A STUDY OF THE INCOME FACTOR IN THE 2006 KANSAS STANDARD OF EXCELLENCE SCHOOLS

by

M. KATHLEEN (LOMSHEK) BROWN-CECORA

B.S., Pittsburg State University, 1979
M.S., Pittsburg State University 1983

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Curriculum and Instruction
College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2008

Abstract

This statewide study examined the relationship between building income level and performance level percentage distribution, using 502 schools that earned a 2005-06 Kansas Standard of Excellence (SOE) building-wide award for reading or math. It originated from the premise that excellence is excellence, no matter the setting or income level of a school. A new baseline of data began in 2005-06 due to changes in the Kansas assessments, including more grades being tested than in previous years. The much larger database more accurately reflected the achievement of low-income students in Kansas. Decades of literature were reviewed, addressing influences on the development of Kansas standards, assessments, and the SOE award; the lifelong significance of income levels and achievement; high achievement for low-income students; and the pursuit of excellence through equitable educational reform. For purposes of this study, SOE schools were sorted into six designated types of buildings based on percentages of students eligible for free and reduced lunches, assessed grade levels, and SOE subject award. Results were reported using aggregate building groups as the unit of analysis. A two-way, repeated-measures, mixed design ANOVA general linear model served as an appropriate method to examine means for significant differences. Low-income SOE schools were noticeably fewer than medium- or high-income schools, especially at the senior high level. Three types of buildings showed some significant mean differences, but generally income did not appear to be a major factor. High-income buildings appeared to have a slight advantage; in the Exemplary category, high-income buildings outperformed the others; in the lower performance categories, high-income buildings had significantly lower means. The mean differences for high-income middle school/junior high buildings showed mainly moderate to large differences; other significant differences were rated as small to moderate. SOE schools of a given educational level and of varying income levels generally had similar performance scores in most of the performance level categories. Overall, major differences in performances were not evident among the different income levels of SOE buildings.

A STUDY OF THE INCOME FACTOR IN THE 2006 KANSAS STANDARD OF EXCELLENCE SCHOOLS

by

M. KATHLEEN (LOMSHEK) BROWN-CECORA

B.S., Pittsburg State University, 1979
M.S., Pittsburg State University 1983

A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Curriculum and Instruction
College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2008

Approved by:

Major Professor
Dr. Charles Heerman

Copyright

Abstract

This statewide study examined the relationship between building income level and performance level percentage distribution, using 502 schools that earned a 2005-06 Kansas Standard of Excellence (SOE) building-wide award for reading or math. It originated from the premise that excellence is excellence, no matter the setting or income level of a school. A new baseline of data began in 2005-06 due to changes in the Kansas assessments, including more grades being tested than in previous years. The much larger database more accurately reflects the achievement of low-income students in Kansas. Decades of literature were reviewed, addressing influences on the development of Kansas standards, assessments, and the SOE award; the lifelong significance of income levels and achievement; high achievement for low-income students; and the pursuit of excellence through equitable educational reform. For purposes of this study, SOE schools were sorted into six designated types of buildings based on percentages of students eligible for free and reduced lunches, assessed grade levels, and SOE subject award. Results were reported using aggregate building groups as the unit of analysis. A two-way, repeated-measures, mixed design ANOVA general linear model served as an appropriate method to examine means for significant differences. Low-income SOE schools were noticeably fewer than medium- or high-income schools, especially at the senior high level. Three types of buildings showed some significant mean differences, but generally income did not appear to be a major factor. High-income buildings appeared to have a slight advantage; in the Exemplary category, high-income buildings outperformed the others; in the lower performance categories, high-income buildings had significantly lower means. This was most noticeable for high-income middle-school/junior high buildings; other significant differences were rated as small to moderate. SOE schools of a given educational level and of varying income levels generally had similar performance scores in most of the performance level categories. The results of this study could act as a springboard for examining educational practice at SOE schools and possibly inspiring other schools striving to reduce achievement gaps.

Table of Contents

List of Figures

List of Tables

Acknowledgements

My warmest thanks and regards go especially to the following people: Dr. Ben Smith, my first mentor at Kansas State University; Dr. Denise Salsbury of Ball State University, Muncie, Indiana, my dear friend whose example and persistent encouragement put me back on track more than once; Dr. David Hurford of Pittsburg State University, Pittsburg, Kansas for his time and generous assistance with the statistical methodology and analysis; Mr. Marty Courtois of KSU's Repository Services for his technical help with the electronic format of this dissertation; Dr. Paul Burden of KSU, whose advice was much appreciated; and Dr. Charles Heerman, my major professor, whose guidance opened new vistas of research and steered me to the finish line.

Dedication

To my mother and father, who instilled in me a deep love of learning and made all things seem possible.

To my husband, Reno Cecora, who saved my sanity on more than one occasion with his assistance, encouragement, and loving support.

To my children, especially Debbie, who gave me time alone and much help with meals and other daily necessities.

To my siblings, for their help, humor, and love expressed in multiple ways.

CHAPTER 1 - Introduction

The Kansas school year of 2005-2006 saw many changes in education that impacted state assessment results for reading and mathematics. This study addressed the assessment changes and results, focusing on the comparative performance of low-, medium-, and high-income schools that earned a Standard of Excellence (SOE) award. Curricular standards for reading and math were revised in 2003, specifying benchmarks and indicators for all grade levels K-12, instead of having benchmarks at only a few grade levels. New reading and math assessments with new performance labels and descriptions, based on the revised K-12 standards, were developed and given in 2005-06 at each grade level to all students from third to eighth grades, and once in high school, as required by the federal No Child Left Behind Act (NCLB) of 2002. A new baseline of data was thus established. Many schools administered assessments by computer and received immediate feedback on student performance; two-thirds of the Kansas schools in 2005-06 chose this option. Previously, Kansas assessed only one grade level per subject in elementary, middle, and high schools, without the state-wide computer option. Results of the state assessments determined which buildings and which grade levels in a building earned a Standard of Excellence designation, with criteria set by the Kansas State Board of Education (KSBE). A total of 4,567 grade-level and building Standard of Excellence awards were earned in 2006, far more than in previous years (Accountability Report, 2006). For decades, socioeconomic status (SES) has been shown to be a factor in student achievement. The school year 2005-06 saw an increase in the number of Kansas students qualifying for free or reduced lunches, especially those eligible for free lunches, indicating a more severe level of poverty for many families. Due to multiple elementary and middle grade levels tested in the spring of 2006, a tremendous increase occurred in the number of assessments given per subject and in the number of low-income students assessed per subject per building. Educators, therefore, had a larger database to analyze and interpret, more accurately reflecting the achievement of low-income students (Accountability Report, 2006).

Statement of the Problem

The purpose of this study was to determine if any significant performance differences existed on the 2005-06 state assessments for SOE schools of varying income levels. A new test cycle for reading and math in Kansas was begun in the school year of 2005-2006, constituting new baseline data. The new assessments, to be given annually in each grade from third through eighth and once in high school, were first administered in March and April of 2006. Based on revised standards, they differ notably from earlier assessments in schedule, structure, number of items per tested indicator, and presentation of content, with different performance labels for each category of achievement. Due to all these differences, no valid comparisons can be made with the 2005-06 assessment results and those of previous years (Accountability Report, 2006, p. 7). However, the trends evidenced and conclusions reached from the previous assessment data can point researchers towards specific areas that bear close scrutiny in the new assessment cycle.

One area of ongoing concern and emphasis in Kansas for many years has been that of increasing the achievement levels for low SES students and low-income schools. The KSDE Executive Summary states one of the greatest challenges for educators is "raising the mathematics achievement levels for students in poverty" (Accountability Report, 2006, p. 3). Kansas first specified that low SES students and other subgroups be targeted for improvement as part of an outcomes-based accreditation process initiated in 1992 (Kansas Quality Performance Accreditation, 1992). The same concern with the performance gap has been expressed year after year by the Kansas State Department of Education (KSDE):

> The one troubling note with test scores at all levels continued to be the disparity seen in the performance of students who qualify for free or reduced priced lunches as compared to those who do not . . . this achievement gap has become a priority for the State Board of Education" (Accountability Report, 2001, p. 1).

The federal No Child Left Behind Act (NCLB) of 2001 mandated a continual improvement progression. Results of the reading and math assessments are among the factors used to determine whether or not a school or district meets Adequate Yearly Progress (AYP) goals to comply with NCLB requirements. The AYP target must be met

by each sub-group (low-income students being one), as well as overall for buildings, districts, and the state (No Child Left Behind Act [NCLB], 2001).

Family socioeconomic status has been a strong predictor of school success or difficulty, eventual educational attainment, and income level. Evidence abounds from decades of studies that low-income students have a greater probability of low performance and behavior problems in school, a higher degree of reading and math difficulties, of failure, and of dropping out (Harris, 2006: Havighurst, 1962; Gates. 1997; Ma & Klinger, 2000; Wilson, 1999). The percentage of low-income families has increased over the years (U.S. Census Bureau Quick Facts, 2007; Kansas State Department of Education [KSDE] Planning and Research, 2004). The results are likely to be more families under stress as they struggle to survive day-to-day and are less able to provide effective parenting and modeling of educational values in the home (Alliance for Excellent Education, 2007; National Center for Children in Poverty [NCCP], 2008). The school year 2005-06 saw an increase in the percentage of Kansas students qualifying for free or reduced lunches, especially those eligible for free lunches, indicating a more severe level of poverty for many families (Accountability Report, 2006).

The business community, government, educators, and society at large have voiced concern about the impact of poverty, of poor education, and of dropouts on the country's economic, social, and civic well-being (Gates, 1997; NCCP, 2005; U.S. Department of Commerce, 2006; Wilson, 1999). The economic gap for accumulated wealth and earning potential between high school graduates and dropouts has been documented (Alliance for Excellent Education, 2007; Haycock, 2001; NCCP, 2008). The societal costs of poor or limited education are much higher than the cost of good education (Gates, 1997; Gouskova & Stafford, 2005; Wilson, 1999). Exemplary education for all students is one hope for interrupting the self-perpetuating cycle of poverty, with opportunities to learn provided along with strategies for learning (Alliance for Excellent Education, 2007; Shapiro, 2004).

How is this educational improvement for low-income schools and students to be accomplished? The Kansas Department of Education is using a system-wide reform approach, promoting research-based instructional methods in districts and schools, giving attention to parent and community relations and support, and connecting accreditation to

performance (Accountability Report, 2001, 2002, 2006; Kansas School Reform, 1992). Classroom factors in the affective domain (e.g., teacher expectations, attitudes, and behaviors toward students) are being emphasized, along with equitable instruction, equitable assessment, and development of equitable funding. A more consistent database is being accumulated, focused on student performance and disaggregated by subgroups, SES being one (see Appendix B). Statistical and anecdotal evidence of schools in Kansas and elsewhere breaking the pattern of low achievement with their low-income students gives hope (Delisio, 2002; Essex, 2006; Green and Forster, 2004; Kahlenberg, 2006; Standard and Poor's, 2007). A large increase in the number of Standard of Excellence schools occurred since the award's inception in 1995, especially since 2001 (Accountability Report, 2006). Perhaps the system-wide efforts within Kansas account contributed at least partly to the increase, detailed later in this chapter in the section *History of the Kansas Standard of Excellence Award*. The problem addressed by this study concerned the effects of an atmosphere of excellence on the performance scores for low-, medium-, and high-income SOE schools. Will the low SES performance gap persist among excellent schools, whether few or many students are eligible for free and reduced lunches?

Statement of the Significance of the Study

Just as multiple forms of assessment are needed to gain an accurate and more complete perception of a student's achievement and ability, multiple ways of examining educational performance data are necessary to perceive connections and possibilities. This study provided a relatively unique perspective on the variables of income level and achievement: using high-, medium-, and low-income schools distinguished by the SOE Building Award and comparing the distribution of the reading or math scores for each category of building. The results of this study form one baseline for longitudinal studies against which future data may be viewed and interpreted. The statistical picture from this study could have implications for truly educating students qualifying for free or reduced lunches, particularly in any school with a high percentage of eligible students. This sub-group traditionally has performed lower than students with higher income. The results might serve as a springboard for examining educational practice, for discussions, and for

decision-making about future instructional planning and funding as schools strive to reduce achievement gaps, required by NCLB. Statistically verified information might open the door for scrutiny of school, faculty, home, and student characteristics in SOE low-income schools. Such schools could serve as models for those schools still striving to close that achievement gap, sharing processes and strategies effective with low-income students. The SOE schools give evidence that excellence is excellence, whatever the income level of the school.

Context for the Study

Two theories warranted consideration and were central to this study of Kansas SOE schools. The theory that socioeconomic status influences school achievement has attracted attention since the 1960s. Researchers such as Havighurst (1962) and Coleman (1966) found that high SES students generally outperformed low SES students. Edmonds and Frederiksen (1979) and others since then have voiced an alternative theory: high achievement can be attained by low SES students and by low-income schools, with school characteristics more significant than family background. The information given in this section describes the background and elements of the two variables for SOE buildings in this study: school income level as determined by the percentage of free or reduced lunch participation and the school performance level percentages on Kansas assessments.

Pertinent events influenced and propelled the development of standards, assessments, and the Standard of Excellence Award in the state of Kansas. The ensuing summary of national events and the history of events in Kansas presents crucial elements of this development, along with performance level labels and criteria. Background facts on the relationship of income level to school achievement in Kansas, in-state trends since the 1990s in income and achievement, and the significance of these trends contribute additional depth and breadth to the context for this study.

Development of Kansas Standards, Assessments, and a Standard of Excellence

National Influences on Education

Standards and assessments development in Kansas had its foundation in events that impacted the entire country and raised serious questions about American education. The Soviet Union's launch of the satellite Sputnik in October 1957 focused American attention on the need for more scientific research, resulting in the establishment of the Defense Advanced Research Projects Agency (DARPA, originally ARPA) and the National Defense Education Act (NDEA) in 1958. Desegregation efforts included court cases and laws such as *Brown v. Board of Education of Topeka* in 1954 and the 1964 federal Civil Rights Act. The need for consistent, long-term data on school achievement prompted the voluntary National Assessment of Educational Progress (NAEP), mandated by Congress and first administered in 1969. The Carnegie Foundation and the Paideia Group undertook intensive studies of curriculum and instruction in the 1980s. Among the most influential studies and reports from this decade were *The Need for Quality, Educating Americans for the 21st Century, Action for Excellence, A Nation at Risk: The Imperative for Educational Reform,* and *Everybody Counts: A Report to the Nation on the Future of Mathematics Education.* The studies pointed to the need for consistent and higher standards, connected inadequate educational quality with future negative impacts on America, decried the lack of substantial data, and called for systemic reform of education. A study by the National Governors' Association (NGA) culminated in the 1991 report, *A Time for Results*, which led to the National Education Goals in 1999. By 1995, national standards had been developed for each subject; many states were developing standards using finished versions or drafts of the national ones, ideas from other states, and international standards. The formats and specificity varied widely, but all focused on outcomes at the end of grade twelve. Details concerning the national reports and studies are found in Chapter Two (Accountability Report, 2005-2006; Defense Advanced Research Projects Agency, 2003; Education Commission of the States, 1983; Everybody Counts, 1989; Finn, 1991; National Commission on Excellence in Education, 1983; National Science Board, 1982; National Science Foundation, 1994; Southern Regional Education Board, 1981; Toch, 1990; Wiles, 2005).

History of Kansas Standards and Assessments for Math and Reading

The spirit of systemic educational reform has engulfed Kansas since the 1980s, depicted by the timeline in Table 1.1. Kansas Governor John Carlin made educational reform the focus of his 1984 Message to the Kansas Legislature (State of the State Address), stressing that such reform was "an agenda for the future of Kansas" (Carlin, 1984, Introductory Section, Para. 2). Governor Carlin recommended that funding be allocated for testing of reading and math skills at grades two, four, six, eight, and ten; he further advocated that the KSBE budget should include additional funds to hire extra specialists in math and science (Carlin, 1984, Curriculum Initiatives section, Para. 2, 6).

Inspired by national reports and findings, the recommendations from the Committee on Accountability to Governor Mike Hayden and the Governor's Public School Advisory Council called for "a change in philosophy from that of 'counting or input accountability' to that of 'outcome accountability' . . . the product we expect when the public education experience has been completed" (Report from the Committee on Accountability, 1988, p. 4). The report emphasized the importance of making all options real possibilities for all students, instead of simply offering the options. Attention must be paid to disaggregated data for achievement levels of sub-groups (e.g., low income). The need to identify essential exit skills, knowledge, and attitudes was recommended, along with the necessity of planning measurable outcomes, an outcome-based accreditation system, and a process of changing from the current input-related accreditation process. Investigation of an outcomes-based accreditation system began in December of 1989 by the Outcomes Accreditation Task Force. Among the issues examined was the potential impact on the functions of KSDE and the overall system. This culminated in adoption by the Kansas State Board of Education (KSBE) of the Quality Performance Accreditation Process (QPA) on March 12, 1991. Fifty schools were chosen for a 1991-92 pilot project from numerous schools nominated by their districts. The QPA Congress held in June 1991 was significant for the fact that teachers as well as administrators worked as a team with the KSDE staff in designating additional details of the new accreditation program (Process Module, 1992). QPA addressed school improvement, accountability, and individual student performance at the building level. QPA scheduled a four-year period of gradually adding districts until all districts would begin the process in 1994-95, with

all schools involved by 1996 (Kansas Quality Performance Accreditation [QPA], 1991). Representatives of the Kansas Association for Social Curriculum Development (KASCD) added their voice in support of a strong program: "The key element in approaching, achieving, and documenting success . . . is the element of assessment/evaluation" (Kansas Association for Social Curriculum Development [KASCD], 1992, p. 1). The KASCD recommendation focused on institutions as opposed to individual student scores, so that the progress of improving achievement in a given school or district could be statistically verified. The KASCD representatives emphasized cooperative planning, with a suggested format for surveying districts and schools that were evaluating their current situations. Then the local entities would be ready to focus on ways to improve programs and instructions for better student performance. Public support was courted through meetings throughout the state and publications for the public, defining and detailing aspects of QPA. One point particularly relevant to this study is the explanation of disaggregated data and its use: "This disaggregation . . . will be used to help the district revise its educational approach to help educate groups of students in areas where they are not making satisfactory progress" (Kansas School Reform, 1992, p. 5).

Development of state standards for specific subjects resulted from the QPA emphasis on "a process which focuses on student performance. This included state and local outcomes, standards, and indicators" (Kansas Quality Performance Accreditation, 1991, p. 1). The resulting standards clearly stated their purpose, each using a similar statement in the introductory pages, included in each revision: "The standards, benchmarks, and indicators in this document have been created to assist Kansas educators in developing local curricula and assessments, as well as to serve as the basis for the development of the state assessments in mathematics" (Kansas Curricular Standards for Mathematics, 2003, p. 5). More detailed standards were developed in 1999, revising the previous ones and adding benchmarks for additional grade levels. Assessments were to be given in reading at Grades 5, 8, and 11 and in math at grades 4, 7, and 10. In 1995, the Kansas Legislature required the KSBE to develop an annual "report card" aligned with the annual accountability report. Data requirements included demographics, precise test results, and rates of improvement for each building, plus designation of individual and building performance levels on state assessments for excellence. The federal No Child

Left Behind Act (NCLB), also known as the reauthorized Elementary and Secondary Education Act, mandated implementation of its provisions by the states in 2002-2003. Kansas was one of the first eight states to have an accountability plan approved by the U.S. Department of Education and to have all the requirements for approval in the designated timeframes. In the summer of 2003, Kansas put its redesigned Report Card on-line in a standard format, containing information required by NCLB. Assessment results were shown for each subject and grade level, for all students as a whole and disaggregated by SES and other sub-groupings, easily available to anyone (Accountability Report, 2005; NCLB, 2001).

The year 2003 brought another revision of the Kansas standards for reading and math, with benchmarks and indicators specified for every grade level. The process of developing different state assessments began, with the scheduled date of administration set for the spring of 2006. In keeping with NCLB requirements, all students in grades 3-8 and once in high school were to be assessed in reading and math in 2005-2006. This drastically increased the size of the database used in calculating percentages of students performing at a given level (Accountability Report, 2005).

Assessment Performance Level Descriptors and Guidelines

The Kansas assessments for 2005-06 specified five levels of performance: Exemplary, Exceeds Standard, Meets Standard, Approaches Standard, and Academic Warning, with descriptors varying to some degree for different subjects and grade levels. The "Definitions" section contains general criteria for each performance level. These labels and their descriptors replaced the ones used through 2004-05. The 2005-06 Performance Level Descriptors Guidelines released by the Kansas Department of Education stipulated five elements: (a) Performance levels are not equivalent to grades (i.e. A, B, C, D, F), (b) overall proficiency is based on NCLB requirements, (c) the student's performance should be considered as a sum of the whole performance on a particular assessment rather than any one part, and (d) the descriptors provided should be the sole determiner for assignment of performance levels (KSDE Performance Level Descriptor Guidelines, 2006). More detailed information was made available to administrators and teachers in terms of tested indicators, format, and data reporting (see

Appendices E and F). The KSDE web site www.ksde.org provides teachers, administrators, and the public with access to all of the information regarding standards, assessments, and results. More schools closely aligned their curricula with the Kansas standards throughout the 1990s and into the 21st Century. On a survey of high-achieving schools in mathematics, nearly 90% (53 of 60) of the responding principals said their schools had completed formal alignment activities for mathematics at both the school and district levels. The principals rated as significantly helpful the KSDE-sponsored seminars, institutes, and workshops throughout the state to assist teachers in development of their classroom skills and to familiarize them with the standards and upcoming assessments. This process continues (Kansas Learning First Alliance Survey, 2004).

History of the Kansas Standard of Excellence Award

Established by the KSBE as directed by the Kansas Legislature in 1995, the publicized designation of Standard of Excellence (SOE) recognizes schools for student achievement on state assessments. The SOE is awarded annually in one or both of two ways: (a) At grade level for a given subject, and (b) for a building's overall achievement for a given subject (see Appendix A for SOE school data used in this study; see Appendix C for SOE criteria). A dramatic difference is evident between the number of 2005-06 SOE schools and the number of SOE schools from earlier years. In 1994-95, the first year of the award, 0.7% of the buildings earned the SOE designation for 4th grade math, without specification of the exact number. No buildings qualified for grades seven or ten (KSBE Minutes, Oct., 1995). By 2000-2001, performance levels had improved, with publication of the percentage and the number of SOE schools for each subject. SOE Math awards for 2000-01 were as follows: (a) Grade Four, 17% or 158 buildings; (b) Grade Seven, 11% or 60 buildings; (c) Grade Ten, 11% or 40 buildings. The SOE Reading awards in 2000-01 also showed noticeable gains over the previous years: (a) Grade Five, 8% or 67 buildings; (b) Grade Eight, 7% or 37 buildings; (c) Grade Eleven, 8% or 32 buildings (Accountability Report, 2001, 2002, 2003).

An overall upward trend continued in the number of schools earning SOE awards between 2001 and 2006. In 2005-06, public schools in Kansas earned a total of 4,567 SOE awards, including grade level and building-wide awards. Of the 1,414 public

schools in Kansas, a total of 452 public elementary, middle/ junior high, and high schools earned a Standard of Excellence in Math designation for their buildings. A Standard of Excellence Award in Reading was earned by 720 of the 1414 buildings. A caveat: the numbers depicted in the Accountability Report could distort the results for the casual reader. Many of the schools that earned a building-wide SOE Award did so in both math and reading; therefore, the actual count of buildings is less than the 1,172 indicated in the Accountability Report. I calculated the actual count of building-wide awards for 2005-06 as 698, nearly half of the 1414 public schools (Accountability Report, 2005-06; Standard of Excellence Schools, 2006). Improvement in the performance level percentages of sub-groups (e.g., low-income students) has been a stated goal and concern of the KSBE for many years (see Appendix B for performance comparisons). Administrators and teachers appreciate and seek good publicity for all types of student achievements; public recognition such as earning the SOE rating could motivate non-SOE schools to make changes for the better. The KSBE wanted to award the SOE to schools that not only had a certain percentage of students scoring in the top three performance levels, but also to schools that moved students out of the two lowest levels into higher ones. Schools could achieve a building-wide 2005-06 Standard of Excellence rating in several ways; use of a building index formula determined the expected performance scores to the actual distribution of scores in a given building (see Appendix C for the performance level percentages and weighting formula). SOE schools are designated as such in two ways: (a) The on-line Report Card from the KSDE for the current year, and (b) by a list of SOE schools each year. This information is accessible by the public, and schools eagerly publicize the award through local media (Flaherty, 2007).

Table 1.1 depicts a timeline of the previously-described development for Kansas curricular standards, assessments, and the Standard of Excellence, spanning the years from 1984 to 2006. The timeline summarizes critical events in the state that led to the 2005-06 assessments and the manner of reporting their results, all part of the context of this study.

Table 1.1 Timeline of Development: Kansas Mathematics and Reading Standards, Assessments, and Standard of Excellence

1984	Competency testing in mathematics and reading recommended by Governor Carlin; tests of basic skills developed by Kansas Department of Education (KSDE).
1988	Report from the Committee on Accountability to Governor Hayden.
1991	Quality Performance Accreditation and curricular standards for math and reading adopted by Kansas State Board of Education (KSBE).
1992	1st Math assessment and 1st reading assessment given to two grades in elementary/middle school and one in high school; first use of disaggregated data.
1995	(a) Spring: Kansas legislature required KSDE to report demographics, performance level results on state assessments, improvement for each building, and development of SOE. (b) August: KSBE planned to create "report cards" for each building to show improvement and set criteria for SOE – 75% correct for Math, 84% correct for Reading. (c) October: first annual report on SOE results from assessments given at KSBE meeting.
1996	(a) July: Individual student and building standards of excellence levels set by KSBE, requiring 75-80% of questions correct in the average building score. (b) Fall: Revision of Reading and Math standards begun.
1997	July: Individual student standard of excellence criteria adopted by KSBE.
1998	First year for Kansas participation in the National Assessment of Educational Progress (NAEP) for Mathematics for 4th and 8th grades.
1999	Reading and Math standards revised; additional grade levels added as benchmarks. New assessments given. Teacher seminars and workshops scheduled for content of standards, instructional strategies, and assessment information, to continue each year. Reading diagnostic assessment of all second grade students conducted by school districts; 61% of second graders scored at or above grade level.
2000	Kansas participation in the NAEP mathematics for 4th and 8th grades.
2001	Modified and alternate state assessments for students with special needs; same performance level descriptors as the general student population; accommodations prescribed for students who receive accommodations regularly in class. Performance level scores included any student who took any assessment; mandated by the Individuals with Disabilities Education Act (IDEA) and the reauthorized Elementary and Secondary Education Act (ESEA), also known as No Child Left Behind (NCLB).
2002	NAEP mathematics and reading assessments for 4th and 8th grades in Kansas.
2002-2003	Reading and Math standards revised; 1999 assessment schedule and pattern continues through school year 2004-05. Development and review of new assessments began.
2004	NAEP mathematics and reading assessments for 4th and 8th grades; Kansas scores exceeded national averages. SOE awards increased noticeably.
2005	Five years of data from state assessments: trends more evident; performance gap between low-income students and others narrowed; higher percentages of students from all groups performed at proficient or above. More students eligible for free or reduced lunches.
2006	New assessments based on the 2003 standards given in Reading and Math in Grades 3-8 and once in High School; to be given annually; new performance labels used.

Note. From Accountability Reports (2000, 2001, 2002, 2003, 2004, 2005, 2006; Kansas Curricular Standards in Math, 1999, 2003; Kansas Curricular Standards in Reading, 1999, 2003; Kansas QPA, 1991; Kansas School Reform, 1992; KSBE Minutes, Oct. 1995; NAEP Report Card 2006; Report from the Committee on Accountability, 1988.

Achievement Trends, Performance Gaps, and Their Significance

Assessment data from 2006 differed from that of previous years in schedule, structure, computer or paper options, number of items per tested indicator, presentation of content, and different performance labels for each category of achievement. Due to the differences, the 2006 results cannot be validly compared with earlier results. However, assessment results from the years of 2000 to 2005 reveal some distinctive trends in student achievement, generally for the better, along with areas that form a challenge for educators. One of these challenges has been the gap in reading and math performance between students who qualify for free and reduced lunches and those who do not. Table 1.2 shows changes in the gap over a four-year span; from 2001 to 2005 in fourth grade mathematics scores, the gap diminished by 5.9 percentage points. However, for seventh graders, the mathematics gap widened by 12.4 percentage points, and 10th-grade scores showed a wider gap by 6.9 percentage points. The gap for reading has narrowed consistently, by 9.8 percentage points for fifth graders, 4.6 percentage points in eighth grade, and 0.9 percentage points in 11th grade. Both mathematics and reading performance improved over this five year period, with more students posting scores in the top three performance levels of proficient, advanced, and exemplary, as labeled prior to the 2005-06 assessments (Accountability Report, 2005, pp. 7-14).

Table 1.2 Performance Gap Change Between Eligible and Ineligible Lunch Students

	Percentage points change 2001-05	
Subject/Grade level	Increase gap	Decrease gap
Math 4TH		5.9
Math 7TH	12.4	
Math 10TH	6.9	
Reading 5TH		9.8
Reading 8TH		4.6
Reading 11 TH		0.9

Note. Percentages are calculated from the cumulative performance of students assessed in all public schools in Kansas. From Accountability Report, 2005.

The overall improvement of Math and Reading Achievement in Kansas between 2001-2005 is definitely an area worthy of attention, using baseline data from the assessments given in 2006. From the new starting point of 2005-2006, changes in the performance gap between advantaged and disadvantaged students will surely continue under scrutiny by the KSBE, NCLB administrators, educators, and the public. With all students assessed in third through eighth grades and one year in high school for reading and for math, a much more extensive database was available for 2005-06; the number of students taking assessments more than doubled. The expanded database for 2005-06 provided a more precise picture of the performance level for each sub-group. Appendix B shows a comparison of performance level percentages between economically disadvantaged students and non-disadvantaged students for 2005-06. Will the gap decrease and eventually be null? With the new assessments, a new round of data must be accumulated over time. This study did not include results by single grade levels, but it did provide a baseline to show the existence of any significant gap in the percentage distribution of performance levels between schools of excellence across different income levels for 2005-2006.

The federal NCLB Act requires that states annually show an increase in the percentages of their students that meet or exceed standards in math and reading. Kansas Commissioner of Education Alexa Posny explained in a newspaper interview that each state sets its own performance targets with progressive increases each year, known as Adequate Yearly Progress (AYP). She views the new funding allocated by the Kansas Legislature as being vital to help improve achievement for the state's poor and minority students (Morning Sun, 2007). The performance targets must be met by the total student population as a whole for the state, districts, and buildings, and also for designated sub-group characteristics including the low SES group (Kansas Adequate Yearly Progress Revised Guidance, 2006; NCLB Act, 2001).

