schools

_____
_____, OK, _____

Dear _____,

  I am a doctoral student at Oklahoma State University pursuing a degree with emphasis in elementary school curriculum and am preparing to conduct my dissertation research in the area of reading instruction. I am very interested in examining the ways that teachers teach and students learn reading. This letter is to request your permission to conduct research in the elementary school in your district.

  The purpose of my research is to investigate the ways reading instruction is conducted in classrooms in selected schools in Oklahoma. I would like to conduct this study during the month of April, 1998. This investigation will be done in a single visit to each school using observations, teacher interviews and questionnaires. The observations will be recorded by taking notes and with the use of an audio tape recorder. I can assure you that I will take every precaution not to interfere in any way with instructional programs or class schedules. I will arrange visits with teachers which will minimize interference.

  The study requires no cost to the public school system. Subjects will be voluntarily solicited. No one will participate in the study without consenting to do so. Please be assured that the school system, administration, teachers and students will remain anonymous.

  You may contact me if you have any questions regarding this proposal at my home number, (409) 579-0302, or at my school number, (405) 692-5677, or you may call my advisor, Dr. Leah Engelhardt, at (405) 744-9052. You may also contact Gay Clarkson, Institutional Review Board Executive Secretary, 305 Whitehurst, Oklahoma State University, Stillwater, OK 74078; telephone number (405) 744-5700.

  Thank you for your consideration. I look forward to speaking with you in regard to this matter, and will call in one week to discuss it.

          Sincerely,

          Marianne M. Morgan

APPENDIX G

LETTER TO SCHOOL PRINCIPALS

March 20, 1998

_____, Principal
_____Elementary School
_____
_____, OK _____

Dear _____,

     I am a doctoral student at Oklahoma State University pursuing a degree with emphasis in elementary school curriculum and am preparing to conduct my dissertation research in the area of reading instruction methods. I am very interested in examining the ways that teachers teach and students learn reading. This letter is to request your permission to conduct research in your school.

     The purpose of my research is to investigate the ways reading instruction is conducted in classrooms in selected schools in Oklahoma. I would like to perform this study during the month of April, 1998. The investigation will be done in a single visit to your school using observations, teacher interviews and questionnaires. The observations will be recorded by taking notes and with the use of an audio tape recorder. I can assure that I will take every precaution not to interfere in any way with instructional programs or class schedules. I will arrange visits with teachers which will minimize interference. As a teacher myself, I am aware that teacher time is valuable.

     The study requires no cost to your school. Subjects will be voluntarily solicited. No one will participate in the study without consenting to do so. Please be assured that the school, administrators, teachers and students will remain anonymous.

     You may contact me if you have any questions regarding this proposal at my home number, (405) 579-0302, or at my school number, (405) 692-5677. You may prefer to call my advisor, Dr. Leah Engelhardt, at (405) 744-9502, or to contact Gay Clarkson, Institutional Review Board Executive Secretary, 305 Whitehurst, Oklahoma State University, Stillwater, OK, 74078; telephone number (405) 744-5700.

     Thank you for your consideration. I look forward to speaking with you in regard to this matter, and will call in one week to discuss it.

                         Sincerely,

                         Marianne M. Morgan

APPENDIX H

LETTER TO TEACHERS

Dear Teacher:

     I am a doctoral student at Oklahoma State University pursuing a degree with emphasis in elementary school curriculum and am currently conducting my dissertation research in the area of reading instruction methods. I am very interested in examining the ways that teachers teach and students learn reading. I have been given permission to conduct my research in your district and would like you to be a participant in the study.

     If possible, I would like to schedule one session with you in April or May of this year. During this time you would be asked to complete a questionnaire and to allow me to conduct a short, thirty-minute interview with you.

     In return, I will share, at your request, information regarding the findings about different methods of reading instruction and their relationships to the ways in which students learn to read. This information may provide you with a greater understanding of the differences among teachers, and may provide you with ideas for future implementation in your classroom. I will be available to answer questions as needed. Confidentiality will be maintained in the collection of data. Neither names or grade levels of participant teachers will be used at any time in this study.

     Because I have been an educator for twenty-one years, I am well aware of how valuable your classroom time is. I can assure you that I will take every precaution not to interfere in any way with your instructional program or class schedule. I will arrange visits with you which will minimize interference. Your participation in this study will be invaluable. The information provided by this research will present evidence of effective reading instructional methods to colleges of education and to future teachers.

     I look forward to hearing from you regarding this project. Please use the enclosed self-addressed stamped envelope to reply to this request. You may contact me at home at (405) 579-0302 or at (405) 692-5677 at school if you have any questions or concerns.

                          Sincerely,

                          Marianne M. Morgan

APPENDIX I

SUPERINTENDENT/PRINCIPAL

CONSENT FORM

CONSENT FORM

I hereby authorize Marianne M. Morgan to conduct teacher
interview in my school or district as part of her doctoral research. The
purpose of the study is to provide evidence of the nature of reading
instructional environments in selected elementary schools in Oklahoma.

Signature_____

Title_____

District_____

Date_____

APPENDIX J

SUBJECT CONSENT FORM

CONSENT FORM

I, _____, hereby authorize or direct Marianne Morgan to perform the tasks described in the attached letter.

This study is being conducted as part of an investigation entitled <u>A Study of the Relationship Between Reading Instruction and Student Achievement in Oklahoma</u>. The purpose of this study is to provide evidence of the nature of reading programs and instructional methods in selected elementary schools in Oklahoma. Further, this study will determine whether there is a relationship between the program used and reading achievement among elementary school students in this state.

I understand that participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withhold my consent and participation in this project at any time without penalty after notifying the project investigator.

Marianne Morgan may be contacted concerning this study at (405) 579-0302. I may also contact Gay Clarkson, Institutional Review Board Executive Secretary, 305 Whitehurst, Oklahoma State University, Stillwater, OK, 74078; telephone number (405) 744-5700.

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy has been given to me.

Date_____   Time_____am/pm

Signed: _____
                 Signature of Subject

I certify that I have personally explained all elements of this form to the subjects or his/her representative before requesting the subject or his/her representative to sign it.

_____
Marianne Morgan, Project Investigator

VITA

Marianne Marie Morgan

Candidate for the Degree of

Doctor of Education

Thesis: HIGHER AND LOWER READING ACHIEVEMENT IN RURAL
OKLAHOMA ELEMENTARY SCHOOLS: A DESCRIPTIVE
COMPARISON OF CONTEXT AND INSTRUCTIONAL ENVIRONMENT

Major Field: Curriculum and Instruction

Biographical:

Personal Data: Born in Vancouver, Washington, May 5, 1947, the daughter of
Kenneth and Mary Ellen Freeman.

Education: Graduated from Lawton High School, Lawton, Oklahoma in May,
1965; received Bachelor of Science degree in Education from University
of Central Oklahoma, Edmond, Oklahoma in May, 1969; received Master
of Library and Information Studies degree from University of Oklahoma,
Norman, Oklahoma in May, 1986. Completed the requirements for the
Doctor of Education degree with a major in Curriculum and Instruction at
Oklahoma State University in December, 2000.

Professional Experience: Employed by Oklahoma City Public Schools as a
classroom teacher; Oklahoma City Public Schools as a Library Media
Specialist; Moore Public Schools as a Library Media Specialist.

Professional Memberships: National Education Association; Oklahoma
Education; Moore Association of Classroom Teachers; American Library
Association; Oklahoma Library Association; Oklahoma Association of
School Library Media Specialists; Phi Delta Kappa.