Income Trends and Their Significance

The National School Lunch Program (NSLP) is a federally funded program operating in public and nonprofit private schools and residential child care institutions. It provides nutritionally balanced, low-cost or free lunches to children each school day. The program was established under the National School Lunch Act, signed by President Harry Truman in 1946. The NSLP, administered by the Federal Nutrition Assistance, is a division of the U.S. Department of Agriculture. Each year adjustments are made to the Income Eligibility Guidelines (Appendix D) that are used in determining eligibility for free and reduced price meals or free milk for the upcoming fiscal school year, as required by Section 9 of the Richard B. Russell National School Lunch Act. The guidelines are intended to benefit those children most in need and are revised annually to account for changes in the Consumer Price Index. Nationwide for the school year 2005-06, thirty million students ate a school lunch each school day; 17.7 million students (54.6%) received a free or reduced-priced lunch. The total public school enrollment for Kansas during 2005-06 was 463,840 students. Of these, 38.5% were eligible for free or reduced lunches (Leading the Fight Against Hunger, 2007).

Household median income is estimated annually for states and counties and is increasing in Kansas. In 2000, the median income for Kansas was $37,705. In 2005, it was $44,690. Half the households in Kansas earned more than the median income and half earned less. (U.S. Census Bureau Quick Facts: Kansas, 2007). But how much less was earned than the median indicates? And how many households earned less? We can get some indication by looking first at the national poverty threshold, which also increases every year. Families and persons are classified as "below poverty" if their total family income or unrelated individual income is less than the poverty threshold specified for the applicable family size, age of householder, and number of related children under 18 present. The Census Bureau uses the federal government's official poverty definition. For a family with one adult and four children in 2000, living in one of the 48 contiguous states, the national poverty threshold was $20,236; in 2005, $22,951 for the same size family (U.S. Census Bureau, Poverty Threshold, 2007). As median income has risen, the poverty threshold has also risen, as did the percentage of students eligible for free and

reduced lunches. The National Center for Children in Poverty (NCCP) observed that the threshod is inadequate: " . . . families need an income of about twice the federal poverty level to meet their basic needs" (NCCP, 2008, Kansas: Demographics of Low-Income Children, ¶ 1). With this as a guide, a family of one adult and four children in 2005 meeting the poverty threshold of $22,951 would need to earn $45,902 just to meet basic needs. In 2006, 20% of Kansas children, younger than 18 years old, lived in low-income families (100–200% of the federal poverty level). Poor children (from families with incomes less than 100% of the federal poverty level) comprise 18% of the population, as displayed on Table 1.3. The percentage of poor and low-income children in Kansas totaled 38%.

Table 1.3 Income Levels of Kansas Children 2006

Income levels	Percentage of children	Number of children
Poor	18%	121,235
Low-income	20%	139,772
Above low-income	62%	425,247
Total	100%	686,254

Note. Poor = less than 100% of the federal poverty level. Low-Income = 100-200% of the federal poverty level. Children = under the age of 18. From NCCP, 2008, Kansas Demographics of Low-Income Children.

The percentage of students who qualify for free or reduced lunches has increased considerably over the years, meaning more students are now in the sub-group of low-income students. Trends in lower SES percentages for Kansas students from 1992-2004 are shown in Table 1.4, reflecting the national trends described on previous pages. In 2005-06, Kansas schools enrolled 463,840 students; 38.5% or 178,578 children were eligible for free or reduced lunches. Those students not eligible for subsidized lunches were classed as non-economically-disadvantaged; 61.5% or 285,262 children were so classified (Accountability Report, 2006).

Table 1.4 Percentage of Kansas Students on Free or Reduced Lunches 1993-2006

Type of school	Public	Private
1993-94	28.2%	8.6%
1994-95	31.3%	10.0%
1995-96	31.4%	9.6%
1996-97	31.7%	9.7%
1997-98	32.5%	10.4%
1998-99	32.3%	8.7%
1999-2000	32.2%	9.7%
2000-01	33.2%	10.2%
2001-02	34.0%	9.8%
2002-03	35.9%	11.8%
2003-04	37.3%	12.2%
2004-05	38.2%	ng
2005-06	38.5%	ng

Note. ng = not given. From Accountability Reports, 2000, 2006; KSDE Planning and Research, p. 26, 2004; KSDE Report Card, 2004-05, 2005-06.

The increase in students eligible for free or reduced lunches in Kansas could mean one or all of various possibilities. The wages perhaps are not keeping up with cost-of-living adjustments to the Income Eligibility Guidelines each year from the Food and Nutrition Service (FNS) in Washington, DC, so families previously ineligible now would qualify as being in the poverty sector (see Appendix D for the Income Eligibility Guidelines chart). The Center for Immigration Studies pointed out the influx of immigrant families since 1990. Using the U.S. Census Bureau's definition of poverty, the poverty rate for immigrants in 2005 was 18.4%, compared to 11.7% for native-born; thus children of immigrants add to the number of eligible students for subsidized lunches. Eligible students include those who are non-citizens or who are American-born children

of illegal immigrants (Camarota, 2005). "Any child at a participating school may purchase a meal through the National School Lunch Program . . . if the family meets the income eligibility guidelines" (USDA Food and Nutrition Service [FNS], 2007, p. 2). Whatever the causes, the percentages of eligible students are climbing, yet Kansas is reducing the achievement gap on state assessments between eligible and ineligible students (see Table 1.5), despite the state's low rate of per pupil spending: tenth lowest in the nation in 2005 (KSDE Planning and Research, Snider, 2005; KSDE Report Card 2004-05, 2005-06).

Table 1.5 Percentage of Students Scoring at or above Proficient on Kansas Assessments

Free & reduced lunch eligibility	2000 Reading	2003 Reading	2005 Reading
Ineligible	68.3%	72.9%	73.5%
Eligible	43.9%	50.5%	62.7%
Gap in percentage points	*24.4*	*22.4*	*10.8*
Free & reduced lunch eligibility	2000 Math	2003 Math	2005 Math
Ineligible	59.7%	67%	68.6%
Eligible	32.9%	41.8%	56.6%
Gap in percentage points	*26.8*	*25.2*	*12.0*

Note. Percentages represent all students assessed in public schools. From Kansas State Report Card, 1999-2000, 2002-03, 2004-05

All states are required by the NCLB Act to set increasing targets in terms of student performance on state assessments. States may set their own target percentages for each year, up to the required 100% target by the year 2014 (Table 1.6). Schools that consist of Grades 7-8 must meet the K-8 targets, and the schools with Grades 7-12 must meet the 9-12 targets.

Table 1.6 Kansas AYP Targets 2006-2014: Percent of Students

AYP target year	K-8 Reading	9-12 Reading	K-8 Mathematics	9-12 Mathematics
2006	63.4	58.0	60.1	46.8
2007	71.7	73.7	67.2	57.0
2008	75.8	77.4	71.9	63.2
2009	79.8	81.2	76.6	69.3
2010	83.9	85.0	81.3	75.5
2011	87.9	88.7	85.9	81.6
2012	91.9	92.5	90.6	87.7
2013	96.0	96.2	95.3	93.9
2014	100	100	100	100

Note. From Kansas Adequate Yearly Progress (AYP) Revised Guidance, 2006, p.11.

As Kansas strives to have all students scoring in the three highest levels by the year 2014, attention must be paid to the performances of sub-groups, along with the instruction and affective aspects of school that impact achievement. The gap that has existed so long between lower income students and higher income students must be eliminated. This study, by examining the performance of high-, medium, and low-income Standard of Excellence schools, will give additional evidence whether or not the income level of these schools will be a predictor of success.

Research Hypotheses

A brief, initial review of literature included the Accountability Report (2006), Good and Brophy (2000), and Yee (2007). Information gathered from these and other sources led to the formation of the hypotheses.

H_{01}. The between-subjects main effect means of the first factor (Income) have no significant difference from one another for a given type of building: low-income, middle-income, and high-income SOE schools.

H_{02}. The within-subjects main effect means of the second factor (Performance Level Categories) have no significant difference from one another for a given type of SOE building.

H_{03}. The two factors (Income Levels of Schools and Performance Level Categories) do not interact beyond the limits of random chance for a given type of SOE building when tested for within-subjects interaction.

Research Questions

Two questions directed this study and guided the testing of the preceding hypotheses:

1. Is the distribution of achievement scores across the performance levels consistent across income-level designation of grade-level buildings per subject?

2. What is the degree of variance or consistency?

This study described any observed differences in the distribution of achievement score percentages from elementary to middle to senior buildings per subject, but did not directly hypothesize any such differences. A statistical comparison between or among the school levels and subjects would not be appropriate for this study, due to differences in the SOE criteria (tolerances) for the different grade level groups and for the subjects of reading and math (see Appendix C).

Method

This study determined whether or not significant differences existed between performance level score distributions at low-, medium-, and high-income SOE buildings in Kansas. All data was obtained from the KSDE site: www.ksde.org, specifically the Building Report Card page: http://www.ksde.org/Default.aspx?tabid=229 and the K-12 Reports page: http://www.ksde.org/Default.aspx?tabid=223.

The SOE building award in reading or math or both was the constant; the two variables were income level and achievement score percentages in each performance level category. High-income (HINC), medium-income (MINC), and low-income (LINC) levels were designated. Five performance levels categorized by the state of Kansas were used in this study: Exemplary, Exceeds Standard, Meets Standard, Approaches Standard, and Academic Warning. This study focused on successful schools, as defined by the KSDE SOE award, with the building as the unit of analysis. All SOE buildings were used, with the exclusion of schools that had less than 150 students, thus controlling the variable of school size by avoiding skewed percentages. Schools were sorted by building grade levels into three types, dictated by assessed grade levels: elementary (Grades 3, 4, and 5), middle or junior high (Grades 6, 7, 8), and high school (Grades 10 and 11). In a case of overlapping grade levels (e.g., a K-7 school), Grades 3, 4, and 5 from that school were listed with the elementary group of buildings; Grades 6 and 7 were listed with the middle/junior high group. I ranked each building category based on enrollment, then according to income (percentage of students eligible for free/reduced lunches). Schools with the lower percentages of free/reduced lunches became the high-income group of schools, while schools with the higher percentages of free/reduced lunches became the low-income group; medium-income schools fell in between the two (see Appendix A for the final data sets used in this study).

At the proposal stage, I originally intended to use Chi-Square analysis. Running the data with Chi-Square proved to be problematic, due to the high number of cells with less than 5 in the performance level categories. At that point, I reviewed other methods of analyzing the data and chose a two-way, mixed design, repeated measures ANOVA.

Limitations

The study was restricted to Kansas schools that earned a 2005-06 Standard of Excellence Building award for reading or math, with 150 or more students, which may limit application of the findings to those buildings. The 2005-06 assessment results constitute a new baseline of data, due to changes in the assessments and their administration; the results of this study constitute a baseline for SOE schools beginning in 2005-06; therefore, statistical comparison of 2005-06 data and this study's results with results of previous years would be inappropriate. Variables concerning instruction methods, school characteristics, or individual student characteristics were deliberately not included. Direct and even inferred causality of instructional methods, curriculum, school size, or parenting was not the purpose of this study. Since the unit of analysis was the building, findings should not be generalized to individual students, teachers, or classrooms. I initially selected the total population of Standard of Excellence schools. The findings should not be generalized to other types of schools. Small schools (less than 150 students) were excluded to avoid distortion of significance. This study is limited to Kansas. The results are limited to each type of building (e.g., elementary math); statistical comparisons between types of buildings would not be appropriate, due to differing Standard of Excellence criteria for different subjects and grade levels. Data gathered for statistical analysis was limited to two items: (1) percentages of students eligible for free and reduced lunches and (2) percentages of students scoring at each of the five performance level categories on the Kansas state assessments for reading and math. Both types of data are uniformly reported at the building level and grade level by the Kansas State Department of Education for the state, each district, and each school.

Definitions

Sources for Definitions: Accountability Report (2006); Assessment Performance Level Descriptors (2005-2006); Federal Register, March (2005); Income eligibility guidelines (2005); Kahlenberg (2006); Kansas Curricular Standards for Mathematics (2003); Kansas Curricular Standards for Reading (2003); Kansas Curricular Standards for Reading and Writing (1999); Kansas Quality Performance Accreditation (1991); KSDE Report Card Definitions (2005-2006); Macionis (2001); NAEP and No Child Left Behind (2005); National Center for Children in Poverty: Explanation of Terms and Data Sources (2008); National Coalition of Educational Equity Advocates (1994); No Child Left Behind Act (2001); Wiles (2005).

Academic Warning: The lowest level of the five levels of performance categories on the 2005-06 Kansas assessments, with general descriptors and specific criteria for each subject; unsatisfactory level. Reading: incomplete comprehension of the text when reading grade-appropriate text. Math: seldom uses problem-solving techniques and is unable to explain the process used; likely to have inaccurate responses at lower cognitive levels and on most elements of the four areas of emphasis: numbers and computation, algebra, geometry, and data; struggles to demonstrate content knowledge and application skills (refer to Appendices E and F for detailed grade-level descriptions).

Accountability: Responsibility for outcomes regarding a stated standard: progress or the lack of it.

Adequate Yearly Progress (AYP): The annual targets or goals set by schools, districts, and states for improvement in percentages of students reaching proficient or above on state assessment; the process for making judgment as to whether or not all public elementary and secondary schools, districts, and states are reaching the annual targets to ensure that all students achieve the state's definition of proficiency by 2013-2014; designed to meet the requirements of the federal No Child Left Behind Act of 2001.

Approaches Standard: Between the middle and lowest levels of the five levels of performance on 2005-06 Kansas assessments, with general descriptors and specific criteria for each subject. Reading: partial comprehension of the text when reading grade-appropriate text. Math: inconsistently uses problem-solving techniques and partially explains the process used; performs at lower cognitive levels and not necessarily on all elements of the four areas of emphasis: numbers and computation, algebra, geometry, and data; demonstrates limited content knowledge and application skills (refer to Appendices E and F for detailed grade-level descriptions).

Benchmark: A specific statement of what a student should know and be able to do at a specified time in his/her schooling.

Child: An individual under the age of 18, living as a dependent to one or more related adults.

Economically Disadvantaged: Students eligible for free or reduced lunches (see Income Eligibility Guidelines definition; refer to Appendix D for complete guidelines).

Equity: In education, the condition of having necessary resources to create meaningful, challenging opportunities to learn for all student groups including the poor, racially, culturally, and linguistically diverse children; fundamental components are school finance, family empowerment, teacher preparation and attitudes, and student assessment; involves comparative monitoring and evaluation of learning opportunities, outcomes, and assessments to eliminate bias and discrimination and to build trust, respect, and regard.

Exceeds Standard: Second-highest level of performance on 2005-06 Kansas assessments, with general descriptors and specific criteria for each subject; advanced level. Reading: full comprehension of the text when reading grade-appropriate text. Math: uses multiple problem-solving techniques and explains the reasoning process; performs accurately at all cognitive levels on most elements of the four areas of emphasis: numbers and computation, algebra, geometry, and data; demonstrates effective content knowledge and application skills (refer to Appendices E and F for detailed grade-level descriptions).

Exemplary*:* Highest level of performance on 2005-06 Kansas assessments, with general descriptors and specific criteria for each subject. Reading: full comprehension when reading grade-appropriate text, making connections within and outside the text. Math: uses multiple problem-solving techniques and accurately explains the reasoning process; performs consistently and accurately at all cognitive levels on all of the four areas of emphasis: numbers and computation, algebra, geometry, and data; demonstrates well-developed content knowledge and application skills (refer to Appendices E and F for detailed grade-level descriptions).

High-Income Schools: For the purposes of this study, those schools that have fewer than 24% of their students eligible for free and reduced lunches.

High-Income Students: Students who do not qualify for free or reduced lunches based on the federal Income Eligibility Guidelines for households,

Income Eligibility Guidelines: Household income guidelines to determine eligibility for free or reduced school lunches, breakfasts, or free milk; issued by the Department of Agriculture, Food and Nutrition Services, Child Nutrition Programs, National School Lunch Program; based on the annual Federal Income Poverty Guidelines, which are multiplied by a stated factor, revised annually in accordance with changes in the Consumer Price Index (refer to Appendix D for the complete guidelines chart).

Indicator: A statement of the knowledge or skills that a student demonstrates in order to meet the benchmark.

Low achiever: Students who score below the standard on state or national assessments.

Low-Income Family: A family having an income less than twice the federal poverty threshold or 100%-200% of the federal poverty threshold.

Low-Income Schools: For the purposes of this study, those schools that have 50% or more of the students eligible for free and reduced lunches.

Low-Income Students: Students who qualify for free or reduced lunches based on the Income Eligibility Guidelines for households.

Meets Standard: Third-highest or middle level of the five levels of performance on 2005-06 Kansas assessments, with general descriptors and specific criteria for each subject. Reading descriptor– satisfactory comprehension of the text when reading grade-appropriate text. Mathematics descriptor– uses some problem-solving techniques and explains the process used; performs at all cognitive levels on many elements of the four areas of emphasis: numbers and computation, algebra, geometry, and data; demonstrates sufficient content knowledge and application skills (refer to Appendices E and F for detailed grade-level descriptions).

Middle-Income Schools: For the purposes of this study, those schools with percentages of students eligible for free and reduced lunches equal to or greater than 24% and less than 50%.

National Assessment of Educational Progress (NAEP): The only national assessment of what students in American schools know and can do in reading, mathematics, science, writing, U.S. history, civics, geography, and the arts; uses a statistical sample of the larger school population for biennial assessments; publicizes results for the nation, specific geographic regions, and states, including performance of subgroups (e.g., low-income) within a population (e.g., fourth grade students).

Performance Level Categories: The five performance score levels for the Kansas 2005-06 state assessments: *Exemplary, Exceeds Standard, Meets Standard, Approaches Standard, Academic Warning* (see definitions for each label; refer to Appendices E and F for detailed grade-level descriptions); prior to 2005-06, *Exemplary, Advanced, Proficient, Basic, and Unsatisfactory*

Performance Level Descriptors: Labels and criteria in each assessed subject for grades 3-8 and high school for the five performance level categories on the Kansas assessments; 2005-06: *Exemplary, Exceeds Standard, Meets Standard, Approaches Standard, Academic Warning* (see definitions for each label; refer to Appendices E and F for detailed criteria criteria aligned with subject-specific standards, benchmarks, and indicators).

Poor Family: A family having an income below 100% of the federal poverty threshold.

Poverty Threshold: The minimum level of annual household income necessary to meet the basic needs for healthy living, below which is officially considered poverty level; determined and adjusted annually by the U. S. Census Bureau using the Consumer Price Index; threshold income levels vary according to specific sizes of families.

Similar Schools: Kansas schools sharing certain characteristics for more valid comparisons of performance, graduation rate, etc. on the annual Report Card; based on all of the criteria to appear on the target school's similar schools list: grade levels in a building, grade configuration, size of grades in the school, and percentage of students enrolled in the free or reduced lunch programs. Schools are considered to be comparable based on the percentage of students enrolled in the free or reduced price lunch programs when they are within ten percentage points of the target school. Schools with more than 60% of students eligible for the programs are considered similar by this factor.

Socioeconomic Status (SES): The relative position of an individual or household in the community, due to income, occupation, and education level.

Standard: A general statement of what a student should know and be able to do in academic subjects.

Standard of Excellence (SOE): Established as directed by the Kansas Legislature in 1995, this award is a recognition for a school's high rate of student achievement on state assessments at one or more assessed grade levels in a school or building-wide; awarded in each assessed subject to those schools that meet the SOE Guidelines and Performance Levels; awarded for reading and math from 1995-2006; refer to Chapter One, *History of the Kansas Standard of Excellence Award*.

Standard of Excellence Guidelines and Performance Levels: Criteria, formula, and percentage levels developed by the KSDE to determine which individual students, classrooms and schools qualify for a Standard of Excellence award; refer to Appendix C for specific details.

Subgroup: For purposes of determining Adequate Yearly Progress, a subgroup is any group of 30 or more students who can be identified by characteristics related to ethnicity, income level, special needs or English proficiency.

CHAPTER 2 - Review of Literature

The Low Income Factor, Academic Performance Standards, Assessments, and Data: Aiming for Excellence

The Relationship of Income to Achievement

Studies researching the relationship of income levels to achievement in school range across the decades. In the 1960s, researchers formed the theory that the socioeconomic status (SES) of the family influences school achievement more than other factors. One of the pioneers in this realm of research was Havighurst (1962). He conducted a 10-year study on how well students performed tasks associated with stages of maturation; he noted their social backgrounds and personal characteristics. *Growing up in River City* contributed to the understandings of how social class and personal characteristics impacts human development. He found that an unstable family structure and low income contributed to poor grades, lack of motivation, lesser ability to learn readily, and anti-social behaviors (e.g., withdrawn, hostile), and made the case for early intervention, before entry into school. Wiles (2005) noted, when reviewing Havighurst's study, that students from unstable families and with low income were four to five times more likely to have poor attendance than were students from stable backgrounds and from middle to upper income families. Difficulty in reading was pinpointed as an early indicator of giving up on school.

Coleman (1966) conducted a remarkable study from several standpoints. The study of equal educational opportunities for students of varying race, color, religion, and national origin was commissioned by the United States Department of Health, Education, and Welfare. Coleman used test scores from teacher-administered standardized academic tests, questionnaire responses from students, teachers and principals, and student characteristics including socioeconomic background, race, ethnicity, goals, and attitudes toward learning. The hundreds of thousands of participants were chosen by a national

stratified sample. Coleman's analysis of the data led him to the conclusion that the strongest predictor of school success was family background. He noted that a student's sense of control over destiny (how his/her efforts influence future outcomes) was also an important factor in higher achieving students; students with a low sense of control performed poorly in school and vice versa. He found that school related inputs (e.g., number of books in the library) had little effect on improving student achievement. He reported that even when black students had access to educational resources equal to or nearly equal to whites, black children performed significantly lower, and poor children's performance was significantly lower than middle- or upper-class students as a whole. He also noted within-school differences in achievement, seemingly related to a student's SES, race, and other characteristics, indicating that a child's achievement is seldom independent of his upbringing and environment. "Schools bring little influence to bear on a child's achievement that is independent of his background and general social context" (p. 325). Coleman did not address factors such as a mainly white, middle-class teaching force and teachers' attitudes and expectations. He did note an indication that a teacher's verbal ability was linked to higher test scores.

Viadero (2006) pointed out that Coleman was the first educational researcher to measure educational variations with testing data; his study was the first to focus on student performance, what children actually learned. The report has often been misinterpreted and used to argue that schools have little effect on student achievement, so more money spent seemingly is wasted (After the Bell, 2001). The study laid the foundation for the structure of the Elementary and Secondary Education Act (ESEA or Title One), passed into law in 1965 (Wiles, 2005). The Coleman results were at odds with conventional beliefs about schooling and generated considerable controversy, so much so that Harvard established a year-long, post-report analysis with 75 participants. Weaknesses in his methods were pointed out: an insufficient rate of response to survey questions, some improper sampling procedures, and flawed testing instruments. In spite of these weaknesses, the scholars eventually concurred with Coleman's findings. His study, one of the largest ever done, stands as a turning point for educational research focus and changed the way schools were viewed. "The importance of the Coleman report

was that it changed the perspective to concentrating on student performance, and that has endured" (History of Education, Hanushek, 2006).

Edmonds and Fredriksen (1979) challenged Coleman's findings with the results of their study *Search for Effective Schools: The Identification and Analysis of City Schools That Are Instructionally Effective for Poor Children*". They operated from the theory that high achievement can be attained by low SES students and by low-income schools, with school characteristics more significant than family background. Using achievement data from schools in cities, the authors identified low-income schools that were successful and concluded that schools can make a difference for disadvantaged students. In some cases, the school had more effect on student achievement than did family circumstances. In these successful schools, five characteristics were consistently evident: (a) instructional effectiveness from all personnel, (b) leadership style encouraging support and teamwork, (c) overall positive climate of the building, (d) the ways in which student progress was frequently measured, and (e) high expectations, expressed by teachers in both overt and covert ways; " . . . the implied expectations derived from the teacher's behavior in the classroom" (Edmonds, 1981, p. 58).

Thomas and Bainbridge (2001) credited the research of Edmonds and others with originating the effective schools movement, citing Edmonds's five principles or characteristics (later termed "correlates") of successful schools to guide schools on the road to improvement. In their report "All Children Can Learn: Fact and Fallacies", Thomas and Bainbridge caution that educators, the public, and policy makers must bear in mind that all children can learn, but not all at the same speed and not all in the same way. Children entering school from disadvantaged backgrounds generally lack the nutrition, intellectual stimuli, and learning opportunities that are commonplace to middle- and upper-class preschoolers. The two researchers reminded readers that synaptic contacts in the brain are formed from birth to age 10 generally, with the bulk of the formation occurring up to approximately three years from birth. Neural paths can be stunted or fail to develop for lack of protein and sensory stimulation. These physiological realities explain one more reason why severely disadvantaged children do not achieve at the same level as children who are more highly nourished and nurtured. The authors expressed the concern that the "all children can learn" philosophy might

minimize the need for early intervention before disadvantaged children start school. Without educational programs for very young infants and children in disadvantaged families, children will continue to start school on a very unequal basis, adding to the burdens of teachers striving to close the achievement gap. Politicians were reminded of the promise from National Goals 2000 that all children will be ready to learn when they start school; the authors called for policies offering "economic opportunity for families, healthcare for all children, and parenting education for young mothers" (Thomas & Bainbridge, p. 2). The authors pointed out the costliness of such programs, but argue that long-term payback in economic, educational, and social benefits make the effort and immediate cost worthwhile.

Research abounds concerning expectations and the difficulties for at-risk students; studies have accumulated for decades. Ogbu (1974) noted the importance of self-expectations and those of society. He concluded that children from low SES or minority areas are likely to enter school already at risk for failure, with little sense of control over their outcome, because they have already learned society will not allow opportunity for success. Cohen (1972) investigated the effect of expectations on achievement. His study involved a control group of mixed black and white boys, two each per group, designated as Group A. The whites' level of involvement and influence towards accomplishing the task at hand was far greater than that of the black boys. Group B black students were taught how to assemble a radio, and then taught Group B white students the same task. The original task performed by Group A was presented to the Group B students. Cohen noted a marked reduction in performance differences between black and white junior high boys, indicating that task performance is influenced by expectations from oneself, peers, and teachers. Stulac (1982) observed that expectations can be changed and thus alter patterns of performance; however, researchers and teachers must keep in mind the complex social settings that comprise a school. Variability in school climate can be a great influence when attempting to eradicate achievement differences.

Researchers have addressed the negative effects of being placed in a low-ability group year after year with little expectation or opportunity to advance. Alternatives to tracking have been investigated. Slavin, Madden, Dolan, and Wasik (1994) recommended that students be involved in active learning and problem solving as a cooperative group,

as opposed to being locked into more or less permanent tracking based on ability. The involvement and support of cooperative group members could counteract the negative effects of low SES and other diversity issues.

Good and Brophy (2000) pointed out a self-perpetuating cycle when low-achievers are continually grouped for instruction, with the impact of teacher expectations noted. They identified three types of grouping based on perceived student ability and achievement: between-class ability grouping, grouping across grade levels, and within-class grouping. Problems were noted in the lower-group situations. Teacher expectations (defined as the beliefs teachers hold about students' future academic achievement, behavior or attitudes) in such situations were lower for students in the lower-ability groups; as a result, less effective instructional strategies and less challenging content were used. The lower-group students fall further behind from an inferior education and tend to be classed as low from year to year. Such students frequently display lower motivation and disruptive behavior. A disproportionately high rate of low SES and minorities stay in low-ability groups from year-to-year. The researchers also point out that allowing some call-outs has been linked to increased learning. Good and Brophy cautioned teachers to be aware that their initial impressions of students, especially poor or minorities, might be based on incomplete or inaccurate information and unconsciously might use other information which affirms their first impressions. Such a situation would compromise the validity of the teacher's judgment and even compromise the assessment of a student's progress.

An example of success in low income schools due in part to high teacher expectations is found in the Department of Defense (DoD) Schools in the U. S. and abroad (Delisio, 2007). DoD schools have a high mobility rate of 35% for its students each year. Half of all students qualify for free or reduced meals; 40% of students are from a minority group. Children of enlisted personnel comprise 80% of the total enrollment; 94% of their parents are high school graduates, without further formal education. The schools have a 97% graduation rate and score well above most other schools on the NAEP. Uniform standards and the uniform curriculum allow teachers to readily incorporate and welcome incoming students into the class throughout the year. Instruction is data-driven, but with latitude for teacher creativity and flexibility. Students

are frequently assessed as part of the instruction. Teachers have an abundance of resources for instruction and strong connections with and support from parents. The atmosphere overall is positive with a sense of teamwork. Teachers expect students to do well and convey that belief to the students.

Klein and Knitzer (2007) pointed out differences between low-income preschoolers and more affluent ones. Cognitive scores of low-income preschoolers lagged 60% behind preschoolers in the highest income group. As one example, by third grade, low-income children had vocabularies around 4,000 words, whereas children from middle-income families had command of 12,000 words. Such gaps are real, but can be addressed by use of an intentional curriculum with better support and training for teachers, so they can more effectively interact with at-risk children. The authors defined an intentional curriculum as having the following characteristics:

- "Developmentally appropriate, emphasizes active engagement.
- Promotes social and regulatory skills, and positive peer and teacher interaction.
- Directive without using excessive drill; fun for young children.
- Content-driven and research-based
- Responsive to cultural diversity and English language learners" (Klein and Knitzer, 2007, p. 2).

Kauchak and Eggen (2003) concluded that instruction in school must acknowledge and be built on students' needs and strengths to counteract the negative social and economic situations. Teachers must not use low student SES as an excuse for students performing poorly; instead, teachers must learn to interact effectively with disadvantaged students from different cultural backgrounds, including that of poverty.

Diaz, Le, and Wise (2006) conducted an analysis of the NAEP mathematics data for twelfth grade, investigating trends from 2000 to 2005, a transition between content frameworks of the math assessment. They noted limitations due to changes in the test structure, calculator use, and content between 2000 and 2005. While they did not report results for the subgroup of SES, they did report statistically significant gains for White, Black, and Hispanic students, with lesser gains for Asian students. Blacks showed the greatest score gain. The authors' analysis of these three changes led them to estimate that the assessment changes had minimal effect overall on gains. The authors noted that

because of the limitations, the gains could possibly have been the result of factors other than increased performance. They recommended future similar studies more stringently designed to give more definitive results.

Information from another country regarding SES impact on achievement seemed appropriate to the purpose of this study. Is SES a factor for levels of achievement in another country? The attention focused on academic performance in Canadian schools emphasizes the importance of researching any and all variables that impact student learning. Multiple sources and varying situations from another society might shed more light on the question of income affecting student achievement in the United States.

Using elementary school students in New Brunswick, Canada, Ma and Klinger (2000) included student characteristics as well as school context and school climate factors to examine the effects of these factors on mathematics and science achievement. SES was one of the variables, but not in the traditional sense of income level. The researchers measured SES in terms of " . . . education-related possessions and participation in social-cultural activities" (Ma & Klinger, 2000, p. 51). The affective elements of family attitudes toward and beliefs about school were thus incorporated. "Low student achievement correlated with negative family attitudes and beliefs" (Ma & Klinger, 2000, p. 51). They determined that SES significantly predicted academic achievement across subjects (mathematics, science, reading, and writing). However, SES was not the most important variable that emerged in this study. Native ethnicity had more than twice the effect of SES; this surprising finding, the authors surmised, was perhaps due to Native students not being part of the mainstream culture. The finding could lead to other studies as to the cultural aspect of instruction in the schools attended by Native students or by other diverse students. Another interesting and surprising result was the contrast between SES influence on different subjects. The school SES means for reading and for writing showed greater significant effects than mathematics and science, prompting the authors to recommend further research as to why different subjects were differently impacted by SES. Ma and Klinger chose the statistic of effect size to show the impact of student-level and school-level variables, deeming this the best way for a cross variable comparison and for future cross-study comparisons. Effect sizes were calculated by dividing the mean differences by the pooled standard deviations. They used

the Hierarchical Linear Model (HLM) as a statistical tool, judging it to offer better statistical adjustments and more accurate estimations, since it separates variations "into between-student and between-school components and then analyzes each component in relation to the other" (Ma & Klinger, 2000, p. 53).

An additional study of Canadian schools was conducted by Ma (2001) to determine the consistency of the socio-economic gap in mathematics and science achievement; influential student and school variables were identified. The correlation of the within-school socio-economic gap in academic achievement across school subjects (mathematics and science) was simultaneously investigated. In other words, if a large socio-economic achievement gap in mathematics exists in a given school, will science also have a large socioeconomic gap? The correlations within schools were significantly high. Furthermore, his findings indicated only minor differences between schools of different socio-economic levels. Ma commented that more studies of this sort are important, as they should eventually help answer the question of "whether schools are differentially successful in reducing the socio-economic gap in academic achievement across school subjects" (p. 99). He found that family structure and SES were among the student characteristics that had significant effects on student achievement in mathematics and science. An unexpected finding in some schools was the minimal effect of the percentage of disadvantaged SES students and students lacking the instructional language in a given school's population. Since Ma's study did not address the issue of instructional language, Ma speculated that credit might be given to instructional programs and school policies that help poor schools and poor students. He recommended further research be done considering factors regarding both equity and equality in schools, particularly examining diverse cultures and languages in a student body.

The socioeconomic status of students was one of three factors hypothesized to negatively affect student achievement in a study by Okpala, Okpala, and Smith (2001). The other two factors were parental involvement and per pupil expenditures. Their focus was on the fourth largest school system in North Carolina, a low-income area with 72 schools in fourth grades. From the results of a Pearson product moment correlation coefficient and a regression analysis, the high rate of low achievement was significantly impacted by the high percentage of students eligible for free or reduced lunches. Family

income level was also a factor in the effectiveness of parental involvement as it impacted achievement, as were ethnicity, home structure, and type of involvement. Expenditures per child were not significant regarding achievement differences.

Relationships between low-income status and academic achievement in Kansas high schools by county were explored by Yee (2007), with school size and location as independent variables. He used building rates of low income and low achievement as dependent variables. Income status was derived from county per capita income amounts. He noted that the buildings with the highest rates of combined low-level assessment scores (unsatisfactory plus basic) had the most consistent basis for low-achievement/low income correlations.

Kahlenberg (2006) described school districts pursuing socioeconomic integration, with the goal of reducing high rates of poverty in one or more schools. Instead of compulsory busing in the districts examined, magnet schools and public school choice motivated the mixing of children from different economic levels. He used the example of Wake County, NC, where low-income and minority students enrolled in middle-class schools outperform their low-income peers enrolled in low-income schools. In middle-class schools, the majority of students "are more likely to value achievement and less likely to act out in class . . . have larger vocabularies, on average, which are informally transmitted to fellow students" (Kahlenberg, no pp., 2006) than do students in predominately low-income schools. Kahlenberg's study emphasized the importance and influence of peer attitudes, teacher quality, teacher expectations, and the physical surroundings.

Using data from studies by the Education Trust and Heritages Foundation, Harris (2006) reanalyzed the data and found the number of schools that claimed high achievement for disadvantaged students to be significantly smaller than stated, due to misanalysis, flawed assumptions, and unclear definitions. He was critical of the original (flawed) findings being used to downplay evidence of societal influences on children starting school, putting the responsibility mainly on the schools. The original numbers of schools, he concluded, could be used to erroneously minimize the need for society to fully address socioeconomic gaps with equitable policies.

The Significance of Improving Achievement

Income gaps between families outside core metropolitan areas and those within the core(s) were noteworthy in a study by Bernstein (1994), an economist. He theorized that large income differences between core cities and their outlying suburbs would have evidence of moderate to low economic development. His results indicated that the larger the income gap, the less economic productivity and growth evidenced by both areas. The amount of education for people in the highest 25% of income earned was compared to people in the lowest 25%. Adult members of households with lowest incomes had the higher dropout rate; students in the low-income families had lower math scores, indeed overall lower scores, when compared to more affluent students. He inferred that areas with large income gaps would negatively impact educational achievement in schools and that this lessening of education compromised the ability of the United States to maintain a strong economic position with its trading partners.

Other sources substantiate the link between education (high school graduation or more) and a more secure economic situation for individuals and the United States. In a PBS *Frontline* televised program entitled "The Two Nations of Black America", H. L. Gates, Jr. interviewed William Julius Wilson at length (Gates, 1997). Wilson discussed his observations and findings that led to his book *When Work Disappears*. He noted that behaviors in a working neighborhood, even a low-income one, are very different from behaviors when no employment is available. Areas with no or little employment abound with "aberrant, destructive behaviors" (Gates, 1997, p. 4). Wilson stated that essential resources must be present to allow people to compete with others and attain economic security. Such advantageous resources are developed over time and passed from one generation to the next. Wilson noted three such resources: "financial means, family stability, and peer groups", essential for the "structure of opportunity" (Gates, p. 3). Individuals and groups experiencing the chronic situations of poverty, unemployment, and oppression are unable to build such resources in a positive way. Education is not relevant to inner-city blacks because youngsters see no connection between school and employment; most of them have no hope of satisfying employment, even if they do find a job. Misbehavior and low levels of achievement become chronic conditions in the schools. Employers are reluctant to hire people from a truly disadvantaged environment,

people who don't know the behavior norms of the workplace and who don't have skills (e.g., personal, numeric, literary skills). A major point of emphasis, how to overcome the cycle of poverty, occurred more than once during the interview. Wilson strongly advocated creating opportunities for better education for children and job opportunities for adults with coaching for skill development to break the continuing destructive cycle.

Multiple studies have researched the situations engendered by poverty, which are detrimental to students' achievement. People are more likely to be poor if they live in an inner city, a rural community, or in a rural southern state. These places have decreased wealth, so the base for financial resources for public education is lower; thus schools have poorer physical plants and fewer in-school resources (e.g., materials and qualified teachers). Poor children, including those of recent immigrants, are more likely to lack health insurance, more likely to suffer inadequate nutrition, more likely to be low achievers, more likely to repeat a grade, students repeating one or more grades are more likely to drop out of school, and dropouts are less likely to find work. Without changes, poverty minimizes the life prospects of such students (Camarota, 2007; Klein & Knitzer, 2007; National Center for Children in Poverty, 2005, 2008; Wilson, 1997, 1999).

Compensatory programs such as Head Start and Chapter One or Title One are among programs used by schools to overcome disadvantages in students' backgrounds that put them at risk for academic success. The cost of these programs must be calculated in terms of long-term societal benefits, not just in terms of assessment scores (Fagan and Held, 1991; Klein & Knitzer, 2007; NCCP, 2005, 2007; Palmer, 1976; Toch, 1990).

For more than a century, researchers have addressed the classic argument of race or class being most significant for accumulation or disaccumulation of wealth. William Julius Wilson observed in his book *The Bridge Over the Racial Divide* (Wilson, 1999) that the divide in American society has become more economic than racial. He called for Americans to acknowledge intense feelings and antipathy engendered by policies attempting to attone for past racial discrimination. He included discrimination towards the low-income and poverty-stricken whites, a group that also has been excluded from economic advancement. The discussion necessary for America's future, he maintained, must focus on education, attitudes, and jobs for the poor of all races and ethnicities to stabilize our society. Butts (2004) addressed the projected demographic reconfiguration

of America and the potential impact of America being only 50% white by 2050. He noted that the two classes of capitalists and labor have long been at odds, with capitalists using race as means of dividing workers and the poor, both black and white. He echoed Wilson's concerns, calling for coalitions to deal with economic divides. "The work of individuals like Cox, Du Bois, and presently William Julius Wilson have set the stage for a better understanding of the economic, structural and environmental forces that have shaped race relations in the U.S." (Butts, 2004, p. 3).

The National Education Summit in 1999 released data on schools with chronic failure. Among the findings was the fact that 75 percent are high-poverty schools; the majority of students qualify for free lunches. Low-income children are about half as likely as other children to attend preschool, have less opportunity to explore words and their structure, and have less exposure to literacy in the home. This increases the possibilities of delayed or impeded reading. In school, at-risk children, including those who are poor, experience critical disadvantages: low literacy expectations, limited resources, and poor instructional practices. Mathematics achievement rates decline noticeably between fourth and eighth grades, as seen on the Third International Mathematics and Science Study of 1995 (TIMSS). Low-income middle and secondary students are among those who have less preparation for upper level math courses than advantaged students, yet they frequently are taught by unlicensed teachers or ones without a degree in the subject (The National Alliance of State Science and Mathematics Coalitions [NASSMC] Report Summary, 1999).

The Alliance for Excellent Education (2007) analyzed the long-term impacts on accumulated wealth (cash, property, possessions, and investments) if the head of every household were a high school graduate. The Alliance used 2005 U.S. Census Bureau data for household educational attainment in each state and then multiplied the households by their median financial wealth to derive the total financial wealth of each education level by state. To calculate the additional household financial wealth gained by high school graduates, they multiplied the number of households headed by an individual with less than a high school degree by the median financial wealth of those households headed by an individual with a high school diploma. The current estimate of the financial wealth of households without a high school diploma was subtracted by this number to

derive the additional household financial wealth that would be gained by each state (and the nation) if a high school diploma were held by the head of every household. In the United States, an additional total of $74 billion in accumulated wealth could potentially exist from all households being headed by high school graduates. More significant than the extra money low-income households could have, this represents additional long-term financial security and opportunities not possible for the 1.2 million students who drop out of high school each year. The Alliance report concluded that increased levels of education and hence increased accumulated wealth contribute to long-term financial security, allowing families and individuals to absorb the costs of educational opportunities, cope with temporary financial hardships, participate in their communities, and have the resources, background, and time to further the education of their own children. Low-income families must survive on a day-to-day basis, unable to build up the economic and educational situations for the adults and for their children's future

The amount of education has a dramatic economic effect on individual households, as shown in the research of Gouskova and Stafford (2005). They found that if a high school dropout has accumulated $500 of wealth (cash and assets), a high school graduate is likely to have accumulated $5,000. Those with post-high school education accumulate many times more than high school dropouts, up to 20 times more for those with some college education and over 90 times more for those attaining a college degree.

Reducing the high school dropout rate by increasing educational achievement thoughout the elementary and secondary school system is critical for impacting the perpetration of poverty, according to Shapiro (2004). Shapiro, agreeing with Wilson (1999; Gates, 1997) concluded that the cycle of poverty could only be broken through education, helping disadvantaged groups build the capacity to accumulate wealth, impacting future generations in positive ways by fostering a solid middle class.

Table 2.1 compares the cumulative economic impact in Kansas from 2006 households headed by high school dropouts ($58,178,500) to that from households headed by high school graduates ($1,549,905,000). The U. S. Census Bureau (2006) also calculated the potential additional wealth in Kansas if graduates were the heads of all households ($523,606,500).

Table 2.1 Household Wealth in Kansas Accumulated by High School Graduates and Dropouts

Head of household	Number of households	Household wealth
High school graduate	309,981	$ 1,549,905,000
High school dropout	116,357	$ 58,178,500

Note. Potential additional household wealth in Kansas if all heads of households were high school graduates: $523,606,500. Housing value is not included in accumulated household wealth. From U. S. Department of Commerce, Bureau of the Census, 2006.

The Pursuit of Excellence Related to Assessments, Data Collection, and Systemic Reform in School

The quest for excellence is not unique to the 1980s and later. Wiles (2005) traced the history of efforts to design effective schools and educational programs in the United States. He presented school models by means of primary sources, among them the Batavia Plan of 1875, the Committee of Ten on Secondary School Studies in 1893, the 1918 Committee on the Reorganization of Secondary Education, and the Educational Policies Commission on Education for ALL American Youth of 1944. The Batavia Plan of 1875 expressed the goal of increasing the performance of low-achievers (slower learners) in order to promote them to the next grade; it featured flexible grading plans and was one of the first formal educational plans in America to offer a strategy to increase performance of at-risk students. The Committee of Ten on Secondary School Studies in 1893 addressed concerns with the quality of education for high school students. It proposed intense coursework in Latin, Greek, German, French, geography, mathematics, various science courses, history, composition, and English literature, stipulating the courses to be taught each year. The 1918 Committee on the Reorganization of Secondary Education advocated universal and comprehensive education for all young people, along with the Seven Cardinal Principles of Secondary Education. These principles contrasted noticeably with the classical emphasis proposed fifteen years earlier by the Committee of

Ten on Secondary School Studies in 1893. The Seven Cardinal Principles, paraphrased, were clear in their practical emphasis:

1. Health instruction and physical activities.
2. Command of fundamental processes such as writing, reading, and math.
3. Worthy home membership, being a contributing member of a family.
4. Vocation, choosing a suitable career.
5. Civic education.
6. Worthy use of leisure.
7. Ethical character, including personal initiative and responsibility.

Wiles also presented the practical skills that were emphasized in a 1944 curriculum promoted by the Educational Policies Commission on Education for ALL [sic] American Youth. The commission included ten important needs that must be served by the curriculum for all youth, paraphrased here and similar to the educational goals promoted by various groups in the 1970s, 1980s, and 1990s:

1. Skills for work; develop the understanding and attitudes necessary to be an intelligent and productive worker.
2. Good health and fitness.
3. Understand the rights and duties of citizenship and perform their obligations to the community and nation.
4. Understand the significance of families for society and conditions necessary for successful family life.
5. Know how to be an intelligent consumer of goods and services, understanding the economic consequences of personal decisions.
6. Understand scientific methods, influence of science, and main scientific facts.
7. Develop capacity to appreciate beauty in nature and in the fine arts.
8. Be able to use leisure time well for socially useful activities as well as personally enjoyable ones.
9. Respect for others, with insight into ethical values, and be able to work cooperatively with others.
10. Continuous growth in ability for rational thinking, to express thoughts well, and to read and listen with understanding.

The cyclical pattern of alternatate philosophies regarding excellence in education becomes evident just from these few examples spanning 69 years in the United States. As the decades progressed, more plans came to the forefront of educational goals and curriculum planning, all aiming for excellence, containing many aspects of the earlier examples.

Conceptual models for education abound throughout the twentieth century, representing the development and process of students' cognitive and affective domains, from Piaget's *Theory of Intellectual Development* (1920) and *The Child's Conception of the World* (1929) to Gardner's *Characteristics of Multiple Intelligences* (1994). Bruner's *Culture of Education* (Bruner, 1996) added another dimension as he emphasized the importance of considering the social, environmental, and historical backgrounds of students in order to make learning relevant. Tyler (1949) set the stage for assessment as we know it today when he identified four essential questions that educators must consider:

1. What purposes should the school strive to attain?
2. What experiences must the school provide to attain the purposes?
3. How can the educational experiences for students be effectively organized?
4. How can schools determine the attainment of the goals?

Educational philosophers have asked the first three questions for centuries. By asking the fourth question, Tyler set in motion a new outlook on testing, directing the educator back to the first three goals as an assessment is developed and administered. He gained credit for initiating the current approach for a cycle of continuous improvement: analyze, design, implement, and evaluate, according to Wiles (2005).

The Soviet Union took the world, especially the United States, by surprise with its launch of the satellite Sputnik in October of 1957. Why wasn't America first into space? Serious questions were raised about the competitiveness of American education and scientific research as a result of the Sputnik launch, with its threat to national defense. One of the first official responses was the establishment of the Defense Advanced Research Projects Agency (DARPA, originally ARPA) in February 1958, whose mission was and is to " . . . maintain the technological superiority of the U.S. military and prevent technological surprise from harming our national security . . ." through the research

efforts of outstanding and unorthodox scientists and engineers (DARPA, 2003). The National Defense Education Act (NDEA) of 1958 provided funding for more rigorous science and mathematics education teacher workshops, institutes, and graduate fellowships through the National Science Foundation, breaking new ground as it offered these nationwide, involving more teachers than ever before in science education. "Both its fellowships and its institutional benefit followed geographic distribution patterns rather than the competitive elitist format typical of Foundation programs" (National Science Foundation, 1994, ¶ 29). Rutherford (1997) pointed out four crucial lessons learned from the Sputnik era regarding significant changes for science (and any) education. First, goals for educational reform must be long-term, not reacting to an immediate crisis. Second, American education is immense and complicated; it cannot be changed quickly. Third, the federal government's role is vital for funding research, teacher training opportunities, extraordinary educational materials, and employment of specialists in the schools. Fourth, all students must be targeted by reform to provide a broader base of well-educated graduates to meet the scientific and technical needs of the United States.

The lack of verification for achievement attracted notice from academicians. In 1966, U.S. Education Commissioner Francis Keppel and others advocated the need for a national assessment program, so that actual learning levels could be documented. "Economic reports existed on family needs, but no data existed to supply similar facts on the quality and condition of what children learned . . . no satisfactory way of assessing whether the time spent in school was effective" (Keppel, 1966, pp. 108-9). Prestigious groups accomplished large-scale studies of education. In 1980, a three-year intensive study of American high schools was begun by the Carnegie Foundation for the Advancement of Teaching; the Paideia Group undertook an investigation of curriculum and instruction in both elementary and secondary schools, also in 1980 (Toch, 1990). *The Need for Quality*, issued in 1981 by the Southern Regional Education Board (SREB), called for extensive reforms at all levels of public education. The quality of math and science instruction was challenged, with a specific plan for upgrading these subjects in the report *Educating Americans for the 21st Century* (National Science Board, 1982). Every finding of every study pointed to the need for higher and consistent standards of

achievement, decrying the lack of substantial data, and calling for reform of both teacher preparation and curriculum in the schools.

A 36-page report shook the entire United States in April of 1983 with its findings of the mediocre, insufficient education of American schools. *A Nation at Risk: The Imperative for Educational Reform* (National Commission on Excellence in Education [NCEE], 1983) galvanized the public and the leaders in all fields: industry, politics, academics. The NCEE did more in *A Nation at Risk* than point out what was wrong with American education and the negative future impacts. The vision of excellence stemmed from certain goals stated in the Commission's charter, among them:

> • assessing the quality of teaching and learning in U.S. schools, colleges, and universities, be they public or private;
>
> • comparing American schools and colleges with those of other developed nations;
>
> • assessing the extent to which social and educational changes since the 1950s have affected student achievement (NCEE, 1983, Introduction section).

Excellence was clearly defined in terms of the individual, the educational institution, and the society as a whole. For each learner, the NCEE advocated developing individual ability and skills to expand personal limits, in school and as working adults. A school or college focused on excellence sets high expectations and goals for all learners, using every way possible to help students reach them. Excellence was termed the main characteristic of a society that embraces and supports the efforts of the individual and the institution, enabling school graduates to have the education and skill necessary to succeed and progress in a rapidly changing world and workplace. To maintain the USA's economic edge, the Commission stated, "Our Nation's people and its schools and colleges must be committed to achieving excellence in all these senses" (NCEE, 1983, no pp., Excellence in Education section). In multiple sections of the Commission, members made strong statements in support of all students being fully educated and stated their concern if equitable education is not achieved: "A high level of shared education is essential to a free, democratic society . . ." (NCEE, 1983,no pp., The Risk section), and:

> We do not believe that a public commitment to excellence and educational reform must be made at the expense of a strong public commitment to the equitable

> treatment of our diverse population. The twin goals of equity and high-quality schooling have profound and practical meaning for our economy and society, and we cannot permit one to yield to the other either in principle or in practice. To do so would deny young people their chance to learn and live according to their aspirations and abilities. It also would lead to a generalized accommodation to mediocrity in our society on the one hand or the creation of an undemocratic elitism on the other (NCEE, 1983, no pp. Excellence in Education section).

The NCEE reached its conclusions after surveying school districts, schools of teacher education, and the business community, heard testimony from hundreds of concerned representatives, and made multiple site visits (NCEE, 1983, no pp., Appendix C).

The impact of *A Nation at Risk* (NCEE, 1983) can be partially realized by noting the distribution to districts all over the nation of a booklet intended to give practical guidelines to schools. *A Nation at Risk: The Excellence Report: Using It to Improve Your Schools* (American Association of School Administrators, 1983) emphasized the critical need for educational improvement through high, consistent standards. The booklet also outlined the ways school districts and communities can form plans for local educational improvement.

The release of other significant reports strengthened the impact of the NCEE message. *Action for Excellence* (Education Commission of the States, 1983) emphasized the relationship between education and the economy, warning that the U.S. position in commerce, technology, science and other fields was undermined by the poor caliber of our schools. Once again, the education offered by public schools was convincingly connected to the decline of the nation's economy and overall strength. Americans who were increasingly ill-equipped to function effectively in a technological society were, in large part, a product of the schools.

Two documents released in 1989 served as models for mathematics reform in instructional content and methods as well as assessment; both were focused on major systemic changes regarding mathematics instruction and assessment. The document *Curriculum and Evaluation Standards for School Mathematics* (1989), published by the National Council of Teachers of Mathematics, included not only curriculum standards for instruction, but also outlined evaluation standards for assessing student achievement in

mathematics in the classroom and in the school system. From the National Research Council came *Everybody Counts: A Report to the Nation on the Future of Mathematics Education* (1989). The document did more than stress the importance of mathematics education. *Everybody Counts* discussed critical aspects of educational reform with expected transitions, counterproductive influences, and national goals, national strategy, and actions for everyone. "The transformation of mathematics from a core of abstract studies to a powerful family of mathematical sciences is reflected poorly, often not at all, by the traditional mathematics curriculum . . . to prepare students to use mathematics in the twenty-first century, today's curriculum must invoke the full spectrum of the mathematical sciences" (Everybody Counts, 1989, p. 43). Both documents emphasized the need to have challenging content for all students, not just the academic elite, focusing greatly on concepts, reasoning, and understanding, with a lesser emphasis on rote facts and skills, as noted by Porter, Smithson, & Osthoff (1994).

Reform was gaining momentum. The National Governors' Association (NGA) of 1986 had an urgent issue as its focus: education and how to strengthen it. Education was to be on the agenda for four years, with each governor serving on educational committees. Annual progress reports on aspects of education were to be publicized through 1990 at educational summits (National Governors' Association [NGA] Annual Meeting, 1986). Finn (1991) called their document, *A Time for Results,* one of the most influential of the decade; for the first time, lay people, as opposed to professional educators, were ready to initiate action. The governors decided the key to true improvement in education might be to look at what product or outcome is desired, from the business, civic, and family standpoints; education was linked to economic development and civic well-being. A series of hearings across the country gave the governors input as to what broad goals should be set. After two years of study, the NGA wrote the National Goals for Education, "Goals 2000"; President Bush approved them in 1990. In brief, they were:

By the year 2000

(1) All children will start school ready to learn.

(2) Ninety percent of high school students will graduate.

(3) Students will be competent in basic subjects and exhibit responsible citizenship.

(4) U.S. students will lead the world in mathematics and science.

(5) Every American adult will be literate.

(6) Schools will be drug-free and safe (Executive Office of the President, 1990; NGA 1986 & 1989; Finn, 1991; Fuhrman, 1995).

Specific subjects were listed as essential: Mathematics, English, Science, History, and Geography. Even though the goals (especially 1, 3, and 4) were criticized as being unrealistic, the governors justified these by saying the nation wouldn't even get 50% success if it didn't aim for 100%. Successive reports from the NGA offered a starting point for a more cohesive educational policy, focused on outcomes with broad strategies for achieving them, as opposed to one fragmented state by state. National voluntary assessments and longitudinal data studies were among the recommendations (NGA, 1990; 1991). "All able and concerned Americans should examine the six national goals and exert influence and energy in areas in which they can effect change. It is only through such a collaborative effort that excellence in education can be achieved" (Swanson, no pp., 1991).

The National Assessment of Educational Progress (NAEP) was mandated by Congress, first administered in 1969, and scheduled biennially. When monitoring the progress of a school, district, state, or nation, it is not necessary to know the score of any one individual student. It is essential to know overall how that aggregate group (school, state, etc.) is performing as a whole. NAEP uses a statistical sample of the larger school population; originally its data was used for comparisons only against the performance scores of previous years. The data could not be used for international comparisons since no other country uses anything comparable to NAEP. In 1987, NAEP was revamped to include state-by-state reporting as well as the nation as a whole. The states originally participated on a totally voluntary basis. Beginning in the school year 2002-2003, NCLB requirements for Title I grants included an assurance from states and schools that they would participate in the NAEP for grades four and eight reading and mathematics if they are selected as part of the sample. At both the state and local level, participation in other NAEP assessments is voluntary. All costs of administrating the NAEP are born by the

federal government. A sample of Kansas schools first took part in the mathematics assessment in 1998 and in the mathematics and reading assessments in 2000. In 2005, approximately 12,000 Kansas students took part in NAEP for reading and mathematics for fourth and eighth grades. In reading, the sample of Kansas fourth graders ranked thirteenth, and eighth graders ranked eighth in the nation. In mathematics, Kansas fourth grade students ranked second in the nation, and eighth graders ranked third (Accountability Report, 2005-2006; Finn, 1991; NAEP and NCLB, 2005; NAEP Report Card, 2006; Toch 1991).

The case for improving assessment in all subjects continued to be strengthened throughout the 1990s. The Southern Regional Education Board (SREB) released *Educational Benchmarks* by Joseph D. Creech in 1990. Among the things he noted: "Pursuing educational goals without indicators of progress is like traveling a highway without mileposts. "We do not know where we are or how far we have to go" (Creech, 1990, p. 2). Suydam (1990) gave five assumptions contained in the NCTM standards, stating the fifth one as follows: "Evaluation is a means of improving instruction and the whole mathematics program" (Suydam, 1990, p. 2). Suydam further emphasized that the content of the NCTM standards indicates that all students be given full opportunity to learn mathematics, with all the essential facts, challenges and important concepts entailed.

The Secretary's Commission on Achieving Necessary Skills (SCANS, 1991) used the National Goals for Education as an impetus for examining the issues related to an educated work force. SCANS defined skills needed for employment, levels of proficiency, suggested ways to assess proficiency; and developed a dissemination strategy for the nation's schools, businesses, and homes. These skills were based on the foundational ones acquired in school: reading, writing, mathematical computation and reasoning. In order for students to be adept in these skills, changes in the curriculum and school system must take place. In the SCANS vision, schools would integrate assessment and instruction, building quality for and in their students at each level. Assessment would consider fairness for different groups of students, using clearly stated criteria. Assessment would be linked with school credentials and student achievement.

The National Council on Education Standards and Testing (NCEST) was instituted by Congress to determine the need and feasibility of developing national standards and assessments through bipartisan consensus. Their 1992 report, *Raising Standards for American Education,* stated emphatically that standards and assessments were needed; grants were given to professional organizations to develop discipline-specific standards. An oversight board, the National Education Standards and Assessment Council (NESAC), was proposed to certify content and performance standards as well as "criteria" for assessments (Kerins, 1996; McRel Purpose; National Council on Education Standards and Testing [NCEST], 1992).

Many states, districts, and schools began reform towards excellence in the 1980s, some more successful than others. Kansas planned and implemented systemic reform in a methodical manner, incorporating many recommendations from national research and reports, as discussed in this study's Chapter One section "History of Kansas Standards and Assessments for Math and Reading". Two studies, one by Odden and Marsh (1988) and one by Anderson (1989) arrived at the same conclusions regarding successful reform to improve education for all students; their conclusions are highly applicable today as well. Anderson, a researcher for the Education Commission of the States (ECS), examined school improvement programs in 10 states, from Arkansas to Connecticut. Odden and Marsh examined California's school reform legislation of 1983. Both studies concluded that the impact of state initiatives on school districts' practices was positively influenced by a cohesive strategy of implementation at the local level. A twofold combination brought about the highest implementation rate: (a) pressure from the state and (b) support from many sources. Higher test scores and improved learning conditions for all groups of students were related to a higher degree of attention towards curriculum content and pedagogy at the district and school level. Sub-groups of students such as the poor were given increased services; however, the strategies used were generally not effective enough to significantly raise scores of at-risk students. This implied that strategies and methods effective for students not at risk did not work well with particular sub-groups.

Fullan and Stiegelbauer (1991) emphasized the need for governments and agencies, such as state departments of education, to work closely with the school sites to

achieve meaningful reform. At the same time within a school, all individuals need to be involved with the change process; time and resources are essential elements to achieve positive, equitable change.

Educate America: A Call for Equity in School Reform stands as a landmark document addressing the attainment of educational excellence (National Coalition of Educational Equity Advocates [NCEEA], 1994). The document presented essential considerations for systemic reform that would be truly equitable for all students, including those disadvantaged by poverty. Among the issues addressed was student assessment and testing. Twenty-four organizations and individuals initially identified the broad structural issues that comprise the foundation of equitable education. Over sixty individuals contributed research and ideas aimed at the goal of removing the barriers raised by inequity, so that every school would be a place of excellent education for every student. The lengthy report detailed the best approaches for equitable reform by the local, state, and federal levels of educational governance. The findings spotlighted school organization and institutionalized processes that leave the minority, disabled, poor, and low achievers to flounder. Holding students to a common assessment standard while they are exposed to vastly different learning experiences and have vastly different backgrounds is inherently unfair (NCEEA, no pp., Testing and Systemic Reform section). "Standardized tests have a disproportionate impact on students, teachers, and curriculum in schools that serve low income and minority students" (NCEEA, no pp., Student Assessment and Testing section). Therefore, schools were encouraged to use the *Educate America* guidelines to evaluate school management, learning and testing environment, and community support and involvement so that the one-size-fits-all approach or a limited range of opportunities provided in schools for poor and minority students will change. These guidelines were submitted to and endorsed by over one hundred national civil rights, educational, and advocacy organizations. Among the multiple guidelines:

•Publicize disaggregated data by socio-economic status and other sub-groups to allow comparative evaluation of learning opportunities and academic performance; assessment results reported with contextual factors (resources, programs, processes, and outcomes such as graduation and dropout rates).

•Development of high state and national standards to which interdisciplinary, multicultural content in schools is aligned; clearly specified before assessments are developed.

•Alignment of assessments with learning opportunities; schools assess students frequently for the purpose of improving teaching and learning.

•Establishment of benchmarks and timelines for student progress.

•Implementation of actions to improve schools not meeting state content standards.

•Full understanding by teachers of assessment purposes, procedures; full use of standards on which assessments are based; teacher participation in the design and administration of assessments.

•Teachers provided with time and resources to increase their participation in curriculum and instruction development from an equitable viewpoint.

• Public recognition and reinforcement of school successes.

•Construction of partnerships and collaboration with parents and the community.

•Provision of equitable resources for every school (NCEEA, no pp., Schools We Want, The Challenge, and Criteria for Assessment Recommendations sections).

Regarding equity vs. equality, the *Educate America* document (NCEEA, 1994) pointed out that disparities could be concealed with school or district or state averages. Therefore, disaggregation of data by advantaged and at-risk groups was recommended as being essential for accountability and decision-making at every level, from classroom to federal. Such disaggregation revealed a connection between classroom resources and student SES on the 1990 National Assessment of Education Progress survey of 8th grade mathematics programs. Only 41% of teachers in poor schools received most or all of requested materials, while 84% of teachers with middle- or upper-SES students were given most or all of what they needed (Educational Testing Service, 1990, as cited in NCEEA, no pp., School Finance section). *Educate America* recommended that federal programs such as Chapter 1 of Title VII encourage systemic restructuring of state education systems through state eligibility requirements, with funding contingent on state adoption of equitable standards for systemic restructuring, to persuade state legislators and representatives of conflicting interests to make hard equity choices. One component

recommended for federal funding eligibility was the assurance in state and district plans of equitable resources to all public schools. Another component recommended assessment practices that provide information on individual progress toward meeting stated high standards; the impact of federal assistance on student progress; individual schools' progress in enabling students to meet high standards. The conclusion of *Educate America* was that each element of the educational system must be reformed with equity in mind; if any one of the components remains inequitable, some students will be short-changed. The path to excellence requires equity (NCEEA, no pp., Conclusion section).

By 1995, national standards had been developed for each subject area; in the meantime, many states were developing their own standards using finished versions or drafts of the national ones, ideas from other states, research-based reports, and international standards. The formats and specificity of state standards varied widely, but all focused on outcomes at the end of grade twelve. Each state was developing or had developed its own in-state assessments. More states were electing to take part in the NAEP (Lomshek, 1995).

In what other ways did Americans pursue change to bring quality education to all children? Desegregation efforts, education for children with disabilities, and equitable funding efforts were aspects of systemic reform. *Brown v. Board of Education of Topeka* in 1954 overturned the "separate but equal" approach to school facilities (Wiles, 2005). Two titles in the federal Civil Rights Act of 1964 caused changes in many schools and districts. Title IV allowed the U.S. Attorney General to file lawsuits that would enforce desegregation. Because of Title VI, federal funds would not be distributed to schools with racially discriminatory programs of any kind (Civil Rights Act, 1964; Wiles, 2005). The Education for All Handicapped Children Act (EAHC), Public Law (PL) 94-142, in 1975 mandated a nondiscriminatory, appropriate education in the least-restrictive environment for any and all children with disabilities. The law contained the principles of "zero reject" and "procedural due process". The Individuals with Disabilities Education Act (IDEA) of 1990 (amended and expanded in 1994, 1997, and 2004) replaced PL 94-142, requiring qualified children to be educated in regular classrooms with appropriate support (Education for All Handicapped Children Act [EAHC], 1975; The Individuals with Disabilities Education Act [IDEA], 1990, 1994, 199, 2004).

Kozol (1991) bluntly described the lack of equal facilities, equal access, and equal choice in destitute schools compared to more affluent schools. He viewed American education as an increasingly two-tiered system, with schools in poor urban areas and poor rural areas seriously lacking funds for qualified teachers, for enough desks and books, and for clean, snug buildings.

Morrison (2000) defined funding equity as the equal ability of districts to pay for quality education. Rural and inner-city districts have a low tax base because wages and property values are less than in more prosperous areas; agricultural land is taxed at a lower rate than residential or commercial property. Thus the traditional reliance on property taxes as the primary source of local funding for education resulted in great discrepancies in available funds among states, districts, and schools within districts. State equalization formulas used are one way to more equitably distribute educational funding.

In 1999, a group of parents and administrators (Dodge City and Salina school districts) filed a lawsuit filed against the state of Kansas. The suit charged that the money provided to schools from the state was insufficient and unfairly distributed, penalizing poor and minority students. The legislature was ordered by the court to generate a new plan for financing education. In July 2006, the Kansas Supreme Court ruled that the three-year school finance plan from the legislature met the criteria established as a result of the 1999 lawsuit and dismissed the lawsuit (Accountability Report, 2006, 2007).

Bryk and Thum (1989) conducted a study in quest of evidence for excellence. Their study focused on school and teacher factors that impacted student achievement. The researchers used the High School and Beyond database to select 160 schools (4450 students). They controlled for differences in social class, race, and other factors, noting that absenteeism and the dropout rate decreased in all groups when the following existed:

- a genuine interest in and involvement with students conveyed by the faculty;
- an orderly environment, in-class and whole-school;
- an emphasis on academic content and progress;
- more uniformity of curriculum for all groups.

They concluded that positive changes in the school facilitated positive changes in student behavior, achievement, and attitudes.

Haycock (2001) stated that in spite of the relationship that exists between income and achievement, what matters most is good teaching and systemic commitment to closing achievement gaps. Haycock pointed out the improvement among poor and minority students in the 1970s and the 1980s, but also noted the decline in the 1990s. Surveys of young people in poverty areas revealed that they viewed not being challenged in school as a higher detriment than poverty. Haycock used data from NAEP, NCES, and from successful school districts in terms of high achievement of poor and minority students. She noted that while research shows more rigorous coursework has a positive impact on formerly low-achieving students, who have less resources in all areas, they typically are given less in school. Haycock called for clear academic standards with rigorous content, assessments aligned with the standards, accountability systems that insist on better results for all students, assistance for teachers improving their skills, and extra instructional time for students who need it. Haycock cited several school districts that had used these research-backed approaches to greatly improve performance of all students, the poor and minorities showed greater degrees of improvement than students who were neither poor nor members of minority groups.

Reform directed at the goal of raising student achievement can succeed if educators examine both successful reforms and barriers along the way. Reforms that are likely to become part of a system's educational culture focus on traditions, knowledge, practice, data management, and student outcomes (Popkewitz, 2000). The school is the primary unit of change for a reform initiative; all programs and services within the school must be aligned strategically, with the focus on total school success as the measured indicator of change (Lewandowski & Moller, 1997; Elmore & McLaughlin, 1988).

In a review of literature focused on obstacles to systemic reform in schools, Jones and Martinez (2001) concluded that an effective data management system is crucial for program evaluations and longitudinal studies, with data collected in disaggregate form and timely, easy access insured. Without such data, "evidence of reform impact is insufficient" (Jones & Martinez, 2001, p. 4). Attempts to bring about rapid improvement in student achievement without aligning the effort throughout the school result in countless reforms that come and go. Rather than specifying separate programs, funding agencies would likely have better results by implementing standards, benchmarks, and a

process for determining what works with all groups of students. The alignment of the aforementioned with funds, assistance for teachers, and data increase the likelihood of reform having a positive effect.

Green and Forster (2004) stated that claims of excellence and the performance results on which they are based are not usually brought under systematic scrutiny. As they designed a way to analyze such claims, two questions guided them.

(1) How large an effect on academic performance is evidenced by the disadvantages that students bring to school with them?

(2) To what extent can excellent schools diminish this effect?

Green and Forster proposed that student teachability should be included as an essential part of any discussion of education policy. They defined teachability as the personal advantages and disadvantages inherent in each student and constructed a Teachability Index by which they could systematically examine factors substantiated by multiple research studies to impact student teachability. The Teachability Index has six sub-indices or categories, shown in Table 2.2, each consisting of relevant factors (sixteen total) such as family incomes, preschool experience, single parent homes, etc., all of which are part of a given student's teachability. The Teachability Index thus gives schools an indication of whether their student populations have greater challenges to learning and to what extent.

Table 2.2 Teachability Index Components

Sub-indices	Factors measured for the extent to which they impose educational challenges
Readiness Index	Preschool and out-of-school preparation and support
Economics Index	Material well-being
Community Index	Helpful and harmful social influences
Health Index	Physical and mental well-being
Race Index	Racial composition
Family Index	Family structure

Note. From Green and Forster (2004).

The factors chosen were tracked for a thirty-year period, from 1970 to 2001. The time span allowed the researchers to track direction and magnitude of trends in teachability. The researchers pointed out that the inflation-adjusted spending has doubled in the thirty-year span; critics have been vocal that the money spent is not having enough effect. The researchers also developed a School Performance Index to measure, in conjunction with the Teachability Index, how well states are teaching its students with their various educational challenges. Variations in the Teachability Index and in the School Performance Index were measured using the Pearson's correlation method. A regression analysis was used by Green and Forster to calculate predicted NAEP achievement levels, based on a state's Teachability Index results, yielding the percentage of students expected to be at the "basic" level in math and reading. The actual NAEP math and reading levels for that state were then divided by the average of the predicted levels. The actual level of achievement was shown as a percentage of the predicted achievement indicated by the Teachability Index. Green and Forster's development and use of other indices gave additional perspectives on the reform efforts of schools, state by state. A state which showed a statistically significant and positive relationship between the Accountability Index and School Performance Index indicates that higher student achievement levels have been attained relative to the teachability levels, inferring implemented reforms produced higher than expected performance levels. The resulting percentage is named the School Efficiency Index; in this study, Kansas ranked 8th in the nation for school efficiency. Green and Forster concluded that states with low scores on the Teachability Index are not doomed to produce low-performing students. Use of these indices indicates that the efforts schools implement can make a difference, overcoming variables in their student populations. I noted the apparent coincidence of large numbers of Kansas Standard of Excellence schools (based on Kansas State Assessments) with the state's high ranking on this School Efficiency Index (based on NAEP) as well as the stages of reform in Kansas since 1989.

Standard and Poor's School Evaluation Services (2007) conducted an efficiency study of Kansas school districts, using KSDE assessment data from the school years of 2004-05 and 2005-06, with the latter year being weighted twice as heavily as the former.

Such weighting was deemed appropriate to offset small populations and measurement error, as well as acknowledging that "the most up-to-date performance should be an important reflection of the districts' most recent efforts" (Standard and Poor's, 2007, p. 10). The objective of the study was to identify which districts used financial resources most efficiently in terms of student achievement and to provide benchmarks by which less efficient districts could identify ways to increase student learning. An analytical method known as Data Envelopment Analysis was used. This method considered multiple weighting options for each district's inputs, outputs, and constraints (as identified for this study); then the optimal configuration is used to compute the efficiency in relation to other districts whose options are weighted in the same way. Of the state's 300 school districts, 257 were ranked; 43 could not be scored due to small size and data unreliability. The study rated 27 school districts at 99% or 100% efficiency. The average district was 85% as efficient as the top districts, with the lowest districts' scores just over 60% as efficient as the most efficient districts. The demographics of the top districts varied considerably. Each district scored can print an explanation of its own efficiency score; if less than 99% efficient, benchmarks from the state's most efficient districts are provided. The results of this study are district-specific, allowing districts the opportunity to target and plan strategies for improvement of student learning, a necessary situation to close achievement gaps in groups of students.

Mosenthal, Lipson, Torncello, Russ, and Mekkelsen (2004) posed two research questions as focus for their study of reading instruction contexts and practices in successful schools. First, what instructional and school factors promote high performance in reading? The second question was of particular interest to me: "Do the factors that influence success and promote excellent performance vary among successful schools, depending on school characteristics?" (Mosenthal et al., 2004, p. 346). Schools in low-, middle, and high socioeconomic (SES) communities were identified using data from the Vermont Department of Education Report about all elementary schools in Vermont. The researchers used a cluster analysis of the data, insuring a wide range of demographic factors in each group of schools: non-English language speakers, community level of SES, educational attainment of parents, teacher salary level, and the number of special education students. The schools were clustered into three SES groupings: low, middle,

and high. A total of six high-performing schools (two from each SES cluster) and 3 low-performing schools (one from each cluster) were selected for the study. High-performing schools were those whose students met or exceeded the reading standard on the Vermont Developmental Reading Assessment (for second grade) and the New Standards Reference Examination (administered statewide at fourth grade). The authors pointed out certain aspects of their study that stand in contrast with many other works in the literature. First, demographic diversity in each group of schools was assured by using a cluster analysis. Second, exemplary schools were defined in terms of test score standards, rather than relative to other schools. Third, success was the focus of the research instead of change. The statistical findings indicated high-performing schools in all of the SES clusters. "Two factors, SES and the nature of literacy instruction, did not play an explanatory role in literacy achievement test scores in the successful schools" (Mosenthal et al., p. 351). The evidence indicates that low SES schools can be successful; school demographic characteristics were not a significant influence on achievement. What does make a difference? The authors identified teacher, classroom, and school factors, agreeing with other research that the quality of the implementation of a reading program is a predictor of success. "It is the fit of an instructional program to the context of the school that determines success. Test scores are a reflection of this fit" (Mosenthal et al., p. 365).

After examining the NAEP performance results released in the fall of 2005, Ravitch (2005) called for uniform national standards, curriculum, and testing, giving the U.S. schools a common criteria for excellence. She noted that many states report high performance levels for a high percentage of students, based on in-state-developed assessments and standards. The NAEP results do not always coincide with the state-generated conclusions. For instance, New York reported almost 85% of its fourth graders were proficient on the state math assessment, but only 36% reached proficiency on the federal test. In eighth grade reading on the Tennessee state assessment, 88% of the students met the standard; however, only 26% were proficient on the NAEP. The federal assessment program aligns its performance level standards with those common to the international community, much more rigorous than the ones set by many states. Ravitch points out the inaccuracy of perception that can result by conflicting sets of criteria. Such

divergence diminishes a state's claim of having a high percentage of highly proficient students. While Ravitch's comments, in my opinion, had some merit she did not specify if NAEP data was that from the trend study of 2005 or from the regular assessment.

The International Association for the Evaluation of Educational Achievement (IEA) completed data collection for the Third International Mathematics and Science Study (TIMSS) of 1995; studies conducted in successive years have been designated as Trends in International Mathematics and Science Study, still using the acronym TIMSS. More than half a million students in five grades from 45 countries were tested in 1995. The overall aims of the study were to measure the mathematics and science achievement in the various target populations and to identify the major in- and out-of-school determinants of the educational outcomes. A sub-study of mathematics and science curricula was also conducted. The study is given every four years, with 60 countries involved in 2007. Student questionnaires yield information on their backgrounds, attitudes and beliefs related to schooling and learning, and information about their classroom experiences. The teacher and school questionnaires ask about class scheduling, mathematics and science content coverage, school policies, teachers' educational backgrounds and preparation. The international headquarters is in Amsterdam, the Netherlands. In the United States, TIMSS is conducted by the National Center for Education Statistics of the U.S. Department of Education; the collected data is available for researchers' analyses, looking for causal relationships and trends in performance and other topics (Brief History of the Trends in Mathematics and Science Study, n.d.; Trends in International Mathematics and Science Study, 2003).

In addition to the TIMMS, the IEA offers a survey of reading achievement known as the Progress in Reading Literacy Study (PIRLS); in 2001, thirty-five countries participated including the United States. Gilmore (2005) evaluated the impact of PIRLS on 24 low- and middle-income countries that participated. Even though the United States was not one of the countries she surveyed, certain findings seem applicable. "The international findings, particularly the international rankings in achievement and trends . . . over time . . . contribute a great deal to a better understanding of education within the countries . . . provide the impetus for reforms and changes" (Gilmore, 2005, p. 6). Benefits from participation in such international projects include countries' use of results

and comparisons to evaluate their own assessments, curricula, and initiatives. In Gilmore's survey, countries describing the greatest benefits were those that participated over a series of cycles and thus could chart trends over a number of years.

During the International Research Conference at the Brookings Institution, Kilpatrick, Mesa, and Sloane (2006) presented their study that focused on how algebra is taught and learned in the U.S., using data from 1995, 1999, and 2003 TIMMS mathematics items. In addition to examining U.S. student performance against the stated standards of achievement, they used an international perspective, comparing U.S. scores to those of other countries. Patterns of performance were detected, suggesting curricular and instructional areas in mathematics that might warrant attention for U.S. educators and school systems. Kilpatrick et al. (2006) noted differences in how algebra is presented; American schools typically isolate algebra as an abstract, theoretical course, whereas other countries use an approach of integrating algebra, geometry, and other aspects of math into one course, or they teach the various areas in an interrelated and parallel series of courses, with less review and more high-complex problems than U.S. teachers include. The U.S. system traditionally viewed algebra, geometry, and more advanced courses as most appropriate for the college-bound students, with general or basic mathematics courses offered to the less elite. Other countries taking part in the TIMSS offer algebra and geometry as essential components of the middle school. The researchers noted that U.S. fourth graders and twelfth graders do well in general, but from an international perspective, their performance is weaker than in other countries. The eighth grade scores showed the greatest gap between U.S. students' performance and that of the other countries' participants, with the U.S. being comparatively low.

Kilpatrick et al. (2006) did not analyze every TIMSS test item. Their method of determining TIMSS items for analysis included using only those test items answered correctly by at least 75 percent of the U.S. students and then the ones answered correctly by no more than 25 percent of the U.S. participants. This isolation of the extremes of scoring helped reveal variations in performance that might have otherwise been buried, so to speak, by the average of scores on a given item and the average overall for a particular mathematical category. The conclusion and recommendation of the authors was "In short, if they are to improve their performance in algebra, U.S. students appear to

need many more opportunities to engage in functional thinking with complex problems and, in particular, in functional thinking as it relates to realistic situations" (Kilpatrick et al., pp. 43).

Although the study by Kilpatrick et al. (2006) did not dwell on SES or other student characteristics, I found it to be relevant to my own study and very interesting in terms of findings, methods, and connection with other studies. They chose to use highly aggregated data, by country and grade level within a country, and used the 1995 scores as a baseline from which they could study achievement trends longitudinally.

Gustafsson (2006) made a strong case for doing these very things in his analysis of methodological problems in many cross-sectional studies that infer a causal relationship. He points out that explanations as to cause are necessary and important aims of scientific research; explanations are needed by policy makers as they make decisions impacting education. However, in cross-sectional studies, uncontrolled variables might confuse the direction of causality, leading to an erroneous explanation. For example, Gustafsson cites the use of NAEP data in 1993 by Mullis, Campbell, and Farstrup to examine the effects of time devoted to direct teaching on grade 4 reading scores. The significant negative correlation they obtained indicated on the surface that students who experienced a higher amount of direct teaching time had a lower reading performance score, hence a causal relation could be inferred that more teaching seemingly caused poor readers. Mullis et al. concluded that this was an unreasonable interpretation; they proposed the interpretation that poor readers were very probably given more instruction time than the more accomplished readers. Gustafsson agrees with their conclusion and interpretation. According to Gustafsson, this example implies that statements of causality for analyses of cross-sectional data should be issued with caution. Confused direction of causality (labeled "endogeneity", "reversed causality", or "selection bias" by different disciplines) is difficult to avoid in cross-sectional data studies, because omitted variables (if they correlate with the dependent variable) will cause bias or confusion of direction in the estimated causal relationship unless controlled, and it is nearly impossible to include all the relevant variables for individual students. Gustafsson suggests procedures to increase the correctness of causal inference by decreasing selection bias and reducing the effect of omitted variables in the design of a study. First, analyze data at a high level of

aggregation. The international studies such as TIMSS accumulate data by country, so this would be the unit suggested. Second, design a longitudinal focus for the same units of analysis. Since the TIMSS is given every four years, a study of changes in a given country over time would reveal important trends. "The fact that change over fixed countries is analyzed turns many of those variables which vary over countries into constants so that they cannot correlate with the independent variables under study" (Gustafsson, p. 28).

Testerman (1996) reported how the affective domain impacts improvement of achievement and reduction of the dropout rate, both indicators of a school striving for excellence. In a surprising finding, high school students had a more positive self-image after quitting school, stating in a survey that teachers' attitudes toward them were not favorable or caring. The decision to drop out was attributed to uncooperative, negative relationships involving students, staff, parents, and administrators. Students with a grade-point average of 1.5 or lower on a 4-point scale were assigned an advisor from the faculty in a Florida high school. A control group had no advisors assigned. The 21-week study resulted in noticeable differences between the two groups. The experimental group had significantly better attendance and improved grade-point averages than the control group, but no difference was detected in their beliefs about their own intellect or their status in school.

Essex (2006) reports aspects of the No Child Left Behind Act (NCLB), signed into law January 8, 2002 with the stated purpose of improving student achievement by changing school culture. One of the provisions requires that Title One funds be used only for programs grounded in research. Schools were given more flexibility with these funds which, as a result of NCLB, could be used school-wide; the poverty threshold for eligibility was lowered from 50% of the school's population to 40%. Each school receiving Title One funds must target a minimum of 5% of the funds towards professional development to assist teachers. Schools were required to establish a single statewide accountability system, with annual assessments (developed by each state) for all students in grades three through eight. State and local report cards on student achievement were to display disaggregated data to track progress for all groups of students toward proficiency in reading and math by 2014. NCLB targets services and

grants to districts that are low-performing and high-poverty. Participation in the biennial NAEP for reading and mathematics (fourth and eighth grades) became mandatory if selected as a part of the sample, to establish a common measuring standard against which educators and policymakers could compare the rigor of state assessments (U.S. Department of Education, *NCLB and Other Elementary/Secondary Policy Documents*, 2002).

The average NAEP scores in reading and math for 9-year-olds in poor schools lacking quality teachers, facilities, and materials lagged 37 points and 21 points, respectively, behind the average scores in other schools with similar student populations; yet exemplary schools with a majority of poor and minority students have closed the gap through effective teachers and an enriched curriculum. Effective teachers had high expectations, positive relationships with students, and developed a positive classroom climate with supportive, respectful structure (Turning Around Low-Performing Schools, 1998). These characteristics impact the affective domain, influencing students' attitudes, performance, self-expectations, and behaviors for the better.

Possible Causes of and Solutions for Low Achievement (2006) consists of a literature review pertaining to characteristics of low achievers, school factors that interact with student characteristics, how school and student characteristics together affect the likelihood of student academic success, and actions being implemented in Kansas and other states to improve the achievement level of students at risk. Low achievement in reading and writing occurs at an unduly high rate for children growing up in poverty. Publicity can serve as an incentive to improve, shown by rewards in the form of public acclaim used in North Carolina. Each school is publicly labeled exemplary, meets expectations, adequate performance, or low performance, based on its performance compared to its own previous performance and statewide average test scores. The Policy Implications Table at the end of *Possible Causes of and Solutions for Low Achievement* (2006) lists several topics highlighted in the report, an explanation of why each topic is important, current Kansas State Board and State Department of Education initiatives in the topic area, and possible next steps/actions to be taken. The purpose is to initiate discussion and planning among Kansas teachers, administrators, and policy makers on how to more effectively educate the low achieving student.

Summary of Literature Review

The literature reviewed for Chapter Two revealed long-standing, accepted trends in educational outlook as well as some less frequently documented. Many documents detailed essential considerations in the quest for excellence in schools, emphasizing equitable education for all students. This summary categorizes representative items of the literature into five trends or outlooks in relationship to this study: (a) strong correlation between low SES and low student achievement, (b) significance and impact of chronic low SES and low achievement, (c) high achievement for low SES schools and students; (d) excellence through equitable systemic reform, and (e) data collection, access, and use focused on trends in achievement.

The relationship of low income to low student achievement and the significance of that relationship formed part of the initial justification for this study. The long-term impact of low achievement on individuals and on our society is too serious to ignore. A great deal of the reviewed literature confirms a high positive correlation between income level and achievement in school, substantiating the theory that low SES correlates with low school achievement levels; in other words, SES influences the level of academic achievement. However, the alternate theory that school effectiveness and quality can be more influential on achievement than family background also is upheld by the review of literature. Several studies pointed to schools that have broken down the barrier for low SES students, especially in low-income neighborhoods and communities, enabling these students and schools to attain high levels of performance. Characteristics in common to such schools were identified. Such perhaps is the case for the Standard of Excellence schools in Kansas. The total population of SOE schools, the percentage of low SES students, and performance levels disaggregated by SES for each building comprised the subject(s) for this study. The changes in standards, assessments, and the accreditation process over the years indicate systemic reform in Kansas is underway. Noting the methods researchers used in selecting samples, the types of data, and the statistical tools enabled me to compare their choices with those used for the study at hand.

Strong Correlation Between Low SES and Low Achievement

An essential consideration when selecting literature for review was the theory that SES consistently has been a strong predictor of success (or the lack) in school, as well as in life. In study after study since the 1960s, low SES was strongly correlated with poor academic performance for a high percentage of low SES students. Coleman (1966), Morrison (2000), National Alliance of State Science and Mathematics Coalitions Report Summary [NASSMC] (1999), Okpala et al (2001), Toch (1991), and Yee (2007) are a few of the authors reviewed who bear out this correlation. Expectations and a student's own sense of control over his or her destiny play a major role in the level and quality of task performance. Low SES students frequently experience negative and low expectations from teachers and of their own making, as they become convinced school will not make a difference in the quality of their lives. They are disproportionately represented in low ability groups and unlikely to change group levels from year to year, as attested by the writings of Gates (1997), Good and Brophy (2000), Kauchak and Eggen (2003), Stulac (1982), and Wilson (1999). Students from low SES backgrounds had poorer performances for reading than for math and a higher drop-out rate (Ma & Klinger, 2000).

Are low-income schools represented in the Kansas Standard of Excellence award roster? If the theory holds that SES influences achievement more than school efforts, than virtually all of the SOE schools would be in higher income neighborhoods, with few students eligible for free or reduced lunches.

Significance and Impact of Chronic Low SES and Low Achievement

The negative personal and societal impacts of chronic poverty and low achievement were very evident in the literature, again giving credence to the connection of low SES with poor performance in school and lack of economic gain for adults. From a societal standpoint, increasing achievement and reducing the dropout rate has economic implications for the future in terms of available wealth per household, incidence of crime and poverty, productivity and quality in the workplace, and an informed, responsible, and compassionate citizenry. The cost of good education is significantly less than the societal long-term costs of ineffective schooling (Alliance for Excellent Education, 2007;

Bernstein, 1994; A Nation at Risk, 1983; 1999; NCCP, 2005, 2007; SCANS, 1991; Thomas & Bainbridge, 2001; & Toch, 1991). Low achievement and low SES can have detrimental negative personal effects in academics, behaviors, relationships, and employment. Family poverty impacts life's prospects even for preschoolers. In their preschool years, they have fewer experiences in the home and community that provide academic readiness. Low income equates with lack of adequate nutrition and health care; hence low SES students are likely to start school physically unable to learn to their true capacity (Camarota, 2005, 2007; Klein & Knitzer, 2007; NASSMC, 1999; NCCP, 2005, 2007; Ogbu, 1974; Thomas & Bainbridge, 2001). Lack of resources for learning, low expectations from teachers, poor relationships with teachers, failures and frustration at one stage of development negatively impact achievement and learning in subsequent stages of life, creating a chronic situation; thus poor performance and apathy or antagonism become a permanent situation and impact a student's capability of learning and earning a living as an adult, often driving students to drop out (Klein & Knitzer, 2007; Thomas and Bainbridge, 2001; Gates, 1997; Wilson, 1999). These concerns about the negative impact of chronic poverty become increasingly relevant for Kansas leaders, families, employers, and educators as more Kansas children come from poverty-level homes.

High Achievement for Low SES Schools and Students

A theory that I favor promotes the attainment of high achievement by low-income students and schools, with school characteristics more important than family and community background. This theory is the foundation of my study's focus: schools designated as excellent and the income level variations of those SOE schools.

The literature review brings to light many instances of success in raising levels of achievement in the low SES group, described by Edmonds (1981), Essex (2006), Fullan et al (1991), Kahlenberg (2006), Testerman (1996), Stulak (1982) and others. While not as numerous as writings reinforcing the strong connection of low SES to low achievement, the situations investigated and the results infer that more widespread success is possible. Schools are more likely to succeed in raising low SES achievement and reducing the dropout rate when the schools address affective as well as academic

issues. High expectations bring about an increased level of performance (Cohan, 1972; Delisio, 2007; Good & Brophy, 2000; Kauchek & Eggen, 2003; Slavin, 1994). To move out of poverty, individuals must have education and caring relationships with good role models. Changes in the school facilitate changes in student behavior, attitudes, and achievement. Interrelated factors were identified that have a correlation with school-wide improvement. Haycock (2001) used data from NAEP, NCES, and from successful school districts, documenting high achievement of poor and minority students.

This study used data from the Kansas assessments about successful school buildings, distinguished by the Kansas SOE award. Do any or many of these SEO schools include those with a high percentage of students eligible for free or reduced lunches? I expected to see a number of low-income schools in the SOE roster. Over the years, more poor students in Kansas and elsewhere and the schools serving them show greater degrees of improvement. The evidence from literature indicates that student demographics, among them low SES, are not always significant influences on achievement; the effective school and teacher characteristics identified in literature can draw out the best in students. Kansas teachers and schools must strive to counteract negative social and economic situations common to poverty. Teachers must not use a student's background as an excuse for low achievement or that student will never be truly educated.

Excellence Through Equitable Systemic Reform: Assessments, Schools, and Funding

Substantiation of the theory that schools can bring about improved performance of low-income students requires meaningful reform in the schools, focused on outcomes, accountability, and equity. More than once, educational reform efforts were triggered by concerns about the economic and the military position of the United States. The responses to *A Nation at Risk* initially focused on test score accountability and comparison of testing results from international levels to classroom levels. A back-to-the-basics movement spread and was given wide publicity (as had been seen previously in other times of national crisis, e.g., the response to Sputnik in 1957) under the guise of various names, one being Basic Competency Testing for minimum skills in math and reading. Restructuring based on deregulation of education (e.g., site-based management,

shared decision making) and school choice were two additional reform movements that gained prominence in the late 1980s and early 1990s, partially in response to the economic decline of the U.S. at that time (NCEE, 1983; NGA 1986-1991; NSF 1994; Rutherford, 1997).

Mosenthal et al (2004) defined exemplary schools in terms of test score standards, rather than relative to other schools, with success as the focus of the research instead of change. I am doing the same. Multiple pieces of literature concluded that low SES schools can be successful. School demographic characteristics, such as SES levels were not a significant influence on achievement in the schools examined. Changes in the school resulted in positive changes in student behavior, achievement, and attitudes. Research agrees that the quality of the implementation of a reading program is a predictor of success. Exemplary schools with a majority of poor and minority students have closed the gap through effective teachers, an enriched curriculum, research-backed approaches, and study of school performance evaluations. An interrelated web of factors related to school organization and climate, administration, teachers, and building community support is in place throughout the system, all focused on the school as the primary unit of change. Frequent, instructionally-based assessments of student progress avoid students being trapped in low performance groups and motivate students to improve (Fullan, 1991; Green and Forster, 2004; Jones & Martinez, 2001; Mosenthal et al, 2004; Possible Causes, 2006; SCANS, 1991; Stulac, 1982). The researchers' conclusions of integrating assessment and instruction, combined with recommendations from other sources regarding equitable reform, sound very much like the accreditation process used by Kansas. Considering fairness of assessment items for different groups of students, using clearly stated criteria and standards, and linking assessment with school credentials and student achievement are part of the system in Kansas.

Fully educating all students, including those from minority groups or those with disabilities is now part of the American education system. Rulings such as *Brown v. Board of Education in Topeka* combined with laws mandating a free, public education for all disabled children laid a large part of the foundation for the movement towards equitable education of all disadvantaged students (EAHC, 1975; IDEA, 1990; Horne, 1996; Wiles, 2005, p. 38).

Equitable funding has been a major part of the systemic reform movement. Legal rulings and equalization policies were noted (Accountability Reports 2005-06, 2006-07; Morrison 2000; and Wiles 2005). Equity of resources and opportunities to learn mean more than the same dollars allocated per student; each student must have what he or she needs to be able to learn. Equitable learning opportunities acknowledge and are built on the particular cognitive, social, and affective needs and strengths of students. It costs more money to educate some students than to educate other students. The research reviewed agreed that equity was a major component of achieving educational excellence; systemic reform is necessary and is occurring, with attention paid to the interactions of all the components impacting achievement (Educate America, 1994; Everybody Counts, 1999; Kozol, 1991; NCEE, 1983; NCCP, 2005: Possible Causes, 2006).

State eligibility requirements for Title One federal funds now require that these funds be used only for research-based instructional programs. They can be applied school-wide, allowing local schools latitude for instructional decisions. Schools must target 5% or more toward professional development for teachers. A statewide accountability system, tracking progress of disaggregated groups through annual state assessments, equitable assessments built on clear standards taught by excellent teachers, equitable opportunities to learn planned in schools are now in place in schools that achieve excellence. Assessment is to be used to improve instruction and the system as a whole. These factors have been documented as essential for systemic reform and equitable improvement of education (Educate America, 1994; Essex, 2006; Fullan & Stiegelbaurer, 1991; NCLB Act, 2001; Suydam, 1990; and Wiles, 2005).

Data Collection, Access, and Use Focused on Trends in Achievement.

Data collection is becoming more standardized, detailed, and sophisticated, partly due to government mandates such as NCLB (2001), and partly to the mentality and essentials of accountability. No one wants to be accountable for conclusions based on faulty data, an incomplete database, flawed assumptions, incomplete definitions, or misanalysis. Such distorted conclusions in some cases have exaggerated the number of successful low-income schools and thus might minimize the need for society to fully address socioeconomic gaps with equitable policies (Harris, 2006).

Researchers, policy makers, educators, and the public can access data from NAEP, NCES, TIMSS, professional groups, states, school districts, and schools. Each state has now developed state and local report cards on student achievement to track progress for all groups of students toward proficiency in reading and math by 2014. All states now must participate in the biennial National Assessment of Education Progress for reading and mathematics at the fourth and eighth grade levels (Accountability Report, 2006; Essex, 2005; Jones & Martinez, 2001; NCLB, 2001; Possible Causes, 2006).

Disaggregation of data by advantaged and at-risk groups (and other sub-groups) is essential for accountability and decision-making, since use of averages for the total student population could conceal disparities (Educate America, 1994; Haycock, 2001; Gustafsson, 2006). Kilpatrick et al (2006) used extremes of scoring to reveal variations in performance that might have otherwise been hidden in the averages. The studies of Anderson (1989) and Fullan and Stiegelbauer (1991) are examples of important information being revealed through disaggregation of data. Anderson found evidence of higher test scores overall at the school/district level due to efforts at curriculum and pedagogy reform. However, the scores of sub-groups such as the poor did not show a significant increase; the knowledge of the gap gives the school/district an opportunity to decide how to better educate particular sub-groups, necessary for the good of the students, in some states for accreditation, and to meet the NCLB mandate. Disaggregated data about student characteristics combined with aggregate data at the state level enabled Green and Forster (2004) to develop indices by which they could cross-reference the teachability rating of the students and the actual performance level, revealing a state's efficiency rating. Kansas was highly rated, indicating that it is efficient at teaching most of its students. Ratings of this sort lend validity to the large number of Standard of Excellence awards earned in 2005-06.

Use of aggregated data is appropriate for longitudinal trend studies. The Standard and Poor's study of 2007, repeated each year, used Kansas assessment data aggregated at the district level through the KSDE. The study rated Kansas districts on efficient use of financial resources in terms of student achievement. The results allowed districts to view themselves in relation to highly efficient districts and plan specific ways to improve their efficiency and effectiveness. Lewandowski and Moller (1997) and Elmore and

McLaughlin (1988) advocated the use of aggregate data to focus on total school success as the measured indicator of change. Gufstafsson (2006) and Kilpatrick et al. (2006) used highly aggregated data from TIMMS to study achievement trends over time within a country and across countries. By designing a longitudinal focus on fixed countries and a high level of aggregation, variables turn into constants and do not correlate with the independent variables being examined.

Ravitch (2005) used NAEP data and data from various states to verify the states' percentages of students at or above proficiency (comparable to the "meets standards or above" designation used for the 2005-06 Kansas assessments). While she did not conduct a formal study of the extent of the performance level differences between state assessments and NAEP, her observations, as well as research from Green and Forster (2004), underscore the need for continued collection and access of detailed data to allow cross-comparisons of performance level claims. Any discrepancies showing a gap between a state's claim and the results on the NAEP or the results on the School Efficiency Index might motivate that state to inject more rigor into its own standards and assessments. Data can thus be a tool for systemic reform.

High achievement for low-income schools and low-income students has been correlated with systemic, equitable reform (e.g., funding, opportunities for all students, teacher quality, instructional and assessment practices). Virtually all of the recommendations for achieving excellence have become part of the Kansas school system; perhaps the efforts in the state since the l980s are bearing fruit. Combined with positive attitudes and high expectations from teachers, equity can foster excellence; perhaps the Kansas SOE schools have learned and applied this principle.

CHAPTER 3 - Methodology

Design of the Study

This study determined whether or not significant differences existed between performance level score means of low-, medium-, and high-income buildings designated as excellent by the Kansas State Department of Education. This study of school income levels and achievement data used 2006 Kansas assessment results for math and reading from schools distinguished by a Standard of Excellence (SOE) Building award, with the building as the unit of analysis. Using a higher level of aggregation (scores from multiple buildings rather than individual student scores or scores from classrooms) eliminated some of the difficulties in obtaining and analyzing the data. Omitted variables that are present when individuals are the subjects (e.g., home atmosphere) cause distortion and confusion unless controlled, and it would be nearly impossible to include all the relevant variables for individual students in a study of this magnitude (Gustafsson, 2006).

Based on the researcher's premise that excellence is excellence no matter the income level of a school, two research questions posed by the researcher prompted the design of this study:

1. Is the distribution of achievement scores across the performance levels consistent across income-level designation of grade-level buildings per subject?

2. What is the degree of variance or consistency?

The researcher formed and tested three hypotheses to answer the research questions:

H_{01}. The between-subjects main effect means of the first factor (Income) have no significant difference from one another for a given type of building: low-income, middle-income, and high-income SOE schools.

H_{02}. The within-subjects main effect means of the second factor (Performance Level Categories) have no significant difference from one another for a given type of SOE building.

H_{03}. The two factors (Income Levels of Schools and Performance Level Categories) do not interact beyond the limits of random chance for a given type of SOE building when tested for within-subjects interaction.

Jones and Martinez (2001) emphasized the importance of an easily accessible database, with data available in both disaggregate and aggregate form. The databases for Standard of Excellence awards, enrollment, percentages of free and reduced lunches, and distribution of scores are available at the KSDE web site http://www.ksde.org without restriction through three pages:

1. Main Assessment Page http://www.ksde.org/Default.aspx?tabid=420 (select *2006 Standard of Excellence Schools* to view the list of all schools by district and building numbers with building and/or grade level SOE awards in reading and math).

2. Building Report Card Page http://online.ksde.org/rcard/searchpage.aspx (select *School/District,* enter *building name or district number,* select the displayed school name, select *School Information Summary 2005-2006*; look for *Economically Disadvantaged* for the building to obtain the building's percentage of students eligible for free and reduced lunches (F/R); then scroll to grade level pages for assessment performance level category results.

3. K-12 School Reports Page http://www.ksde.org/Default.aspx?tabid=223 to verify enrollment for schools and the grade range in each school (from *Report Options,* select *Schools*; enter *district and building numbers* or select the school name from the alphabetical listing; select the year 2005-06 for *Enrollment by grade, race, and gender*, scroll to the bottom and select *Display).*

Data was collected and recorded by grade level student percentages as reported by the KSDE. The use of the reported percentage scores and F/R percentages put large and small schools in the same metric, whereas using raw numbers of enrolled students would have given extra weight to the larger schools. Neither specific school identification nor specific grade level information were reported with the results of this study (see Appendix A for data used in statistical analysis). Results were reported by researcher-designated building categories; the aggregate building type was the unit of statistical analysis. The study was designed to show if any gap existed in the distribution of performance level means between high-, medium-, and low-income schools with excellence ratings from the state of Kansas.

Types of buildings were sorted based on three factors:

1. SOE building award by subject (reading or math).

2. Status as elementary, middle/junior high, or senior high schools, determined by the assessed grade levels.

3. Income level (high-, medium-, or low-income) as determined by the percentages of students eligible for free and reduced lunches.

The designated types of buildings and their assessed grade levels for the purposes of this study were Elementary buildings (Grades 3, 4, and 5), Middle School/Junior High buildings (Grades 6, 7, and 8), and Senior High buildings (Grades 10 and 11). These grade level building groups overrode the official name of schools. A given school might be named "Lucky Ducky Elementary" and have overlapping grade levels (e.g., Kindergarten through Grade 7). In such a case, Grades 3, 4, and 5 from that school would be listed with the elementary group of buildings, while Grades 6 and 7 would be listed with the middle/junior high group. Each of the three building types by grade level was further defined according to the Standard of Excellence Building Award earned (e.g., Elementary Reading Buildings; Elementary Math Buildings). Performance level percentages from each assessed grade level at each school were recorded.

Parameters were set for each income group. Low-income schools (LINC) have been defined as schools with percentages of students eligible for free or reduced lunches (F/R) equal to or greater than 50%, according to the Economic Policy Institute (Kahlenberg, 2006). The researcher followed this definition of low-income schools for every type and level of building except Senior High Math buildings, in which only one school with SOE status fell in the 50% range. The researcher set the parameters for medium-income (MINC) and high-income (HINC) groups by dividing the F/R percentages lower than 50% at the halfway point (24%). Final parameters for each income group were as follows:

HINC (all buildings and subjects): $< 24\%$ F/R

MINC (all except Senior High Math): $\geq 24\%$, $< 50\%$ F/R

MINC (Senior High Math): $\geq 24\%$, $< 45\%$ F/R

LINC (all except Senior High Math): $\geq 50\%$ F/R

LINC (Senior High Math): $\geq 45\%$ F/R

The researcher adjusted the low-income (LINC) parameter for Senior High Math to greater than or equal to 45%, placing three schools in the LINC group, still an inadequate sample size, but better than one. The researcher was aware that the low number of observations in the Senior High Reading and Math low-income groups (three each) would not be adequate for valid statistical analysis and interpretation (McMillan, 2004). These LINC results were included mainly as a matter of interest; the researcher interpreted similarities or differences between the Senior High HINC and MINC group means for each subject.

Had the researcher divided the income groups into equal numbers of observations per group or used only two income groups (e.g., lower and higher), the results would not have been as informative, since the income groups would have been less distinct in terms of free and reduced lunch percentages. In a sense, this study segregated sections of the performance spectrum to obtain more definitive results. It was learned that many more SOE schools had F/R lunch percentages below 30% than above. The established parameters avoided the problem of mixing a large number of observations from the 24% to 50% F/R range into the low-income group, blurring the implications of the findings. Accurate information was thus made more evident, as seen in the isolation of extremes of assessment scores by Kilpatrick, Mesa, and Sloane (2006).

Sampling Procedures

The subjects for this study consisted of the total population of 2005-06 Standard of Excellence Buildings with 150 or more students enrolled. The 90-page list of all Kansas public schools that earned a Standard of Excellence Award for Reading or Math was obtained from the KSDE Main Assessment Page site. Information included district number, building name and number, the specific grade level awards for each school, the school-wide awards, and the SOE subject. The data for each school with a building-wide award was copied into an Excel Workbook. Enrollment totals and F/R lunch percentages for each SOE school were obtained from the KSDE Building Report Card Page site and entered into the worksheet. The KSDE K-12 School Reports Page was used to verify enrollment and grade ranges of all schools. The assessed grade levels were also entered.

Schools were sorted by enrollment; any buildings with less than 150 students were excluded to avoid distortion of data due to reported percentages representing only a few students in a building, for both F/R lunch percentages and performance level percentages. Any subgroup, such as income level, ". . . must consist of 30 or more students in a building" (Accountability Report, 2006, p. 11). The final count of schools that met the enrollment criteria was 508, some of which had one assessed grade level while others had as many as six assessed grade levels. Data from any of the actual 508 schools with overlapping grade levels were entered on the worksheets for the designated building type; such schools were entered on more than one worksheet for the purposes of this study (e.g., data from a school with Grades K – 7 would be recorded for Elementary Reading and Middle/Junior High Reading). As a result, the six building designations for this study listed a total of 693 buildings.

Data Collection Procedures

The SOE schools with an enrollment of 150 or more were ranked and sorted in the following ways to facilitate data collection and analysis:

1. By SOE subject (reading and math).

2. By assessed grade levels, into the six building designations of elementary math, elementary reading, middle/junior high math, middle/junior high reading, senior high math, and senior high reading. Rows were added to the worksheet for every assessed grade level at each school.

3. By F/R percentages for each type of building, then each building type was divided into income groups according to the established parameters (e.g., Elementary Math high-income schools; Elementary Math medium-income schools; Elementary Math low-income schools).

At this stage, all data was entered except the performance level percentages. Separate worksheets were used for each designated type of building. The headings for each column on the worksheets were:

1. District Number

2. Building Number
3. Building Name
4. SOE Subject(s)
5. Building Enrollment
6. Assessed Grades for the SOE Subject
7. Percentage F/R Lunches
8. Exemplary (Headings 8-12 are Performance Level Categories.)
9. Exceeds Standard
10. Meets Standard
11. Approaches Standard
12. Academic Warning

The SOE subject performance level percentages were obtained from the Building Report Card for each assessed grade level in each SOE school. If a school had earned the SOE in both math and reading, the scores for both subjects were recorded on the appropriate worksheets.

Data Analysis Procedures

A two-way repeated-measures, mixed design ANOVA was employed as the most appropriate method to compare the five performance level means of the three income groups per building type, examining between-subjects effects (income group means), within-subjects effects (performance level means), and interaction effects (five performance level means for each income group). A mixed design ANOVA is appropriate when multiple levels of the variables exist, resulting in between-groups and within-groups factors (Abrami, Cholmsky, & Gordon, 2001). "Error variability is reduced in within-groups designs, and statistical power is increased" (Abrami et al., 2001, p. 395). All data analyses were performed with Statistical Analysis Software (SAS) ($p < 0.05$). Aspects of the SAS ANOVA used for this study were as follows:

1. The Frequency (FREQ) Procedure obtained frequency counts for the three levels of the independent variable (income) in the study: High-Income (HINC), Medium-Income (MINC), and Low-Income (LINC) at each building level per subject (math and reading).

2. Because the income groups in each type of school were unequal in size, the General Linear Model (GLM) was selected (Huck, 2000). "The GLM Procedure is the appropriate procedure for conducting ANOVA when the group sizes are unbalanced" (STAT 480 Statistics Packages site, Lesson #12, 2008). The GLM Procedure Repeated Measures ANOVA included three procedures: (a) tests of hypotheses for between-subjects effects (main effects between income level means), (b) univariate tests of hypotheses for within-subjects effects (main effects within the five performance level means), and (c) univariate tests of hypotheses for within-subjects interaction effects (e.g., for High-Income Elementary Math buildings across each of the five performance levels). The researcher was conscious of the potential influence of the interaction effects on the main effect, possibly diminishing the main effect significance or negating it.

3. The Student-Newman-Keuls (SNK) analysis, planned a priori at the .05 alpha level, was employed to identify significant differences between income level means at each performance level for a given type of building and subject. The SNK is also appropriate whenever a significant finding emerged for "either of the two variables or their interaction" (Bartz, 1988, p. 320). The SNK is a more powerful test statistically than others such as the Tukey method (Hinkle, Wiersma, & Jurs, 1998). To see if any observed mean differences were meaningful as well as statistically significant, Cohen's effect size (*d*) was computed to quantify the degree of difference, with approximately .20, .50, and .80 indicating small, medium, and large differences, respectively (Huck, 2000; McMillan, 2004). The conservative Greenhouse-Geisser (G-G) correction factor for degrees of freedom was used to evaluate the observed within-group F ratios, to ensure that the main effects and interaction F values were not too high. "In mixed designs, sphericity is almost always violated and therefore epsilon adjustments to degrees of freedom are routine prior to computing F-test significance levels" (Univariate GLM: Statnotes, n.d., p. 11). The G-G Epsilon controlled for the violation of the sphericity assumption when applied to the degrees of freedom, thereby reducing the chance of Type I error. By accounting for sphericity, the violation of homogeneity of variance was counteracted, and thus the study avoided positively biased F-values for interaction (Huck, 2000).

Summary of Methodology

This statewide study was designed to examine the income factor in Kansas schools designated as Standard of Excellence buildings for 2005-06. A Standard of Excellence Award for the building in reading or math or both was the constant; the two variables were income level of the building and achievement score percentages in each performance level. The total population of SOE buildings with 150 or more students comprised the subjects of this study. The researcher used performance percentages data from the 2005-06 Kansas reading and mathematics assessments. Results were sought by testing the three hypotheses for each of the six types of designated building groups. Using disaggregated data at a high level of aggregation (total building level) contributed to the validity of this study. By using the building as the unit of analysis, any uncontrolled variables (e.g., family structure, atmosphere) were not likely to distort the results and likely contributed to the validity of this study. Both Gustafsson (2006) and Kilpatrick et al. (2006) voiced the merit of using disaggregated data and high levels of aggregated units as the basis of analysis.

Using data that is publicly available on the KSDE web site will enable this study to be replicated. Use of SOE schools with 150 or more students avoided percentages representing only a few students, as would have been the case with smaller schools. The use of the reported student percentages scoring in each performance level category gave equal weight to schools of all sizes. Using raw numbers (enrollment) would have given the performance of large schools more weight in the overall determination of a mean.

Recording the performance scores for each assessed grade in each building resulted in over 2100 rows of data to be analyzed, containing 12,600 cells, representing 693 buildings as designated for this study. The buildings included those with overlapping grade levels (e.g., K-7) and those earning an award in both reading and math; therefore, the actual count of SOE buildings ≥ 150 enrollment was somewhat less (508 schools). A two-way, repeated-measures, mixed design ANOVA analyzed this large database, with considerations given for unbalanced group sizes; the Student-Newman-Keuls procedure ($\alpha \geq .05$) pinpointed any potentially significant differences in the income group means at each performance level.

CHAPTER 4 - Data Results and Analysis

The three null hypotheses were tested for each of the six types of Standard of Excellence (SOE) buildings: Elementary Reading, Elementary Math, Middle/Junior High Reading, Middle/Junior High Math, Senior High Reading, Senior High Math. The researcher divided the SOE buildings into high-income (HINC), medium-income (MINC), and low-income (LINC) groups. A two-way mixed design, repeated measures ANOVA General Linear Model was used on all six data sets, testing the variables of income group and performance level category (Exemplary, Exceeds Standard, Meets Standard, Approaches Standard, and Academic Warning). The Student-Newman-Keuls test provided further analysis of the data, comparing income group means at each performance level category for potential differences.

Results and Analysis by Building Type

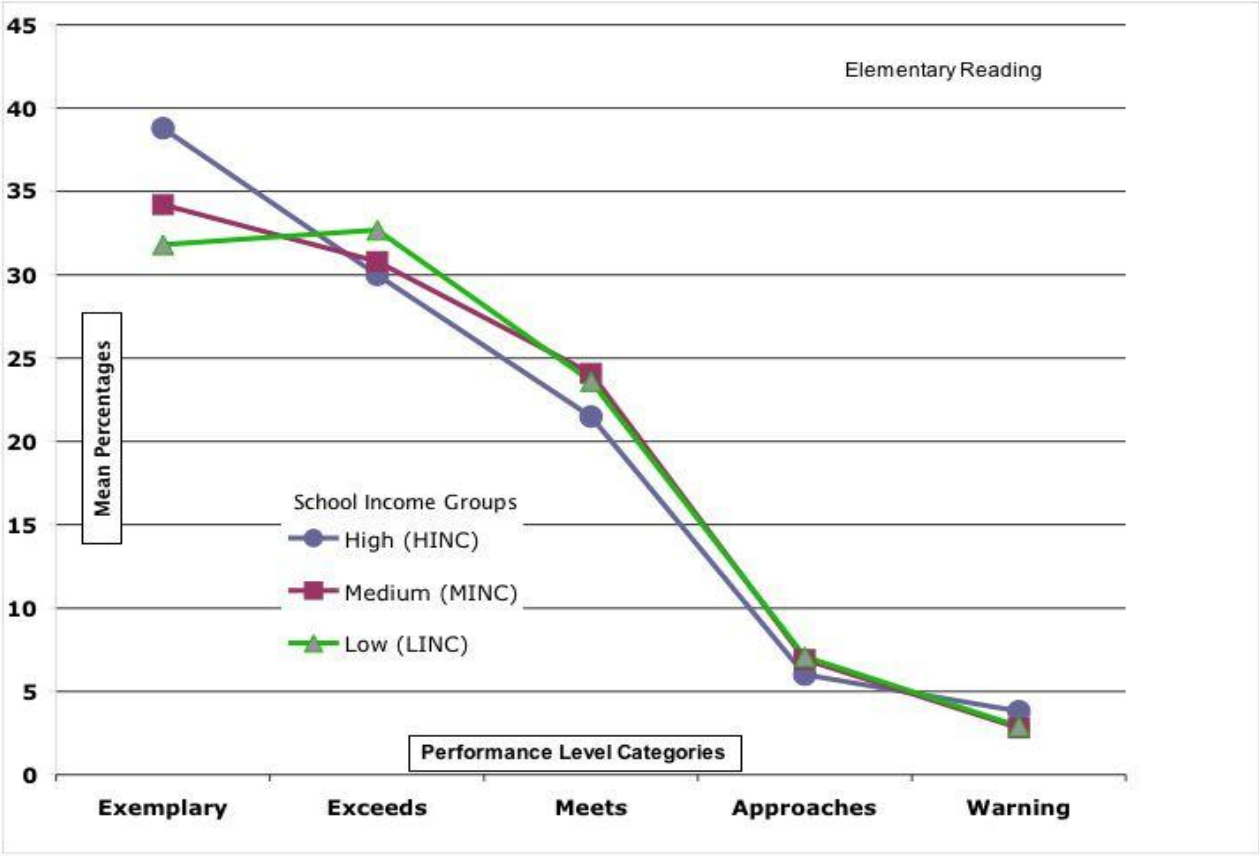
Elementary Reading Results

Figure 4-1 displays the graph plots of elementary reading mean percentages by income group and performance level category for buildings earning the Kansas 2005-06 Standard of Excellence Elementary Reading award. The mean percentages reflect the percentages of students from each income group (HINC, MINC, LINC) in Grades 3, 4, and 5 scoring in the five performance level categories of Exemplary, Exceeds Standard, Meets Standard, Approaches Standard and Academic Warning. The graph illustrates the relative differences and similarities for the means of the three income groups in each performance level category. The non-parallel lines and the varied relative position of the income groups among the performance categories indicate interaction at multiple points. The three performance level categories of Exemplary, Exceeds, and Meets standard show the possibility of significant differences among the income group means. In the Exemplary category, the relative distance is greatest between the high-income group mean and those of the other two groups. In the Exceeds standard category, the low-income group mean appears to be farthest apart from the means of the high and medium

income groups. In the Meets Standard category, the high-income group mean is noticeably lower than those of the other two income groups.

The low percentages of students from each income group in the categories of Approaches Standard and Academic Warning are consistent with the Kansas SOE guidelines for elementary school-wide performance in reading. The guidelines state that the expected percentage of students classified as Approaches Standard and above should be at least 95% in the building; the expected percentage of students classified as Meets Standard and above should be at least 80%, with at least 60% designated as Exceeds Standard and above. At least 25% of the students must place in the Exemplary category, while not more than 5% are allowed in Academic Warning (Appendix C, Table C.2).

Figure 4-1 Elementary Reading Means Plotted for Income Groups and Performance Level Categories for 2005-06 Kansas SOE Schools



Note. HINC, *n* = 273; MINC, *n* = 283; LINC, *n* = 86. Mean Percentages = percentages of students scoring in a given performance level category.

Table 4.1 reports the elementary reading ANOVA summary results for the between-subjects main effects, within-subjects main effects and interaction effects. The between-subjects effects on the variable of building income showed no significance, F (2, 639) = 0.97, p = .38. The within-subjects effects for performance categories produced a significant main effect, F (4, 2556) = 834.12, p < .0001. The within-subjects interaction effects of income levels and performance level categories, F (4, 8) = 6.64, proved to be significant, p < .0001. The conservative Greenhouse-Geisser test ($\varepsilon = 0.76$) yielded probability values of < .0001, a high degree of significance for the within-subjects effects of performance level and of interaction.

Table 4.1 Elementary Reading ANOVA Summary: GLM Procedure, Repeated Measures Analysis of Variance

Effects source	*df*	Type III *SS*	Mean square	*F*	*p* ≤ .05	G-G
Between-subjects:						
Income groups	2	70.60	35.30	0.97	.38	
Error	639	23172.22	36.26			
Within-subjects:						
Performance levels	4	391735.35	97933.84	834.12	< .0001	
Income*performance	8	6239.14	779.89	6.64	< .0001	
Error	2256	300099.91	117.41			
Adjusted *Pr* > *F*:						
Performance levels						< .0001
Income*performance						< .0001
Epsilon						.76

Note. N = 642; G–G = Greenhouse-Geisser.

The Student-Newman-Keuls (SNK) analysis for elementary reading, displayed in Table 4.2, compared mean percentages for high-, medium-, and low-income groups at each performance level. The mean percentages for each income group reflect the percentages of students scoring in the five performance level categories of Exemplary, Exceeds Standard, Meets Standard, Approaches Standard, and Academic Warning. The SNK analysis, (α = .05, *df* = 639) showed significant differences between income group means in three of the five performance level categories: Exemplary, Exceeds Standard, and Meets Standard. In the "Exemplary" category, HINC had a significantly higher mean (38.80%) than MINC (34.19%) and LINC (31.80%). In the "Exceeds Standard" category, the LINC mean (32.74%) was significantly higher than were the means of MINC (30.83%) and HINC (29.99%). The HINC group had a significantly lower mean (21.55%) for the "Meets Standard" category than MINC (24.12%) and LINC (23.57%). The effect sizes (Cohen's *d*) ranged from .21 to .55, indicating small to moderate degrees of difference.

Table 4.2 Elementary Reading Mean Percentages by Performance Level Category and Income Group

		Performance level categories				
Income group	*n*	*Exemplary	*Exceeds standard	*Meets standard	Approaches standard	Academic warning
High*****	273					
Mean %		*38.80	29.99	*21.55	5.98	3.76
SD		11.55	7.56	7.60	4.17	20.60
Medium	283					
Mean %		34.19	30.83	24.12	6.87	2.77
SD		12.14	8.94	8.68	4.94	3.45
Low*****	86					
Mean %		31.80	*32.74	23.57	7.09	2.94
SD		14.07	9.71	10.53	6.57	4.80
Cohen's *d*		.39 H-M .55 H-L	.32 L-H .21 L-M	.32 M-H .22 L-H		

Note. Mean % = mean percentage of students; *n* = number of grade-level observations; H = high-income mean; L = low-income mean; M = medium-income mean.

*SNK analysis found a significant difference (α = .05, *df* = 639) from the other income groups in this category.

Analysis of Elementary Reading Results

The likelihood for between-subjects main effects that differences between the income group means are due to random chance, not income, is 38%, with F (2, 639) = 0.97, p = .38, well above the stated standard of 5% ($p \leq .05$). Therefore, the researcher arrived at a fail-to-reject decision for H_{01}: the main effect means of the first factor (low-income, medium-income and high-income) have no significant difference from one another for elementary reading SOE buildings. HINC, MINC, and LINC means were not significantly different when looking at performance overall, undifferentiated by performance level categories. This indicates that students enrolled in SOE elementary schools of varying income levels are likely to have similar overall performance scores for reading.

The within-subjects effects for the second variable (Performance Levels) found a significant main effect, F (4, 2556) = 834.12, p < .0001) that would indicate a rejection of the $H_{02.}$ Examination and confirmation of the interaction effects was necessary before reaching the final decision to reject H_{02}, since interaction effects can weaken the main effect significance. The GLM ANOVA detected significant interaction effects, F (4, 8) = 6.64, p < .0001. The conservative Greenhouse-Geisser test yielded probabilities of < .0001 for each null hypothesis, thus confirming that the reported F values and probabilities for the main effects and interaction effects were not overstated.

As a result of the data analysis for the within-subjects (performance level) main effects and the within-subjects interaction effects, H_{02} and H_{03} were rejected. Regarding $H_{02,}$ (the main effect means of the second factor, Performance Levels, have no significant difference from one another for a given type of building), the researcher observed that the reported differences are not due to random chance, that some other factor(s), could be influential.

The confirmed probability value for the interaction effects of < .0001 led the researcher to observe that certain performance categories and income groups do have some degree of significant interaction effect on each other, thus rejecting H_{03} (the two factors of Income Levels and Performance Levels do not interact for a given type of building beyond the limits of random chance).

Of 15 means tested by the SNK procedure (five performance level categories, three income groups per category), only three means showed a statistically significant difference from the others in the specified performance level categories: the HINC mean was significantly higher in the Exemplary category and significantly lower in the Meets Standard category; the LINC mean was higher in the Exceeds Standard category. The effect sizes (Cohen's *d*) indicated these differences were from small to moderate magnitude. Thus income levels of elementary reading SOE buildings overall did not appear to have a major effect on student performance in reading SOE. In certain performance level categories, certain income groups outperform others, such as the HINC group in the category of Exemplary. The HINC group, however, has lower means than the other income groups in Exceeds, Meets, and Approaches. This indicates that students in HINC elementary schools with SOE in reading status are more likely to score in the Exemplary category than if they are in MINC or LINC SOE buildings.

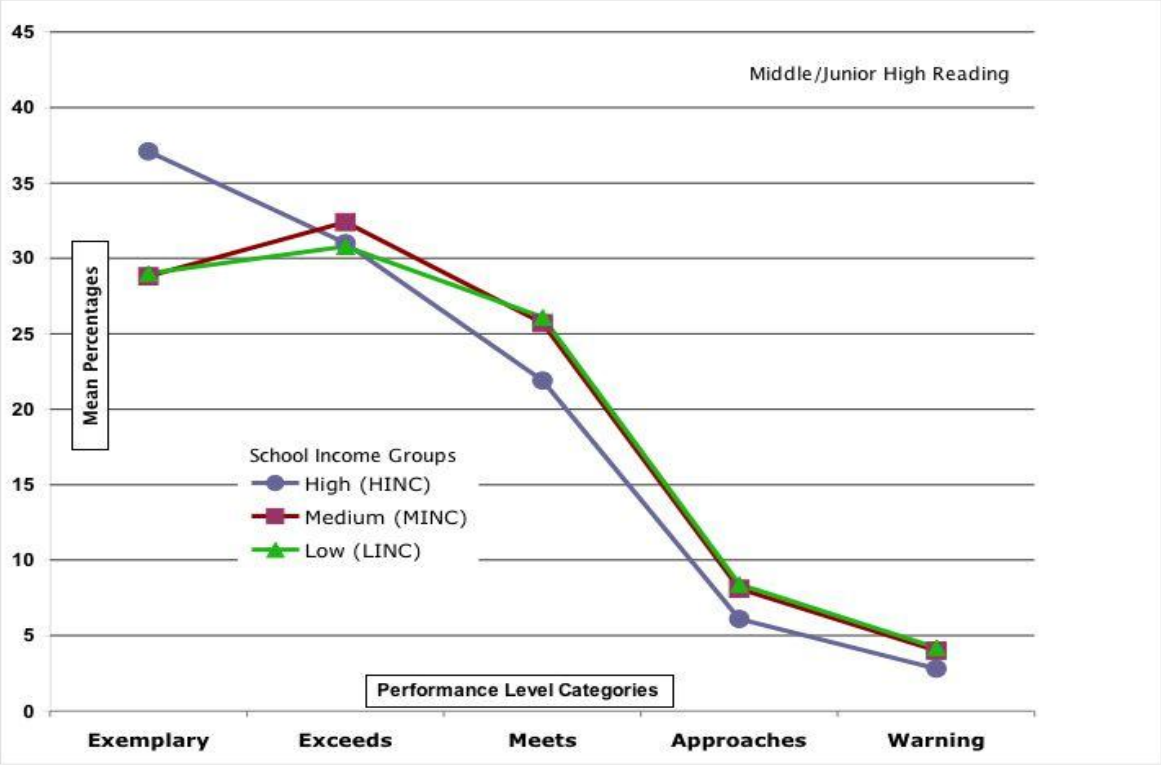
Middle School/Junior High Reading Results

Figure 4-2 displays the graph plots of middle school/junior high reading mean percentages by income group and performance level category for buildings earning the Kansas 2005-06 Standard of Excellence Reading award. The mean percentages reflect the percentages of students from each income group (HINC, MINC, LINC) in Grades 6, 7, and 8 scoring in the five performance level categories of Exemplary, Exceeds Standard, Meets Standard, Approaches Standard and Academic Warning.

The graph illustrates the relative differences and similarities for the means of the three income groups in each performance level category. The non-parallel lines and the varied relative position of the income groups among the performance categories of Exceeds and Exemplary indicate some degree of interaction. The roughly parallel lines for the three lower categories indicate lack of interaction at these levels. Noticeable differences are seen for the income means in all performance level categories, with the possibility of multiple significant differences. In the Exemplary category, the relative distance is greatest between the high-income group mean and those of the other two groups, with HINC outperforming the others. In the Exceeds Standard category, the

medium-income group mean is noticeably higher than the means of the high- and low-income groups. In the Meets Standard category, the high-income group mean is noticeably lower than those of the other two income groups. The means of the medium- and low-income groups are close together in the categories of Approaches Standard and Academic Warning, with the high-income group below in both cases. The low percentages of students from each income group in the categories of Approaches Standard and Academic Warning is consistent with the Kansas Standard of Excellence guidelines for Grades 6, 7, 8 school-wide performance in reading, designated by the researcher as middle school/junior high. The guidelines state that the expected percentage of students in the building classified as Approaches Standard and above should be at least 95% for Grade 6; the expected percentage for Grades 7 and 8 is 90%. (Appendix C, Table C.2).

Figure 4-2 Middle/Junior High Reading Means Plotted for Income Groups and Performance Levels for 2005-06 Kansas SOE Schools



Note. HINC, *n* = 203; MINC, *n* = 246; LINC, *n* = 47; Mean Percentages = percentages of students scoring in a given performance level category.

Table 4.3 reports the middle/junior high reading ANOVA summary results for between-subjects effects and within-subject main effects and interaction effects. A slightly nonsignificant finding emerged on the between-subjects effects on the variable of building income level, F (2, 492) = 2.92, p = .06 (actually .055). The within-subjects effects for performance categories produced a significant main effect, F (4, 1968) = 829.81, $p < .0001$. The within-subjects interaction effects of income levels and performance categories, F (4, 8) = 21.61, proved to be significant, $p < .0001$. The Greenhouse-Geisser Epsilon ($\varepsilon = 0.63$) yielded probability values of < .0001, a high degree of significance.

Table 4.3 Middle/Junior High Reading ANOVA Summary: GLM Procedure, Repeated Measures Analysis of Variance

Effects source	*df*	Type III *SS*	Mean square	*F*	*p* ≤ .05	G-G
Between-subjects:						
Income groups	2	2.48	1.24	2.92	.06	
Error	492	209.21	0.43			
Within-subjects:						
Performance levels	4	210341.36	52585.34	829.81	< .0001	
Income*performance	8	10953.12	1369.14	21.61	< .0001	
Error	1968	124712.66	63.37			
Adjusted *Pr* > *F*:						
Performance						< .0001
Income*performance						< .0001
Epsilon						.63

Note. G-G = Greenhouse-Geisser; n = 496.

The Student-Newman-Keuls (SNK) analysis for middle/junior high reading, displayed in Table 4.4, compared mean percentages for high-, medium-, and low-income groups at each performance level. The mean percentages for each income group reflect the percentages of students scoring in the five performance level categories of

Exemplary, Exceeds Standard, Meets Standard, Approaches Standard, and Academic Warning. The SNK analysis, (α = .05, *df* = 492) showed significant differences between income group means in four of the five performance level categories: Exemplary, Meets Standard, Approaches Standard, and Academic Warning. In the "Exemplary" category, HINC had a significantly higher mean (37.14%) than MINC (28.87%) and LINC (29.01%). The HINC group had significantly lower means for the Meets Standard (21.87%), Approaches Standard (6.11%), and Academic Warning (2.80%) categories than MINC and LINC. The effect sizes (Cohen's *d*) ranged from .77 to .81, indicating a moderate to large difference. No statistically significant difference was detected among the HINC, MINC, and LINC means for the category of Exceeds.

Table 4.4 Middle/Junior High Reading Mean Percentages by Performance Level Category and Income Group

		Performance level categories				
Income group	*n*	*Exemplary	Exceeds standard	*Meets standard	*Approaches standard	*Academic warning
High	203					
Mean %		*37.14	31.00	*21.87	*6.11	*2.80
SD		10.63	6.89	7.51	3.87	2.66
Medium	246					
Mean %		28.87	32.37	25.68	8.14	3.99
SD		9.81	7.96	8.02	5.39	3.82
Low	47					
Mean %		29.01	30.80	26.08	8.35	4.27
SD		10.42	7.51	6.61	4.92	3.63
Cohen's *d*		.81 H-M .77 H-L		.49 M-H .60 L-H	.44 M-H .51 L-H	.32 M-H .47 L-H

Note. Mean % = mean percentage of students; *n* = number of grade-level observations; H = high-income mean; L = low-income mean; M = medium-income mean.

*SNK analysis found a significant difference (α = .05, *df* = 639) from the other income groups in this category.

Analysis of Middle School/Junior High Reading Results

The probability for between-subjects main effects that differences between the income group means are due to random chance, not income, is 0.06, slightly above the stated standard of 5%, with F (2, 492) = 2.92, $p \leq .05$. This gives a slight indication that there were no significant differences between the income groups when looking at performance overall, undifferentiated by performance level categories. The researcher considered the population size (N = 496) and the alpha level of .05 before deciding to retain the first null hypothesis: $H_{01.}$ The between-subjects effects means of the first variable (low-income, medium-income and high-income) have no significant differences from one another for middle/junior high reading SOE buildings. This indicates that students enrolled in SOE middle/junior high schools of varying income levels are likely to have similar overall performance scores for reading.

The within-subjects effects for the second variable (Performance Levels) found a significant main effect, F (4, 1968) = 829.81, $p < .0001$) that would indicate a rejection of the $H_{02.}$ Examination and confirmation of the interaction effects was necessary before reaching the final decision to reject H_{02}, since interaction effects can weaken the main effect significance.

The interaction effects were significant, F (4, 8) = 21.61, $p = < .0001$. The conservative Greenhouse-Geisser test yielded a probability of < .0001, thus confirming that the reported F values and probabilities for the main effects and interaction effects were not overstated.

As a result of the data analysis for the within-subjects (performance level) main effects and the within-subjects interaction effects, H_{02} and H_{03} were rejected. Regarding $H_{02,}$ (the main effect means of the second factor, Performance Levels, are equal to one another for a given type of building), the researcher reasoned that the reported differences in performance level means, without being categorized into income groups, are not due to random chance, that some other factor(s) could be influential. The confirmed value for interaction effects, $p < .0001$, led the researcher to note that certain performance categories and income groups do have some interaction effect on each other, thus

rejecting H_{03} (the two factors of Income Levels and Performance Levels do not interact for a given type of building).

Of 15 mean comparisons from the SNK test (three income groups by five performance level categories), four means showed a significant difference from the others in the specified performance level categories: the HINC mean was higher in the Exemplary category. The HINC mean was significantly lower in the categories of Meets Standard, Approaches Standard, and Academic Warning. The effect sizes (Cohen's *d*) for these differences varied, with the Exemplary category most striking. The difference between the HINC and the MINC means was rated as a large magnitude ($d = .81$), and the HINC to LINC mean difference was rated as moderate to large ($d = .77$). The other significant differences were rated as small to moderate.

Income levels of middle/junior high reading SOE buildings overall did not appear to have a major effect on student performance in reading. The percentages of students from MINC and LINC buildings were more likely to be similar in the categories of Meets Standard, Approaches Standard, and Academic Warning. In certain performance level categories, certain income groups appeared to be more likely to outperform others, such as the HINC group in the category of Exemplary. The HINC group had lower means than the other income groups in the categories of Meets, Approaches, and Warning. This indicated that students in HINC schools were more likely to score in the Exemplary category than if they were in MINC or LINC buildings; a larger percentage of students in LINC middle/junior high SOE reading schools were more likely to place in the lower performance categories.

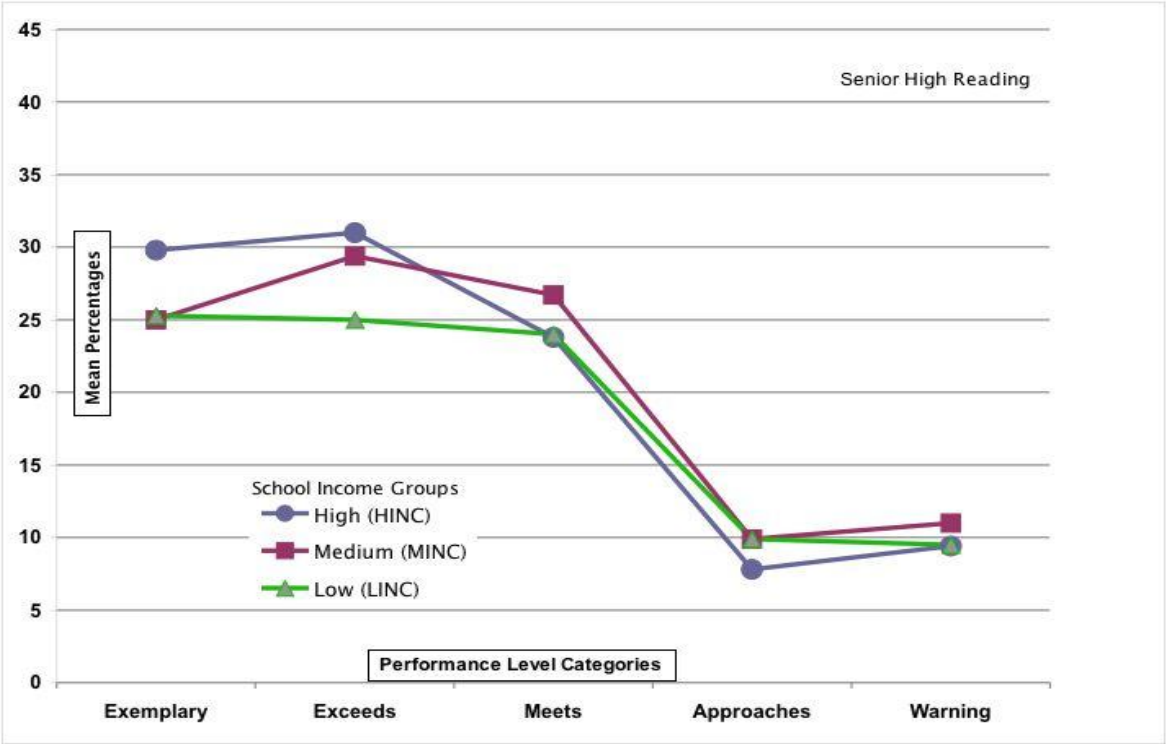
Senior High Reading Results

The parameters for establishing the three income groups produced a low number of observations in the SOE senior high reading low-income group ($N = 3$). Thus the researcher considered the comparisons between the HINC and MINC groups to be the valid comparisons. LINC findings are noted as a matter of interest.

Figure 4-3 displays the graph plots of senior high reading mean percentages by income group and performance level category for buildings earning the Kansas 2005-06 Standard of Excellence Reading award. The mean percentages reflect the percentages of

students from each income group (HINC, MINC, LINC) in Grade 11 scoring in the five performance level categories of Exemplary, Exceeds Standard, Meets Standard, Approaches Standard and Academic Warning. The graph illustrates the relative differences and similarities for the means of the three income groups in each performance level category. Some degree of interaction at multiple points is indicated by the intersections and divergent directions of lines and by the varied relative position of the income groups among the performance categories. Differences are seen among the income means in all performance level categories, with the possibility of significant differences particularly in the categories of Exemplary and Exceeds. In the Exemplary category, the relative distance is greatest between the high-income group mean and those of the other two groups, with HINC outperforming the others. In the Exceeds standard category, the HINC mean again is greatest, with the medium-income group mean noticeably higher than the mean of the low-income group. In the Approaches category, the high-income group mean is noticeably lower than those of the other two income groups. The low percentages of students from each income group in the categories of Approaches Standard and Academic Warning is consistent with the Kansas Standard of Excellence guidelines for senior high school (Grade 11) school-wide performance in reading. The guidelines for a high school state that the expected percentage of students classified as Approaches Standard and above should be at least 90%, with not more than 10% allowed in Academic Warning (Appendix C, Table C.2).

Figure 4-3 Senior High Reading Means Plotted for Income Groups and Performance Levels for 2005-06 Kansas SOE Schools



Note. HINC, *n* = 67; MINC, *n* = 79; LINC, *n* = 3. Mean Percentages = percentages of students scoring in a given performance level category. LINC results are reported strictly as a matter of interest, due to the small number of LINC buildings.

Table 4.5 reports the senior high reading ANOVA summary results for the between-subjects main effects, the within-subjects main effects, and the interaction effects. The between-subjects effects for senior high reading on the variable of building income level yielded a significant finding, F (2, 145) = 4.22, p = .02. The within-subjects effects for performance categories produced a significant main effect, F (4, 580) = 61.51, p < .0001. The within-subjects interaction effects of income levels and performance categories, F (4, 8) =3.69, registered a significant result, p < .0003. The Greenhouse-Geisser Epsilon ($\varepsilon = 0.69$) was applied to the degrees of freedom to control for the violation of the sphericity assumption (Huck, 2000). The conservative Greenhouse-Geisser test yielded probability values of < .0001 (main effects) and 0.01 (interaction), both significant.

Table 4.5 Senior High Reading ANOVA Summary: GLM Procedure, Repeated Measures Analysis of Variance

Effects source	*df*	Type III *SS*	Mean square	*F*	*p* ≥ .05	G-G
Between-subjects:						
Income groups	2	54.22	27.11	4.22	.02	
Error	145	931.99	6.43			
Within-subjects:						
Performance levels	4	11714.04	2928.51	61.51	< .0001	
Income*performance	8	1405.69	175.71	3.69	.0003	
Error	580	27616.08	47.61			
Adjusted Pr > F:						
Performance levels						< .0001
Income*performance						< .0001
Epsilon						.69

Note: G-G = Greenhouse-Geisser; n = 149.

The Student-Newman-Keuls (SNK) analysis for senior high reading, displayed in Table 4.6, compared mean percentages for high-, medium-, and low-income groups at each performance level. The mean percentages for each income group reflect the percentages of students scoring in the five performance level categories of Exemplary, Exceeds Standard, Meets Standard, Approaches Standard, and Academic Warning. The SNK analysis, (α = .05, *df* = 145) detected no statistically significant differences between income group means for any of the five performance level categories.

Table 4.6 Senior High Reading Mean Percentages by Performance Level Category and Income Group

		Performance level categories				
Income group	*n*	Exemplary	Exceeds standard	Meets standard	Approaches standard	Academic warning
High	67					
Mean %		29.77	30.90	23.78	9.35	4.18
SD		9.36	5.82	5.33	6.62	3.21
Medium	79					
Mean %		25.04	29.39	26.72	11.01	5.49
SD		7.65	6.35	6.80	5.20	3.43
Low	3					
Mean %		25.33	25.00	24.03	9.47	4.47
SD		14.40	9.79	10.12	4.47	1.87

Note. SNK analysis (α = .05, *df* = 492) detected no significant differences. Mean % = mean percentage of students scoring in a performance level category; *n* = number of grade-level observations.

Analysis of Senior High Reading Results

The low number of observations in the low-income group (*n* = 3) for senior high reading caused the researcher to give little weight to the LINC statistical findings regarding mean differences and probabilities; instead, the researcher noted any LINC findings as a matter of interest. The researcher did interpret similarities or differences between the HINC and MINC group means and their statistical values.

The between-subjects effects on the variable of Senior High Reading building income level yielded a significant finding, F (2, 145) = 4.22, p = .02, below the stated

standard of 5% ($p < .05$), indicating the likelihood that differences between the income group means are not due to random chance, but to some other factor(s). Before deciding to reject or retain the null hypothesis, the researcher considered the income group sizes and the income group means: HINC 19.60%, MINC 19.22%, and LINC 17.66%. The LINC group mean was derived from only 3 observations, a number insufficient for realistic interpretation of findings (McMillan, 2004). Since the SAS ANOVA test did not show which means were significantly different for the between-subjects main effects, the researcher technically rejected the first null hypothesis (H_{01}: The between-subjects effects means of the first variable [income groups] have no significant difference from one another for middle/junior high reading SOE buildings). However, the reported significance is suspect due to the low number of LINC observations.

The within-subjects effects for the second variable (Performance Levels) found a significant main effect, F (4, 580) = 61.51, $p < .0001$, that would indicate a rejection of the $H_{02.}$ Examination and confirmation of the interaction effects was necessary before reaching the final decision to reject H_{02}, since interaction effects can weaken the main effect significance. The conservative Greenhouse-Geisser test yielded a probability of < .0001, thus confirming that the reported F values and probabilities for the main effects were not overstated. After examination of the interaction effects, the researcher reasoned that the reported differences in performance level means could be due to some factor(s) other than random chance.

The interaction effects revealed significance, F (4, 8) =3.69, $p = .0003$, as was also found on the G-G test. As a result of the data analysis, the researcher arrived at a decision to reject the second null hypothesis (H_{02}: the main effect means of the second factor, Performance Levels, have no significant difference from one another for a given type of building). The significance of the interaction effects resulted in a rejection of the third null hypothesis (H_{03}: the two factors [Income Levels and Performance Levels] do not interact for a given type of building beyond the limits of random chance).
There was indication of significant differences due to income from the between-subjects test without specifying performance categories, the main effects for within-subjects revealed a significant difference, and interaction effects were found to be significant. Interaction is also evidenced in the varied positions of the income groups within the

performance level categories (Figure 4.3). However, no significant difference was revealed for the HINC and MINC group means in each category when the income group mean differences in each performance category were more deeply probed by the SNK analysis ($\alpha = .05$, $df = 145$). The SNK test detected no statistically significant differences between income group means for any of the five performance level categories. Of the 10 mean comparisons (five performance level categories each for HINC and MINC), none showed a significant difference from the others. Therefore, in spite of significance findings for beween-subjects, within-subjects, and interaction, and because of the small LINC number, the researcher cannot state that income impacts performance. In a practical sense, income levels of senior high reading SOE buildings overall did not appear to have a major effect on student performance, when considering the HINC and MINC groups, but it is not possible to make any conclusive statement. A larger number in the LINC group would have perhaps given more definitive results.

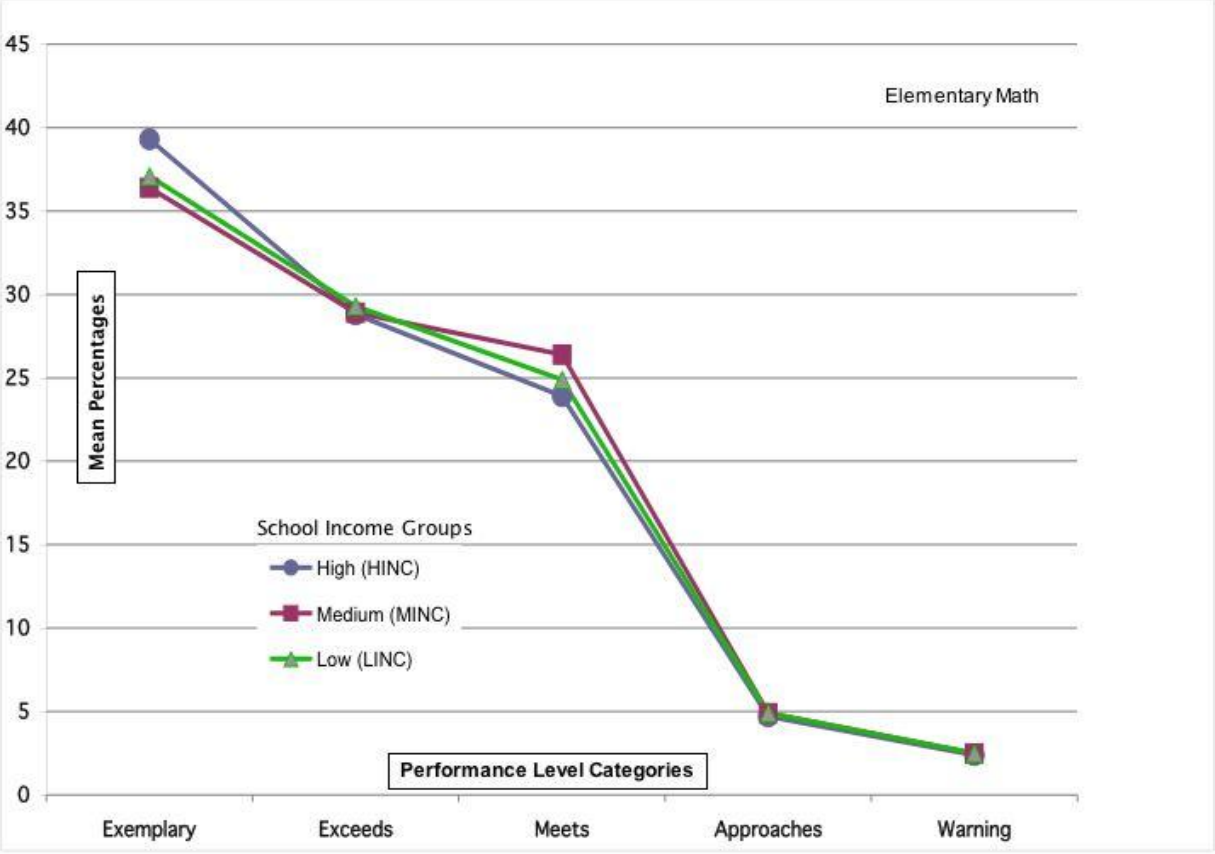
Elementary Math Results

Figure 4-4 displays the graph plots of elementary math mean percentages by income group and performance level category for buildings earning the Kansas 2005-06 Standard of Excellence Math award. The mean percentages reflect the percentages of students from each income group (HINC, MINC, LINC) in Grades 3, 4, and 5 scoring in the five performance level categories of Exemplary, Exceeds Standard, Meets Standard, Approaches Standard and Academic Warning.

The graph illustrates the relative differences and similarities for the means of the three income groups in each performance level category. Some degree of interaction at multiple points is indicated by the intersections and divergent directions of lines and by the varied relative position of the income groups among the performance categories. Differences are noticeable among the income means in the performance level categories of Exemplary and Meets Standard, but the means are fairly close. In the Exemplary category, the high-income group mean is above the others. A larger percentage of students from medium- and low-income buildings placed in the Meets category than did those from high-income buildings.

The low percentages of students from each income group in the categories of Approaches Standard and Academic Warning is consistent with the Kansas Standard of Excellence guidelines for elementary (Grades 3, 4, and 5) school-wide performance in mathematics. The guidelines for an elementary school state that the expected percentage of students classified as Approaches Standard and above should be at least 95%. The expected percentage of students classified as Meets Standard and above for reading should be at least 80%, with 60% expected to place in the Exceeds Standard category and above. At least 25% of the students must place in the Exemplary category, while not more than 5% are allowed in Academic Warning (Appendix C, Table C.2).

Figure 4-4 Elementary Mathematics Means Plotted for Income Groups and Performance Levels for 2005-06 Kansas SOE Schools



Note. HINC, *n* = 230; MINC, *n* = 247; LINC, *n* = 90. Mean Percentages = percentages of students scoring in a given performance level category.

The ANOVA GLM procedure results for Elementary Math buildings are displayed in Table 4.7. The finding for between-subjects effects on the first variable (income level of building) was not significant, F (2, 564) = 0.98, p = .38. A significant main effect, F (4, 2256) = 1181.21, p < .0001 was found for the within-subjects effects for the second variable (Performance Levels). The conservative Greenhouse-Geisser test, ε = 0.44, yielded a probability of < .0001, confirming that the F and p values for the within-subject main effects (performance level means) were not overstated. The within-subjects interaction effects of income levels and performance levels on one another yielded a significant F (4, 8 df) value of 2.64, with the probability of .01. The more conservative Greenhouse-Geisser test found that the interaction effects were still significant, p = .05.

Table 4.7 Elementary Mathematics ANOVA Summary: GLM Procedure, Repeated Measures Analysis of Variance

Effects source	*df*	Type III *SS*	Mean square	*F*	$p \leq .05$	G-G
Between-subjects:						
Income groups	2	3.84	1.92	0.98	.38	
Error	564	1108.84	1.96			
Within-subjects:						
Performance levels	4	440147.99	110037.00	1181.21	< .0001	
Income*performance	8	1835.96	229.50	2.46	.01	
Error	2256	210159.75	93.16			
Adjusted *Pr* > *F*:						
Performance levels						< .0001
Income*performance						.05
Epsilon						.43

Note: G-G = Greenhouse-Geisser; n = 567.

The Student-Newman-Keuls (SNK) analysis for elementary math, displayed in Table 4.8, compared mean percentages for high-, medium-, and low-income groups at each performance level. The mean percentages for each income group reflect the percentages of students scoring in the five performance level categories of Exemplary, Exceeds Standard, Meets Standard, Approaches Standard, and Academic Warning. The

SNK test, set at an alpha level of 0.05 and using 564 degrees of freedom, showed no significant differences between any of the means of the three income groups for each of the five performance level categories (Figure 4.8).

Table 4.8 Elementary Math Mean Percentages by Performance Level Category and Income Group

		Performance level categories				
Income group	*n*	Exemplary	Exceeds standard	Meets standard	Approaches standard	Academic warning
High	230					
Mean %		39.30	28.82	23.90	4.68	2.39
SD		12.18	6.60	7.87	3.98	2.47
Medium	247					
Mean %		36.37	28.87	26.42	4.87	2.50
SD		15.28	8.15	10.89	4.34	2.97
Low	90					
Mean %		37.08	29.25	24.89	4.87	2.47
SD		14.59	8.19	10.80	4.94	3.20

Note. SNK analysis (α = .05, *df* = 492) detected no significant mean differences. Mean % = mean percentage of students scoring in a performance level category; *n* = number of grade-level observations.

Analysis of Elementary Math Results

The likelihood for between-subjects main effects that differences between the income group means were due to random chance, not income, is shown by the nonsignificant between-subjects main effects value, $p > .37$, well above the stated standard of $p \leq .05$. Therefore, the researcher arrived at a fail-to-reject decision for H_{01}: the main effect means of the first factor (low-income, medium-income and high-income) have no significant difference from one another for elementary math SOE buildings. HINC, MINC, and LINC means were not significantly different when looking at performance overall, undifferentiated by categories. This indicates that students enrolled in SOE elementary schools of varying income levels are likely to have similar overall performance scores for math.

The within-subjects effects for the second variable (Performance Levels) found a significant main effect, F (4, 2556) = 1181.21, $p < .0001$, that would indicate a rejection

of the $H_{02.}$ The within-subjects main effect *F* and *p* values were not overstated, as confirmed by the G – G test, $p < .0001$. Examination and confirmation of the interaction effects was necessary before reaching the final decision to reject H_{02}, since interaction effects can weaken the main effect significance.

The GLM ANOVA initially detected significant interaction effects, $F(4, 8) = 2.46$, $p = .01$. The conservative Greenhouse-Geisser (G – G) test also found significance of the interaction effects, $p = .05$. The possibility of Type I error was reduced by the use of the G – G test.

As a result of the data analysis, the researcher arrived at a decision to reject the second null hypothesis (H_{02}: the main effect means of the second factor, Performance Levels, have no significant difference from one another for a given type of building). Significant differences were indicated for the within-subjects main effects of performance level means without specifying income groups. This indicates that while differences in the overall performance level means existed for students in elementary math SOE schools, such differences were likely due to some unknown factor(s) apart from income.

The significance of the interaction effects resulted in a rejection of the third null hypothesis (H_{03}: the two factors [Income Levels and Performance Levels] do not interact for a given type of building beyond the limits of random chance). Interaction is also evidenced in the varied positions of the income groups within the performance level categories (Figure 4.3), and interaction effects for cell means were found to be significant. However, no significant difference was detected when income means by performance category were more deeply probed by the SNK analysis. Of the 15 mean comparisons (five performance level categories, three income groups per category), none showed a significant difference from the others. Therefore, in a practical sense, the researcher cannot state that income levels of elementary math SOE buildings overall have a major effect on student performance in mathematics.

Middle School/Junior High Math Results

Figure 4-5 displays the graph plots of middle school/junior high math mean percentages by income group and performance level category for buildings earning the Kansas 2005-06 Standard of Excellence Reading award. The mean percentages reflect the percentages of students from each income group (HINC, MINC, LINC) in Grades 6, 7, and 8 scoring in the five performance level categories of Exemplary, Exceeds Standard, Meets Standard, Approaches Standard and Academic Warning.

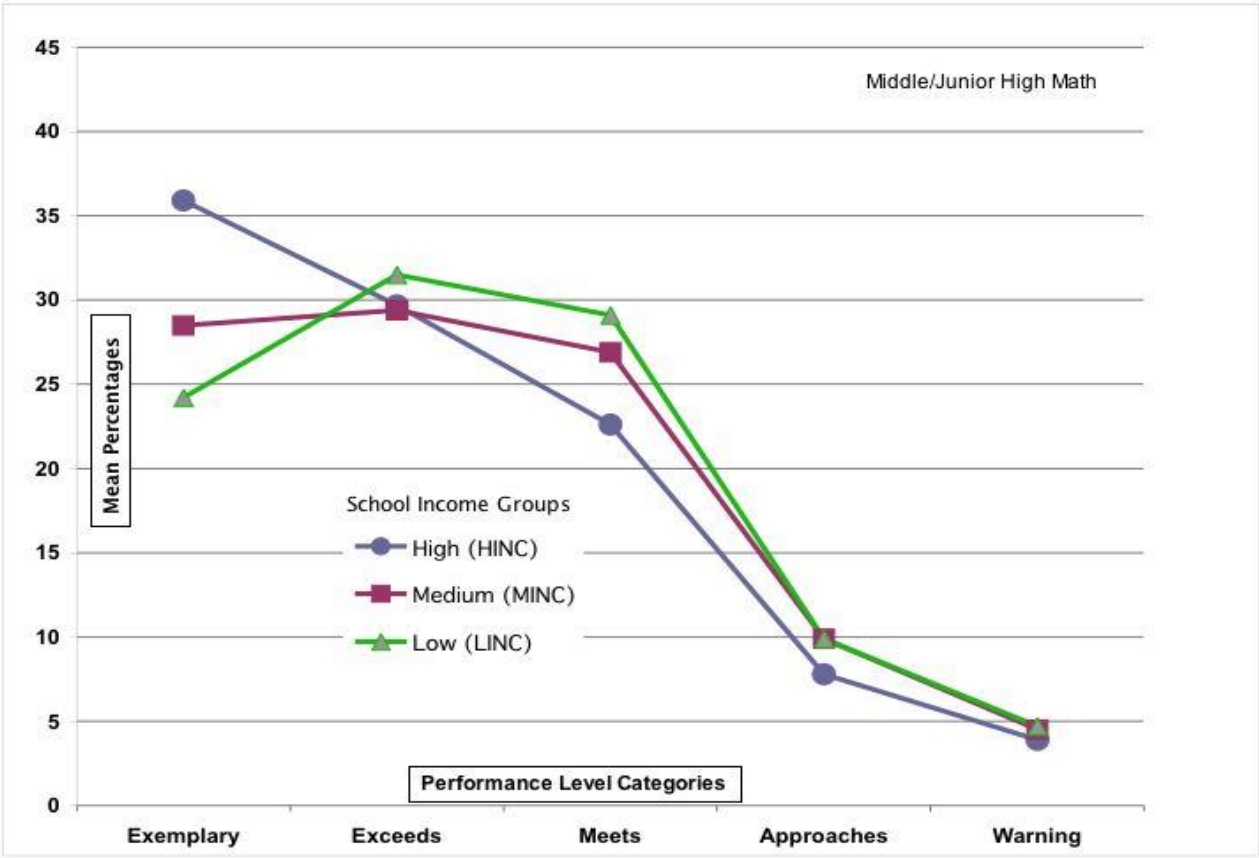
The graph illustrates the relative differences and similarities for the means of the three income groups in each performance level category. The non-parallel lines and the varied relative position of the income groups among the performance categories of Exceeds, Exemplary, and Meets indicate some degree of interaction. Noticeable differences are seen for the income means in all performance level categories, with the possibility of significant differences, particularly in the Exemplary category. The LINC and HINC groups show the more apparent effect on performance, changing places with each other in the Exemplary, the Approaches Standard, and the Meets Standard performance level categories.

In the Exemplary category, the relative distance is greatest between the high-income group mean and those of the other two groups, with HINC outperforming the others. In the Exceeds standard category, the low-income group mean is noticeably higher than are the means of the high- and medium-income groups. In the Meets Standard category, the high-income group mean is noticeably lower than those of the other two income groups.

The low percentages of students from each income group in the categories of Approaches Standard and Academic Warning is consistent with the Kansas Standard of Excellence guidelines for Grades 6, 7, 8 school-wide performance in mathematics, designated by the researcher as middle school/junior high. The guidelines state that the expected percentage of students in the building classified as Approaches Standard and above should be at least 90% for Grade 6; the expected percentage for Grades 7 and 8 is 85%. For Grade 6, 7, and 8, the expected percentage of students classified as Meets Standard and above should be at least 80%. At least 60% of sixth, seventh, and eighth

graders must be designated as Exceeds Standard and above. At least 25% of the students must place in the Exemplary category, while not more than 10% are allowed in Academic Warning (Appendix C, Table C.2).

Figure 4-5 Middle/Junior High Mathematics Means Plotted for Income Groups and Performance Levels for 2005-06 Kansas SOE Schools



Note. HINC, *n* = 135; MINC, *n* = 115; LINC, *n* = 19. Mean Percentages = percentages of students scoring in a given performance level category.

Table 4.9 reports the middle/junior high mathematics ANOVA summary results for between-subjects effects, within-subject main effects, and interaction effects. The between-subjects effects on the variable of building income level was not significant, F (2, 266) = 0.33, p = .72. The within-subjects effects for performance categories produced a significant main effect, F (4, 1064) = 237.08, p < .0001. The within-subjects interaction effects of income levels and performance level categories, F (4, 8) = 10.10, proved to be significant, p < .0001. The conservative Greenhouse-Geisser Epsilon ($\varepsilon = 0.55$), when applied to within-subjects main effects for performance levels and interaction, yielded probability values of < .0001, a high degree of significance.

Table 4.9 Middle/Junior High Mathematics ANOVA Summary: GLM Procedure, Repeated Measures Analysis of Variance

Effects source	*df*	Type III *SS*	Mean square	*F*	*p* ≤ .05	G-G
Between-subjects:						
Income groups	2	6.61	3.31	0.33	.72	
Error	266	2656.31	9.99			
Within-Subjects:						
Performance levels	4	77755.67	19438.92	237.08	< .0001	
Income*performance	8	6622.45	827.81	10.10	< .0001	
Error	1064	87242.22	81.99			
Adjusted *Pr* > *F*:						
Performance levels					< .0001	< .0001
Income*performance						< .0001
Epsilon						.55

Note. G-G = Greenhouse-Geisser; n = 269.

The Student-Newman-Keuls (SNK) analysis for middle/junior high mathematics, displayed in Table 4.2, compared mean percentages for high-, medium-, and low-income groups at each performance level. The mean percentages for each income group reflect the percentages of students scoring in the five performance level categories of Exemplary, Exceeds Standard, Meets Standard, Approaches Standard, and Academic Warning. The SNK analysis, ($\alpha = .05$, $df = 266$) showed significant differences between income group means in two of the five performance level categories: Exemplary and Meets Standard. In the "Exemplary" performance level category, HINC had a

significantly higher mean (35.95%) than MINC (28.45%) and LINC (24.17%). The HINC group had a significantly lower mean (22.59%) for the "Meets Standard" category than MINC (26.85%) and LINC (29.09%). Cohen's *d* effect sizes ranged from moderate to large, with the mean difference between HINC and LINC groups in Exemplary showing the largest magnitude (*d* = 0.91). No significant difference was detected in the HINC, MINC, and LINC means for the Performance Levels of "Exceeds Standard", "Approaches Standard", and "Academic Warning" for Middle/Junior High Math buildings.

Table 4.10 Middle/Junior High Math Mean Percentages by Performance Level Category and Income Group

		Performance level categories				
Income group	*n*	*Exemplary	Exceeds standard	*Meets standard	Approaches standard	Academic warning
High	135					
Mean %		*35.95	29.65	*22.59	7.75	3.86
SD		13.45	6.70	6.89	5.09	4.26
Medium	115					
Mean %		28.45	29.35	26.85	9.95	4.48
SD		11.66	8.07	9.67	6.39	4.54
Low	19					
Mean %		24.17	31.45	29.09	9.87	4.69
SD		12.47	5.27	11.69	6.91	3.12
Cohen's *d*		.60 H-M .91 H-L		.51 M-H .70 L-H		

Note. Mean % = mean percentage of students; *n* = number of grade-level observations; H = high-income mean; L = low-income mean; M = medium-income mean.

*SNK analysis found a significant difference (α = .05, *df* = 639) from the other income groups in this category.

Analysis of Middle/Junior High Mathematics Results

The between-subjects effects on the first variable (income level of building) produced an *F* value of 0.33 (*df* 2, 266) and a large probability value of 0.72. The likelihood that differences between the income group means are due to random chance, not income, is well above the stated 5% standard ($p < .05$), over 71%. Therefore, the researcher arrived at a fail-to-reject decision for H_{01}: the main effect means of the first factor (low-income, medium-income, and high-income) have no significant difference from one another for a given type of building, in this case, middle/junior high SOE math buildings. HINC, MINC, and LINC means were not significantly different when looking at performance overall, undifferentiated by performance level categories. This indicates that students enrolled in SOE middle/junior high schools are likely to have similar overall performance scores for mathematics, regardless of a building's income level.

The within-subjects effects for the second variable (Performance Levels) found a significant main effect, F (4, 1064) = 237.08, $p < .0001$, necessitating consideration of the interaction effects before reaching the decision to reject H_{02}. The ANOVA showed significance for the within-subjects interaction effects, F (4, 8) = 10.10, $p < .0001$. The possibility of Type I error, due to sphericity violations, was reduced by the subsequent use of the conservative Greenhouse-Geisser test. This yielded probabilities of < .0001, thus confirming that the reported *F* values and probabilities for the main effects and interaction effects were not overstated.

As a result of the data analysis for the within-subjects (performance level) main effects and the within-subjects interaction effects, H_{02} and H_{03} were rejected. Regarding H_{02}, (the main effect means of the second factor, Performance Levels, have no significant difference from one another for a given type of building), the researcher concluded that the reported differences are not due to random chance, that some other factor(s) could be influential. The confirmed *p* value for interaction effects of < .0001 led the researcher to observe that certain performance categories and income groups do have significant effect on each other, thus rejecting H_{03} (the two factors of Income Levels and Performance Levels do not interact for a given type of building beyond the limits of random chance).

Of the 15 means generated by the SNK analysis (five performance level categories, three income groups per category), only 2 means showed significant difference from the others in the specified performance level categories: the HINC means for Exemplary and Meets Standard. Cohen's *d* effect sizes showed a large mean difference between HINC and LINC groups in Exemplary and moderate to large differences in between the other income group means. The researcher thus observed that, in a practical sense, income levels overall of middle/junior high SOE math buildings did not appear to have a major effect on student performance in mathematics. However, in certain performance level categories, certain income groups outperformed others, such as the HINC group in the category of Exemplary. The HINC group, however, had the lowest means in Exceeds, Meets, and Approaches. This indicates that students attending HINC middle/junior high SOE math schools were more likely to score in the Exemplary category than if they are in MINC or LINC SOE buildings. A higher percentage of students in MINC or LINC buildings were likely to be classed in the other four performance categories for math.

Senior High Math Results

The criteria for establishing the three income groups produced a low number of observations in the SOE senior high mathematics low-income group ($N = 3$). Thus I considered the comparisons between the HINC and MINC groups to be the valid comparisons. LINC findings are noted as a matter of interest.

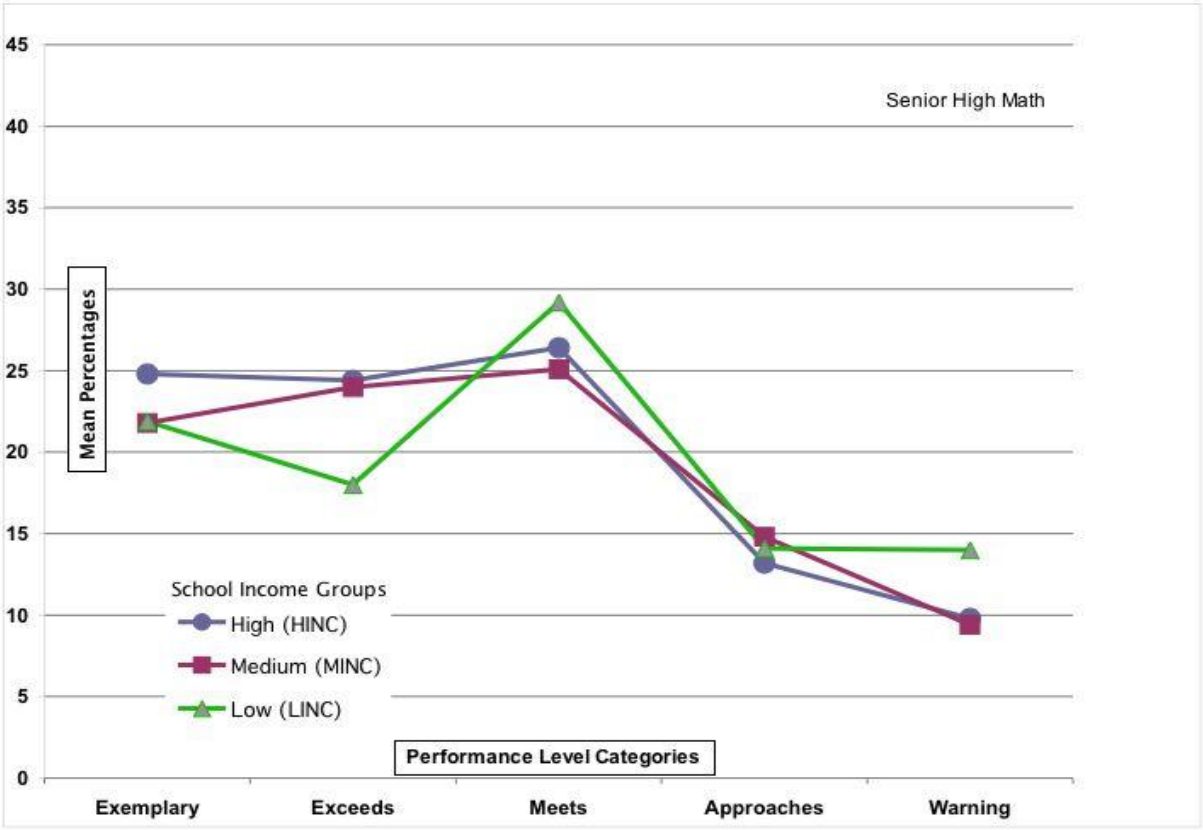
Figure 4-6 displays the graph plots of senior high mathematics mean percentages by income group and performance level category for buildings earning the Kansas 2005-06 Standard of Excellence Mathematics award. The three income groups of high-income, medium income, and low-income buildings are represented. The mean percentages reflect the percentages of students from each income group in Grade 10 scoring in the five performance level categories of Exemplary, Exceeds Standard, Meets Standard, Approaches Standard and Academic Warning.

The graph illustrates the relative differences and similarities for the means of the three income groups in each performance level category. Some degree of interaction at

multiple points is indicated by the intersection of and the divergent directions of lines, as well as by the varied relative position of the income groups among the performance categories. For example, the means of HINC and MINC maintain the same relative position for Exemplary and Exceeds, with HINC outperforming MINC. Then, in the category of Approaches Standard, the MINC mean is greater than HINC.

The low percentages of students from each income group in the categories of Approaches Standard and Academic Warning is consistent with the Kansas Standard of Excellence guidelines for senior high school (Grade 10) school-wide performance in mathematics. At least 15% of the students must place in the Exemplary category, while not more than 15% are allowed in Academic Warning (Appendix C, Table C.2).

Figure 4-6 Senior High Mathematics Means Plotted for Income Groups and Performance Levels for 2005-06 Kansas SOE Schools



Note. HINC, *n* = 41; MINC, *n* = 18; LINC, *n* = 3. Mean Percentages = percentages of students scoring in a given performance level category. Low-income group results are reported strictly as a matter of interest, due to the small number of LINC buildings.

Table 4.7 reports the senior high math ANOVA summary results for the between-subjects effects, within-subject main effects and interaction effects. The between-subjects effects for senior high math on the variable of building income level yielded a nonsignificant finding, F (2, 59) = 0.81, p = .45. The within-subject effects for performance categories produced a significant main effect, F (4, 236) = 26.90, p < .0001. The finding for within-subject interaction effects of income levels and performance level categories was not significant, F (4, 8) = 1.23, p = .28. The conservative Greenhouse-Geisser Epsilon ($\varepsilon = 0.79$) yielded a significant within-subjects main effects probability value of < .0001; the interaction effect, p = .29, was not significant.

Table 4.11 Senior High Mathematics ANOVA Summary: GLM Procedure, Repeated Measures Analysis of Variance

Effects source	*df*	Type III *SS*	Mean square	*F*	$p \leq .05$	G-G
Between-subjects:						
Income Levels	2	27.79	13.90	0.81	.45	
Error	59	11011.17	17.14			
Within-subjects:						
Performance levels	4	3770.26	942.56	26.90	< .0001	
Income*performance	8	345.18	43.15	1.23	.28	
Error	236	8269.80	35.04			
Adjusted *Pr* > *F*:						
Performance levels						< .0001
Income*performance						.29
Epsilon						.79

Note: G-G = Greenhouse-Geisser. HINC = high-income; MINC = medium-income; LINC = low-income; n = 62.

The Student-Newman-Keuls (SNK) analysis for senior high math, displayed in Table 4.12, compared mean percentages for high-, medium-, and low-income groups at each performance level. The mean percentages for each income group reflect the percentages of students scoring in the five performance level categories of Exemplary, Exceeds Standard, Meets Standard, Approaches Standard, and Academic Warning. The SNK analysis, (α = .05, df = 145) detected no statistically significant differences between income group means for any of the five performance level categories.

Table 4.12 Senior High Math Mean Percentages by Performance Level Category and Income Group

		Performance level categories				
Income group	*n*	Exemplary	Exceeds standard	Meets standard	Approaches standard	Academic warning
High	41					
Mean %		24.75	24.39	26.36	13.20	9.77
SD		6.11	5.97	5.65	4.69	3.53
Medium	18					
Mean %		21.78	24.03	25.09	14.80	9.44
SD		5.32	5.92	8.15	7.10	4.20
Low	3					
Mean %		21.87	17.97	29.17	14.13	13.97
SD		3.19	8.50	8.76	3.17	1.62

Note. SNK analysis (α = 0.05, *df* = 492) detected no significant differences between income group means for each performance level category. Mean % = mean percentage of students scoring in a performance level category; *n* = number of grade-level observations.

Analysis of Senior High Math Results

When analyzing the between-subjects main effects, the interaction effects, and the SNK results, the main focus was towards the HINC and MINC means. The LINC means were derived from only 3 observations, a number insufficient for realistic interpretation of findings (McMillan, 2004). Any LINC findings are noted anecdotally as a matter of interest. The researcher did interpret similarities or differences between the HINC and MINC group means and their statistical values.

The likelihood for between-subjects main effects that differences between the income group means are due to random chance, not income, is 45% ($p = .45$), well above the stated standard of 5% ($p < .05$). Therefore, the researcher arrived at a fail-to-reject decision for H_{01}: the main effect means of the first factor (low-income, medium-income, and high-income) have no significant difference from one another for senior high math SOE buildings. Income group means for HINC and MINC buildings were not significantly different when looking at performance overall, undifferentiated by

categories. This indicates that students enrolled in SOE high schools of varying income levels are likely to have similar overall performance scores for math.

The within-subjects main effects for the second variable (Performance Levels) found a significant main effect, F (4, 236) =26.90, p < .0001, initially indicating a rejection of the $H_{02.}$ The F and p values were not overstated, as confirmed by the conservative Greenhouse-Geisser test, p = < .0001. The second null hypothesis was rejected ($H_{02:}$ the main effect means of the second factor, Performance Levels, have no significant difference from one another for a given type of building), after considering the nonsignificant finding for interaction. The researcher observed that the reported differences in total performance means, undifferentiated by income, are perhaps not due to random chance; some other factor(s) could be influential.

The conservative Greenhouse-Geisser test yielded an interaction effects value of 0.29 that was not significant, confirming the original GLM probability value of 0.28 for within-subjects interaction effects. The lack of significance for interaction effects resulted in a fail-to-reject decision concerning the third null hypothesis (H_{03}: the two factors [Income Levels and Performance Levels] do not interact for a given type of building beyond the limits of random chance).

The SNK analysis (α = .05, df = 145) revealed no statistically significant differences for the income group means in each performance level category. Of the ten mean comparisons considered by the researcher (five performance level categories for HINC and MINC groups), none showed a significant difference from the other means. Some degree of interaction is evidenced in the varied positions of the income groups within the performance level categories when depicted on a graph (Figure 4.3); however, the presence of a significant interaction was not confirmed in the ANOVA summary table (Table 4.11). Due to the small number of observations in the LINC group (3), the researcher considered the only the HINC and MINC data as relevant for analysis. As a result of the data analysis, the researcher observed that, although general differences exist in performance level means, income levels of senior high mathematics SOE buildings did not appear to have a categorical effect on student performance in mathematics.

Summary Tables Regarding Building Income Levels

The summary tables allow one to see at a glance the statistical focus of this study: means of income groups for Standard of Excellence schools by performance level categories. Income ranges, the distribution of assessed grades (number of observations) and the number of SOE awards and buildings are displayed as well. The information, presented building by building earlier in Chapter Four (e.g., Elementary Math Results, Table 4.8), depicts the results of the SNK analysis of mean differences.

Tables 4.13 and 4.14 are organized by subject and present the income group means for each type of building. The tables include the three income groups, the five performance level categories, and the three educational levels of SOE buildings. An asterisk (*) marks any statistically significant difference among the means. Statistical comparisons of the income means were calculated by building type for each performance level category (e.g., high-, medium-, and low-income means for the Exemplary category in elementary reading buildings). The mean percentages reflect the percentage of students scoring in each performance level category. No statistical comparisons should be made across different types of buildings or across subjects. The SOE requirements vary by grade level and by subject, making such cross-comparisons inappropriate (Appendix C). These same requirements account for the small percentage of students scoring in the *Approaches Standard* and *Academic Warning* categories. The mean scores for the low-income group of senior high buildings is reported strictly as a matter of interest, due to the small number of observations for both reading and math (three each). Statistical analysis and interpretation for senior high buildings was based on the HINC and MINC means.

Table 4.13 SOE Reading Mean Score Percentages by Income Group 2005-06

SOE Building/ Performance level	HINC *n*	HINC %	MINC *n*	MINC %	LINC *n*	LINC %
Elementary reading Grades 3. 4, 5	273		283		86	
Total group mean		20.01		19.76		19.63
Exemplary*		*38.80		34.19		31.80
Exceeds*		29.98		30.83		*32.74
Meets*		*21.55		24.12		23.57
Approaches		5.98		6.87		7.09
Academic warning		3.76		2.77		2.94
Mid/JrHigh reading Grades 6, 7, 8	203		246		47	
Total group mean		19.78		19.81		19.70
Exemplary*		*37.14		28.87		29.01
Exceeds		31.00		32.37		30.80
Meets*		*21.87		25.67		26.08
Approaches*		*6.11		8.14		8.35
Academic warning*		*2.80		3.99		4.27
Senior High Reading Grade 11	67		79		03	
Total group mean		19.60		19.22		17.66
Exemplary		29.77		25.04		25.33
Exceeds		30.90		29.39		25.00
Meets		23.78		26.72		24.03
Approaches		09.35		09.47		09.47
Academic warning		04.18		05.49		04.47

Note. % = mean percentage of students; *n* = number of grade-level observations; Mid/JrHigh = Middle School/Junior High School; HINC = high-income; MINC = medium-income; LINC = low-income.

*Significant differences from other income means based on the SNK analysis.

Table 4.14 SOE Mathematics Mean Score Percentages by Income Group 2005-06

Building/ Performance Level	HINC *n*	HINC %	MINC *n*	MINC %	LINC *n*	LINC %
Elementary Math Grades 3. 4, 5	230		247		90	
Total Group Mean		*19.81*		*19.81*		*19.71*
Exemplary		39.30		36.37		37.08
Exceeds		28.82		28.87		29.25
Meets		23.90		26.42		24.89
Approaches		4.68		4.87		4.87
Academic warning		2.39		2.50		2.47
Mid/JrHigh Math Grades 6, 7, 8	135		115		19	
Total Group Mean		*19.96*		*19.82*		*19.85*
Exemplary*		*35.95		28.45		24.17
Exceeds		29.65		29.35		31.45
Meets*		*22.59		26.85		29.09
Approaches		7.75		9.95		9.87
Academic warning		3.86		4.48		4.69
Senior High Math Grade 10	28		31		03	
Total Group Mean		*19.69*		*18.88*		*19.42*
Exemplary		24.75		21.78		21.87
Exceeds standard		24.39		24.03		17.97
Meets standard		26.36		25.09		29.17
Approaches standard		13.20		14.80		14.13
Academic warning		9.77		9.44		13.97

Note. % = mean percentage of students in SOE math schools; *n* = number of grade-level observations. Mid/JrHigh = Middle School/Junior High School. HINC = high-income; MINC = medium-income; LINC = low-income.

*Significant differences from other income means based on the SNK analysis.

Table 4.15 addresses the income data through the presentation of income means and income mean ranges; the data is organized by type of building, by subject, and by income groups. Income ranges and means reflect the percentages of students eligible for free and reduced lunches. All six income means fall in the twenty to thirty percent range of free and reduced lunches.

Table 4.15 Building Income Means and Income Ranges

Income groups	Elementary reading Grades 3, 4, 5			Elementary math Grades 3, 4, 5		
Elementary	*n*	Mean F/R %	Min. – Max. F/R %	*n*	Mean F/R %	Min. – Max. F/R %
Total*	642	28.28	0.65 – 82.08	567	29.71	0.65 – 82.08
HINC	273	10.04	0.65 – 23.69	230	9.36	0.65 – 23.69
MINC	283	36.04	24.29 – 49.77	247	36.72	24.19 – 49.85
LINC	86	59.41	50.60 – 82.08	90	62.47	50.60 – 82.08
	Middle/Jr.high reading Grades 6, 7, 8			Middle/Jr. high math Grades 6, 7, 8		
Mid/Jr High	*n*	Mean F/R %	Min. – Max. F/R %	*n*	Mean F/R %	Min. – Max. F/R %
Total*	496	28.72	0.73 – 66.04	269	25.17	0.73 – 70.51
HINC	203	13.43	0.73 – 23.71	135	12.09	0.73 – 23.69
MINC	246	35.20	24.12 – 49.77	115	35.15	24.12 – 49.85
LINC	47	55.16	50.31 – 66.04	19	57.63	50.60 – 70.51
	Senior high reading Grade 11			Senior high math Grade 10		
Senior high	*n*	Mean F/R %	Min. – Max. F/R %	*n*	Mean F/R %	Min. – Max. F/R %
Total* 3 groups	149	26.25	2.18 – 64.63	62	20.53	2.18 – 54.1
HINC	67	15.22	2.18 – 23.84	28	13.70	2.18 – 23.64
MINC	79	25.04	24.12 – 49.04	31	31.12	24.12 – 37.92
LINC	3	56.40	51.86 – 64.63	3	50.26	47.71 – 54.07
Total* 2 groups	146	25.63	2.18 – 49.04	59	19.01	2.18 – 37.92
HINC	67	15.22	2.18 – 23.84	28	13.70	2.18 – 23.64
MINC	79	25.04	24.12 – 49.04	31	31.12	24.12 – 37.92

Note. Totals* calculated from all grade-level observations per building type. F/R % = percentage of students on free and reduced lunches; Min. – Max. = Minimum to Maximum; *n* = number of observations as categorized for the purposes of this study. The actual count is therefore less than shown. HINC = high-income; MINC = medium-income; LINC = low-income.

To help explain the high levels of income mean percentages for each type of building shown previously in Table 4.15, the grade-level observations across F/R percentages are presented in Table 4.16. With the F/R percentages divided into ten-point intervals, Table 4.16 displays a more precise representation than would be achieved using only the three income groups of high, medium, and low. The lower income schools have the higher F/R percentages and vice versa. Reading each column from top to bottom reveals the drastic reduction in the number of observations as the income levels become lower. The first major decrease for Middle/Junior High Math and Senior High Math observations can be seen between the 20-29.99% and the 30-39.99% F/R brackets; the first large decrease for these same levels in reading occurs in the 30% and 49.99% F/R range. Elementary Reading and Math observations show a significant drop between the 10% and 19.99% points and again between the 40% and 59.99% F/R points.

Table 4.16 Number of Assessed Grades in Standard of Excellence Schools 2005-06 by Free and Reduced Lunch Percentages

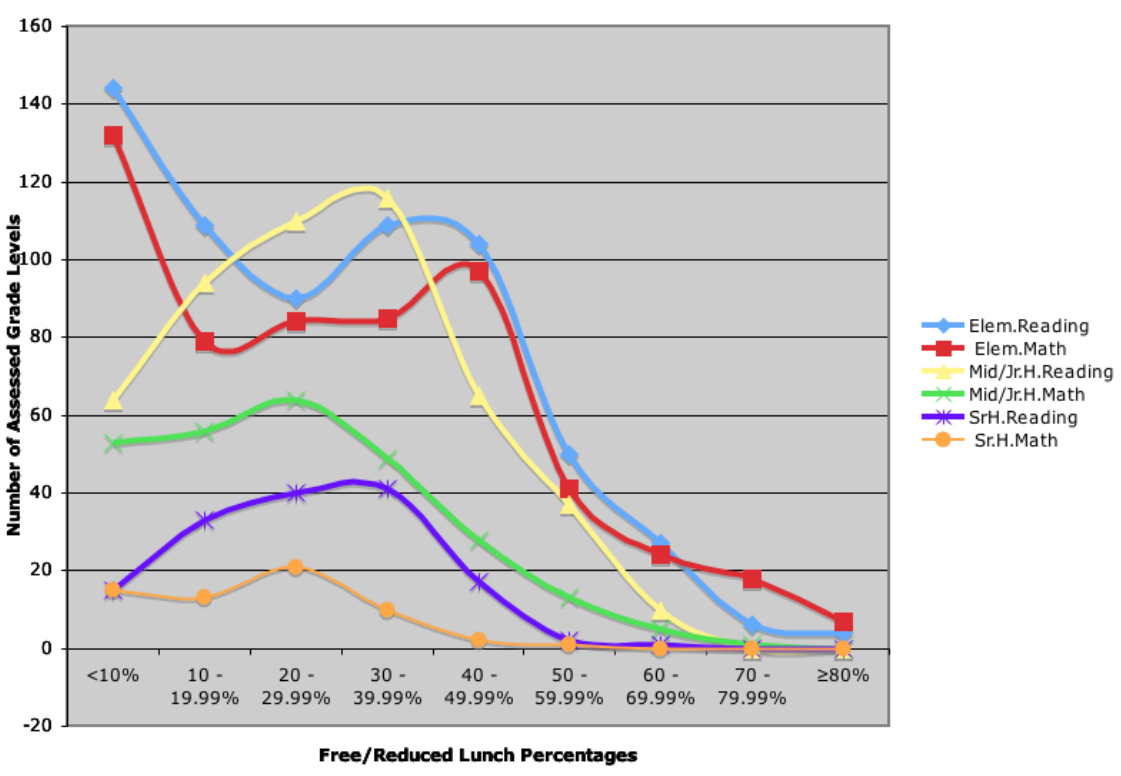
	Gr. 3, 4, 5		Gr. 6, 7, 8		Gr. 11	Gr. 10	
F/R %	El. rdg.	El math	M/j rdg.	M/j math	Sr rdg.	Sr math	Total
<10%	144	132	64	53	15	15	423
10 – 19.99%	109	79	94	56	33	13	384
20 – 29.99%	90	84	110	64	40	21	409
30 – 39.99%	109	85	116	49	41	10	410
40 – 49.99%	104	97	65	28	17	2	313
50 – 59.99%	50	41	37	13	2	1	144
60 – 69.99%	27	24	10	5	1	0	67
70 – 79.99%	6	18	0	1	0	0	25
≥80%	4	7	0	0	0	0	11
Total	643	567	496	269	149	62	2186

Note. The numbers might include schools entered into more than one category (e.g., earning an SOE in both reading and math); therefore, the actual count would be lower than shown. El. = Elementary; M/J = Middle/Junior High; Sr = Senior High; F/R% = percentage of students eligible for free and reduced lunches; rdg. = reading; ≤ 10% = highest-income schools; ≥ 80% = lowest-income schools.

Figure 4-7 illustrates visually the positively skewed distribution of assessed grades (number of observations) across the income levels of buildings, presented numerically in the previous Table 4.16. Division of the F/R percentages into ten-point intervals achieved a more precise representation than would be possible with only the three income groups of high, medium, and low.

Even with large quantities of data (e.g., Elementary Reading: 643 total observations), a normal distribution does not exist for any of the income means of the SOE schools used in this study. Far fewer lower-income buildings earned SOE awards than did higher-income buildings. Total income means for all building types fall in the free and reduced lunch range of 20% to 30%, as was previously shown in Table 4.15.

Figure 4-7 Income Level and Number of Assessed Grades by Standard of Excellence Building Type 2005-06



Note. Income level for each building type is determined by the percentage of students eligible for free and reduced lunches. Income means for all building types fall in the free and reduced lunch range of 20% to 30%.

Table 4.17 shows the number of building-wide SOE awards in the two subjects of reading and math for elementary, middle/junior high, and senior high buildings, as categorized for use in this study. The distribution is arranged in ten-point intervals of free and reduced lunch percentages for each building type. The majority of awards were earned in buildings with fewer than 40% of economically disadvantaged students. The number of SOE buildings declines noticeably at each educational level as the F/R lunch percentages increase. The proportion of math awards to reading awards decreases in middle/junior high and in senior high, compared to elementary buildings.

Table 4.17 Number of SOE Building-Wide Awards by Subject and by Free and Reduced Lunch Percentages 2005-06

F/R %	El reading	El math	M/J reading	M/J math	Sr reading	Sr math	Total
<10	44	40	39	33	15	15	186
10 - 19.99	43	33	54	36	34	13	213
20 - 29.99	36	33	51	34	39	20	213
30 - 39.99	38	31	54	27	42	11	203
40 - 49.99	40	36	30	19	17	2	144
50 - 59.99	19	16	19	8	3	1	66
60 - 69.99	10	9	4	3	1	0	27
70 - 79.99	2	6	0	1	0	0	9
≥80	2	3	0	0	0	0	5
Total	234	207	212	128	151	62	994

Note. El = elementary; F/R = percentage of students eligible for free and reduced lunches; M/J = middle/junior high; Sr = senior high. Reading SOE Awards *N* = 597; Mathematics SOE Awards *N* = 397. The numbers reflect schools counted in more than one category for purposes of this study, due to overlapping grades (e.g., Grades K-7); also counted more than once are schools that earned the building-wide SOE award in both reading and mathematics. The actual count of SOE building awards for buildings ≥ 150 is therefore less than shown.

Schools could earn an SOE building-wide award in reading, mathematics, or both. The distribution of SOE building-wide awards by subject category (single subject or both) and income level is shown in Table 4.18 for schools used in this study. This table reveals that over half the SOE building awards were earned in schools with less than 40% of their students eligible for free and reduced lunches.

Table 4.18 Number of Buildings with SOE Awards in Reading, Mathematics, or Both by Free and Reduced Lunch Percentages 2005-06

SOE building award	F/R <10%	F/R 10%-19.99	F/R 20%-29.99	F/R 30%-39.99	F/R 40%-49.99	F/R 50%-59.99	F/R 60%-69.99	F/R 70%-79.99	F/R ≥ 80%	Total
El rdg	4	12	6	15	14	9	3	0	0	63
El math	0	2	3	8	10	6	2	4	1	36
El both	40	31	30	23	26	10	7	2	2	171
El total	44	45	39	46	50	25	12	6	3	270
M/J rdg	6	18	18	32	18	11	2	0	0	105
M/J math	0	2	2	4	6	0	1	1	0	16
M/J both	33	34	31	23	13	8	2	0	0	144
M/J total	39	54	51	59	37	19	5	1	0	265
SrH rdg	2	21	22	32	15	2	1	0	0	95
SrH math	2	1	3	1	0	1	0	0	0	8
SrH both	13	13	17	10	2	0	0	0	0	55
SrH total	17	35	42	43	17	3	1	0	0	158
Grand total	100	134	132	148	104	47	18	7	3	693

Note. The building categories designated for the purposes of this study included those with overlapping grades (e.g., Grades K-7). Therefore, the actual number of SOE schools with ≥150 students is less than shown. El = Elementary Gr. 3, 4, 5; F/R = Percentage of students on Free and Reduced Lunches; M/J = Middle School/Junior High Gr/ 6, 7, 8; Rdg = Reading; SOE = Standard of Excellence; SrH = Senior High Gr. 10, 11.

CHAPTER 5 - Summary, Conclusions, and Recommendations

Summary of the Study

The theoretical perspective for this study, as discussed at length in Chapter Two, focused on two varying theories: (a) the correlation of family SES to achievement, documented through the years by researchers from Coleman (1966) to Klein and Knitzer (2007), and (b) a strong correlation between school characteristics and student achievement, with SES not identified as a major factor in low-income, high-achieving schools (e.g., Edmonds, 1979; Kahlenberg, 2006, Mosenthal et al. 2004). The reviewed literature lent credence to both theories and also addressed elements of reform and characteristics of schools and teachers. Evidence of equitable reform and specific characteristics of the Standard of Excellence (SOE) schools were not the statistical focus of this study, but rather assessment scores and income levels of these high-performing schools. This statewide study, designed to uncover any significant relationship between performance level percentage distributions and income levels of Kansas SOE schools, originated from the premise that excellence is excellence, no matter the setting or income level of a school. After careful consideration of the statistical findings in comparison with the reviewed literature, I concluded that this study supported the second theory.

The time frame of 2005-06 was chosen due to the large number of SOE building awards and to changes in the state assessments, rendering direct comparisons with previous years inappropriate. A new baseline of data therefore began in 2005-06. A much more extensive database was accumulated, due to the new requirement that all students in Grades 3-8 be assessed. Performance gaps between non-disadvantaged and disadvantaged students could now be more precisely identified; trends in the achievement of low-income students and schools could be tracked more accurately over a span of years. Such use of data enables the KSDE, districts, schools, and communities to plan and implement strategies aimed at decreasing and ultimately eliminating any gap between disadvantaged and non-disadvantaged students. This process brings two important goals of the KSDE

closer to completion: first, the meaningful education of all students; second, fulfillment of the AYP targets for the low SES group and other sub-groups, according to NCLB requirements (Kansas Adequate Yearly Progress Revised Guidance, 2006). The KSDE Report Card reports data for each school by percentages of students in each grade level in each school. This study of building income levels and performance level percentages in SOE schools contributes to the interpretation of the 2005-06 data.

A building-wide Standard of Excellence Award in reading or math or both was the constant; the two variables were income level of the building and state assessment scores in each performance level category. Categorical data was recorded for statistical analysis: (a) the student free and reduced lunch percentages per school and (b) the student performance level percentages by grade level per school. Use of the reported student percentages avoided giving undue weight to large schools. The total population of SOE building-wide award schools with 150 or more students comprised the subjects of this study. Exclusion of smaller SOE schools avoided distortion of the percentage representations. For purposes of this study, I designated six types of buildings based on the assessed grade levels and the SOE subject: Elementary Reading and Elementary Mathematics (Grades 3, 4, 5), Middle School/Junior High Reading and Middle School/Junior High Mathematics (Grades 6, 7, 8), Senior High Reading (Grade 11), and Senior High Mathematics (Grade 10). Some of the actual 502 schools fit more than one designation resulting in 693 buildings listed on the datasets. I subdivided each building type into HINC, MINC, and LINC according to the percentages of students eligible for free and reduced lunches. Data was recorded by grade level for each school (Appendix A); results were reported and analyzed by the aggregate building unit. Use of aggregate building groups reduced the likelihood that any uncontrolled variables or outliers (e.g., family structure and classroom atmosphere) would distort the results (Gustafsson, 2006; Kilpatrick et al., 2006).

A two-way, repeated-measures, mixed design ANOVA General linear Model (GLM) was employed as the most appropriate method to analyze the large dataset for differences among means for each type of building. The Student-Newman-Keuls multiple comparison procedure was planned to probe the individual income group means for significant differences at each of the five performance level categories.

Conclusions

Discussion of Statistical Results

Because of the non-experimental nature of this study, the results describe relationships rather than causes. Direct and even inferred causality of instructional methods, curriculum, school size, or parenting was not the purpose of this study. Such variables were deliberately not included. Since the SOE building was the aggregated unit of analysis, findings should not be generalized to non-SOE buildings, individual students, teachers, classrooms, or schools.

Within-subjects interaction effects and the Student-Newman-Keuls (SNK) results held particular interest, since the purpose of the study focused on the sets of income means for each type of building, testing the income means of each building type for significant differences at each performance level. The information revealed by these two tests was particularly pertinent in terms of practical implications and conclusions when considered in conjunction with the other ANOVA findings. As with any two-way ANOVA, results of main effects must be and were considered in light of the interaction effects and planned tests of multiple comparisons when deciding to what extent the hypotheses were supported and how the research questions might be answered. I was conscious of the difference between statistical significance and practical significance for education when interpreting any significant findings.

Within-subjects interaction effects: Rejection of the H_{03} occurred when significant interaction was detected for five of the six types of buildings: Elementary Reading, Elementary Math, Middle/Junior High Reading, Middle/Junior High Math, and Senior High Reading. This indicated that a given level of income had different effects at each of the different performance levels. The non-parallel lines plotted for the means of each building type gave visual evidence of interaction, even in the case of the non-significant findings for Senior High Math (see Chapter Four: Figures 4-1, 4-2, 4-3, 4-4, 4-5, and 4-6). The changing position of the HINC group for each building type was especially evident. The income groups of any of the buildings thus have an inverse relationship in some instances, "changing places" with each other in different performance categories, while in other instances remaining parallel from one performance category to another. It

would appear that, in most of the SOE buildings, income does have some impact on performance. The significance for Senior High Reading buildings was interpreted with caution, due to the small number of the LINC group (n = 3).

At first glance, the significant findings seem to somewhat support the connection of SES to achievement. However, some discrepancies are evident, brought to light by the more specific SNK procedure.

SNK results: Despite the evidence of significant interaction in five buildings, the planned SNK test of means found that only three of the five building types showed any significant differences between the income group means at each performance level. For the three buildings, a very limited number of the means differed significantly. Three of the six buildings showed significant differences: (a) Elementary Reading, with three of its 15 means, two HINC and one LINC; (b) Middle/Junior High Reading, 4/15, all HINC; and (c) Middle/Junior High Math, 2/15, both HINC (see Chapter 4: Tables 4.13 and 4.14). Eight of the nine significantly different means belonged to the HINC group, being either significantly higher in the Exemplary category or significantly lower in the Meets Standard, Approaches Standard, and Academic Warning categories. The Elementary Reading LINC group was significantly higher in the Exceeds category.

Between-subjects main effects: The findings supported H_{01} for five of the six building types, with no significant differences evident between income means disregarding performance level scores, giving some credence to the theory of school influence being more important than SES. Only Senior High Reading showed a significant difference. While rejection of the first null hypothesis for Senior High Reading buildings might be technically correct, the practical significance is suspect, due to the small size of the LINC group (3) and the fact that specific mean differences were not revealed by this test.

Within-subjects main effects: When each individual score was checked for deviation from that performance level's group mean, disregarding income groups, all buildings exhibited strongly significant within-subjects main effects. In attempting to account for the dramatic differences, I reasoned that a probable factor was the SOE criteria for a building-wide award (see Appendix C). Not every grade level in a building must meet the minimum percentages specified, as long as the building as a whole did

meet the requirements. Data from each school potentially included one or more assessed grade levels that did not meet or that far exceeded the SOE criteria. Of the 643 Elementary Reading observations (aggregate grade-level scores per building) used in this study, the percentages of students scoring in the Exemplary category ranged from 0% to 87%! A range of such magnitude and the large sample size could account for significant cell deviations from the Exemplary group mean. The same pattern emerged in the other performance level categories. The other five types of buildings exhibited a similar pattern. I determined that this was a logical and unavoidable part of examining an entire building's performance, not just that of the highest performing grades in the building. The determination of practical significance always depends on the context. The statistically significant findings resulted in the technical rejection of H_{02} for all types of buildings; but were not considered particularly applicable in a practical sense for education or for the questions that prompted this study.

In summary, the ANOVA results bought to light four patterns that had bearing on the formation of my insights and conclusions:

1. Significant interaction was detected for every building but one, yet only three of those five buildings showed significantly different income means when examined at each performance level category.

2. In the three buildings exhibiting significantly different income means at each performance level, only a small proportion of the means were significant (3/15 for Elementary Reading, 4/15 for Middle/Junior High Reading, and 2/15 for Middle/Junior High Math buildings). All three buildings showed HINC means as significantly higher at the Exemplary level.

3. HINC building groups had far more significantly different means at the performance levels than did the others (eight for HINC, one for LINC, none for MINC), most rated as small to moderate. In the Exemplary category, Middle/Junior High Reading buildings and Middle/Junior High Math buildings showed a moderate to large degree of difference between the HINC to LINC means and between the HINC and MINC means.

4. Only one of the six buildings showed significance for between-subjects income level differences. That finding was suspect due to the small number of the LINC group.

The detected patterns that emerged from the statistical findings led me to note particular observations:

1. A few performance categories and income level do appear to have some slight impact on each other, particularly noticeable for students at Middle/Junior High Reading and Math buildings; HINC buildings are more likely to outscore MINC and LINC Middle/Junior High buildings in the Exemplary category. A slight probability exists that Elementary Reading HINC buildings are somewhat more likely to outperform MINC and LINC buildings in the Exemplary category.

2. Taking a broader view from the proportion of pertinent, significant findings and from the mainly small to moderate degrees of difference, I concluded that income does not appear to be a major influence on performance in general for SOE buildings. Income does appear to have some larger degree of impact in Middle/Junior High buildings; however, in the terms of practical significance, this impact would likely be minimal. In my opinion, the findings indicate that students enrolled in SOE schools of a given educational level (e.g., Elementary Reading SOE building) and of varying income levels (i.e., HINC, MINC, and LINC buildings) could have similar overall performance scores for reading, math, or both in most of the performance level categories when considering the building as a whole.

The statistical patterns and the resultant observations formed my conclusion that income is not always a major factor in schools with high achievement scores, in this case SOE schools. Thus my conclusion agrees with the findings of Edmonds (1979, 1981), Fullan et al. (1991), Haycock (2001), Kahlenberg (2006), and Mosenthal et al. (2004), among others.

Trends Noted

Certain trends became evident as data and results were compiled. I did not directly hypothesize any such patterns, and hence they lack statistical verification. However, the trends noted do add an additional dimension to this discussion of income levels and SOE schools and could be the starting point for additional research. Two trends were especially noteworthy, in my opinion: (a) the proportion of LINC schools and (b) the location of SOE schools throughout Kansas in counties of varying income levels.

The numbers of each designated type of building, recorded on the tables of statistical results in Chapter Four, made one trend quite obvious. The higher the educational level, the fewer low-income SOE schools were represented in this study, as shown in Table 5.1. For instance, senior high LINC buildings numbered only four, while elementary LINC buildings numbered 46. Nearly twice as many elementary LINC buildings earned awards compared to middle school/junior high LINC buildings. The numbers and percentages of MINC and HINC buildings do not show the same drastic changes when compared across educational levels. When comparing the sizes of the different income groups to each other, the use of ratios in Table 5.2 gives a simple, clear view of differences. The middle school/junior high buildings have somewhat greater ratios for income groups than elementary buildings, but still noticeably less than those of senior high buildings. The ratios of HINC and MINC buildings to LINC buildings increase dramatically at the senior high level.

Table 5.1 Number of SOE Buildings by Educational Level and Income Level

Educational level	LINC		MINC		HINC		Total number
	N	%	*N*	%	*N*	%	
Elementary 3, 4, 5	46	17%	125	46%	99	37%	270
Middle/jr high 6, 7, 8	25	10%	127	48%	113	43%	265
Senior high 10, 11	4	4%	81	51%	73	46%	158
Total	75	11%	333	48%	285	41%	693

Note. % = percentage of the number; jr = junior; HINC = high-income; LINC = low-income; MINC = medium-income; *N* = the count of building types designated for this study, including schools with overlapping grades (e.g., 3 – 8) and schools earning an award in only reading, only math, and in both reading and math; therefore, the actual number of SOE schools ≥ 150 is less than shown. Percentages are not exact due to rounding.

Table 5.2 Ratios of Income Groups by Standard of Excellence Building Type

Educational level	HINC:LINC	MINC:LINC
Elementary 3, 4, 5	2:1	3:1
Middle/Jr High 6, 7, 8	4:1	5:1
Senior High 10, 11	18:1	20:1
Total Ratio	4:1	4:1

Note: Due to rounding, the ratios do not reflect the exact numbers of HINC and MINC building types. HINC = high-income; LINC = low-income; MINC = medium-income.

The information depicted in Tables 5.1 and 5.2 raised the following questions my mind:

1. Why do the elementary SOE buildings have a higher percentage of LINC schools than middle/junior high buildings and senior high buildings?

2. Are there more LINC elementary schools in the state than at the middle/junior high or senior high levels? Many districts have more than one elementary school and more than one middle/junior high school, often with income levels dependent on the location of the schools. If multiple LINC, MINC, and HINC schools send students to one senior high school, the overall income level of the high school would be affected, diminishing the effects of extremes of income. This could partially account for the low number of SOE LINC senior high buildings.

3. To what extent will the number of LINC schools overall in the state increase as more families and more communities struggle economically?

4. Do the numbers and ratios indicate that the elementary schools are doing a better job of educating students in low-income schools, enabling more elementary LINC schools to earn the SOE building award than upper- and middle-grade-level schools?

5. If so, will this high achievement carry over into future years as these elementary and middle school/junior high students from LINC SOE schools move into the upper grades and senior high school, decreasing the performance gap between disadvantaged and non-disadvantaged students?

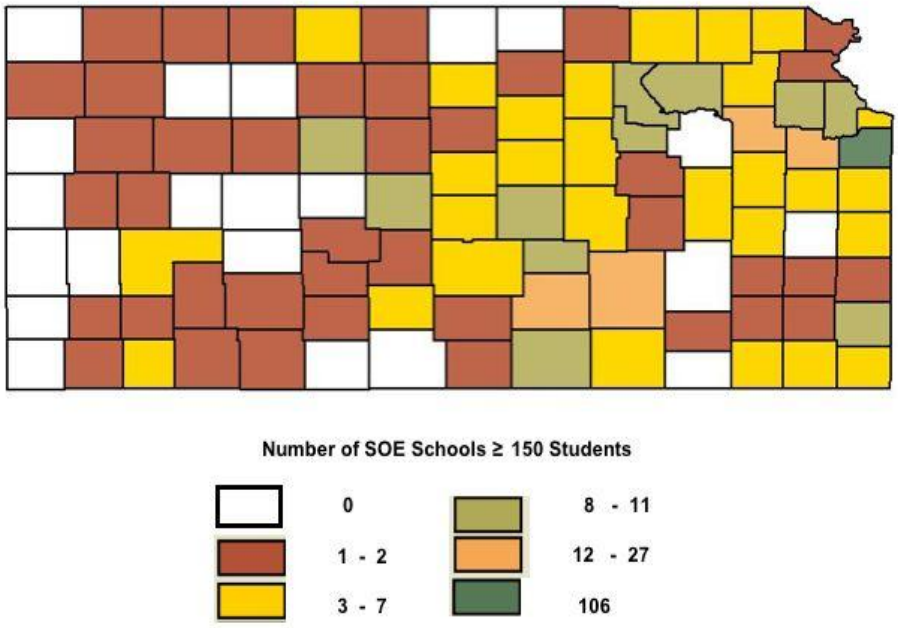
The distribution of SOE schools across Kansas attracted my notice, because SOE building income levels (percentage of students on free and reduced lunches) reflect area economic indicators, such as median household income and poverty rate. The visual comparisons offered by the maps (see Figures 5-1, 5-2, and 5-3) indicate that SOE school location is not dependent on county median household income level and poverty rate. SOE schools with 150 or more students appear to be more concentrated in the eastern half of the state in which are found the most counties with higher income levels and, conversely, the most counties with the highest poverty rates. My realization was that the income-related location of SOE schools lacks a consistent pattern when compared by county. To keep the income level of the counties in perspective, I compared these levels to my previously researched literature regarding poverty and eligibility for free and reduced lunches. The government's poverty level for a family of five is $22,951; in reality, that family needs to earn $45,902 to meet basic needs (NCCP, 2008, Kansas). The annual Income Eligibility Guidelines for Free and Reduced Lunches states $41,829 as the qualification threshold for a family of five (Income Eligibility Guidelines, 2005).

Figure 5-1 shows that 84 of the 105 Kansas counties contain SOE schools with 150 or more students: (a) 40 counties, one to two SOE schools; (b) 28 counties, three to seven; (c) 11 counties, 8 to 11; (d) four counties,12 to 27; (e) one county, 106; and (f) 21 counties, none. The eastern half of the state holds the majority of SOE schools used in this study. Consideration must be given to the fact that western counties are more sparsely populated with smaller enrollments and fewer schools per county than in eastern Kansas. Western counties also are larger in area, resulting in fewer counties than in the eastern half.

Of the 11 counties with the lowest median household income, only two lack SOE schools (see Figure 5-2). SOE schools are in 53 of the 70 counties with a median income range of $31,001 - $40,000. Counties with high median household income are mainly in eastern Kansas (19 of 24 counties). Of the higher income counties in the east, 18 show a median household income between $40,001 and $51,000; one county had a median income greater than $68,000. Western Kansas had five counties with median income

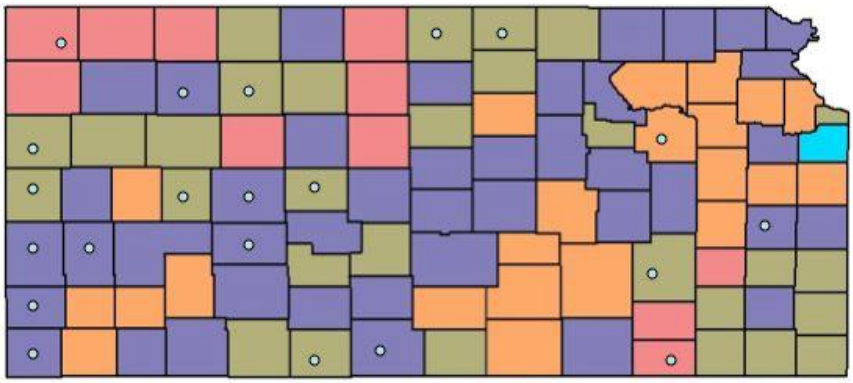
between $40,001 and $51,000. Statewide, all but one of the 24 higher income counties contain SOE schools. Eastern Kansas not only has the majority of higher income counties; it also has all of the 13 counties with the highest poverty rates (between 14.0% and 17.6%), depicted in Figure 5-3. Of these 13 high-poverty-rate counties, all but one have from 1 to 11 SOE schools. Nearly half the counties with lower rates of poverty (7.3% - 10.9%) had no SOE schools. The one county with both the highest median income and the lowest poverty rate had the highest number of SOE schools (106).

Figure 5-1 Map of SOE Schools ≥ 150 Students by County



Note. From KSDE Report Card 2005-06. SOE = Standard of Excellence building-wide award in reading or math or both.

Figure 5-2 Map of Median Household Income by County

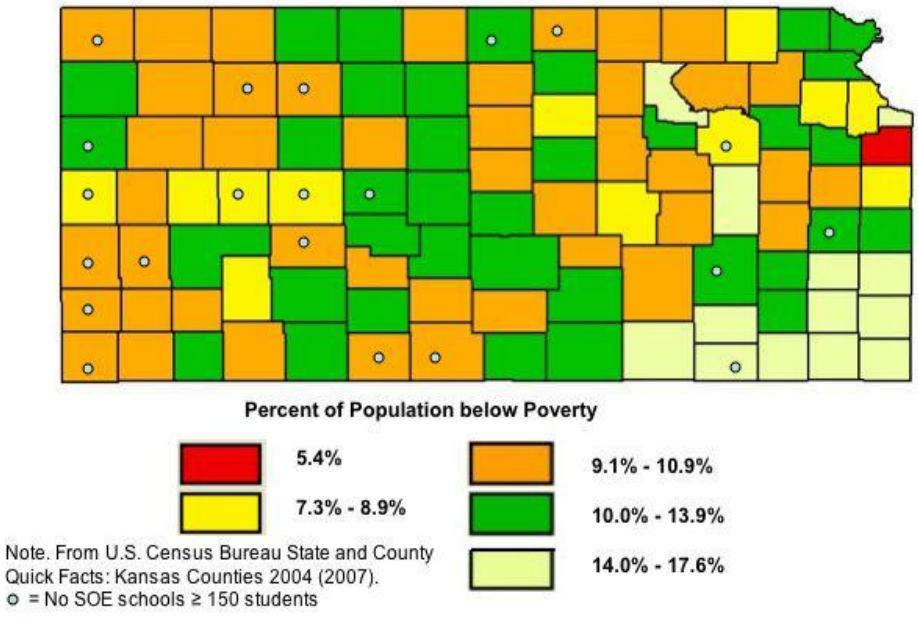


Median Annual Household Income: Minimum and Maximum

$25,797 - $31,000	$34,001 - $40,000
$31,001 - $34,000	$40,001 - $51,750
	> $68,000

Note. From U.S. Census Bureau State and County Quick Facts: Kansas Counties 2004 (2007).
○ = No SOE schools ≥ 150 students

Figure 5-3 Map of Poverty Rates by County



Note. From U.S. Census Bureau State and County Quick Facts: Kansas Counties 2004 (2007).
o = No SOE schools ≥ 150 students

Recommendations

Based on this study's results and on the reviewed research base, I propose the following six recommendations for future research about SOE schools:

1. What demographic variations exist in addition to income, and to what extent do these demographics influence academic success among the SOE schools in Kansas? This study used aggregate data about income level and performance percentages across SOE schools with a range of size and geographic diversity. The findings support the conclusions of Mosenthal et al. (2004), Haycock (2001), and Standard & Poor's (2007) that income level and other demographics are not consistent factors in high-achieving schools. Future studies of SOE schools could examine other demographics for statistical significance, such as the setting (rural vs. urban), the sizes of the schools, the ethnic and racial profiles, the grade levels, and the percentage of SOE schools in different geographic regions of Kansas.

2. How does the performance of economically disadvantaged students in SOE schools compare to that of the other students in the same schools? Future SOE research could focus on the subgroup of economically disadvantaged students within the SOE schools of Kansas. Using aggregate grade level data from SOE schools, the performance level percentages could be compared to those of non-disadvantaged SOE students. Are SOE schools closing the achievement gap between low-income students and other students more effectively than similar non-SOE schools? A comparison of the gap in SOE schools and non-SOE schools, using data such as that shown in Appendix B, might be a starting point for improvement. When designing comparative research regarding a specific subgroup, a researcher must consider the inclusion of that subgroup in KSDE data labeled "All Students". Although this is a standardized procedure for displaying KSDE data, the inclusion does obscure the actual performance gap between a given subgroup and other students. The actual degree of performance difference is therefore less distinct than if the "All Students" group could be considered without inclusion of the subgroup's data.

3. How do changes in the administration of the assessments impact student performance in the SOE schools? Future studies might focus on the impact from changes made in the administration of the state assessments, such as the more widespread student use of computers for the assessments. A study might consider the Hawthorne effect, the temporary improvement in performance due to a change in regular conditions or situations and to being watched closely, possibly leading to a continuous improvement (Draper, 2008). Factors might include in-class preparations for the assessment (throughout the school year), variation of the ordinary procedures in class; use of computers in lieu of paper tests, and motivation and feedback provided to students. Any or all of these possible factors might alter students' beliefs and attitudes towards the importance of school. Students' understanding of a situation (assessment) and its relevance might impact their own attitudes about the effect of their actions.

4. What characteristics exist in common among SOE schools? Mosenthal et al. (2004) posed the same question: "Do the factors that influence success and promote excellent performance vary among successful schools, depending on school characteristics?" Mosenthal et al., p. 346). We could narrow the focus strictly to low-income schools by asking another question: Why are some low-income schools successful and others are not? In the case of the second question, a researcher could examine the characteristics of low-income SOE schools and those of other low-income schools. Mosenthal et al. and Haycock (2001) agreed that good teaching and systemic commitment to closing achievement gaps overrode influences of income. Any of the following seven characteristics or others might form part of a study's design or emerge with the findings. Characteristics for consideration might include: (a) the level of teaching experience (e.g., number of years, advanced degrees), (b) frequency of assessment as part of the instructional plan, (c) use of assessment results to improve instruction, (d) alignment of instruction with high standards and the research base, (e) equitable learning opportunities, (f) level of support for teachers, and (g) level of enthusiasm in students and teachers. The use of assessment results might incorporate a school's consideration of existing indices and surveys such as the annual Standard and Poor's survey (2007).

5. How do low-income SOE schools in Kansas address the issues of equitable opportunities to learn and equitable assessments? In poor schools with high rates of achievement, Mosenthal et al. (2004) and Haycock (2001); noted that the fit of an instructional program to the needs and context of a particular school and particular students showed the greatest impact on test scores. A survey of SOE schools might reveal aspects of equity. Items researched might include five elements, among others: (a) instruction built on the students' cognitive, social, and affective needs and strengths; (b) expression of high expectations; (c) attention to parent and community relations, involvement, and support; (d) sensitiveness to cultural differences; and (e) nurturing of positive attitudes of teachers, students, administrators, and staff; funding venues. These factors and others have long been touted as essential for meaningful improvement of education through equity (Educate America, 1994; Essex, 2006; Fullan & Stiegelbaurer, 1991; NCLB Act, 2001; Possible Causes, 2006; Suydam, 1990; and Wiles, 2005).

6. Are the results of this study replicable? Use of data that is publicly available on the KSDE web site will enable this study to be replicated with data from later years. A longitudinal view would determine if the results are unique to 2005-06 SOE schools or if they can be generalized to SOE schools in years ahead (Gustafsson, 2006; Kilpatrick et al., 2006). A trend study of this sort would give additional evidence that the income level of SOE schools is not a major factor on achievement. Jones and Martinez (2001) emphasized the importance of an accessible database in both disaggregate and aggregate form for longitudinal studies; the KSDE data system meets this need for researchers.

Additional verification of SOE schools as models might result from any of the recommended research topics. Knowledge of processes and strategies in SOE schools might lead to discussions and action about future instruction and funding to expand the use of effective methods with low-income students. Nothing in education falls totally into neat, self-contained categories; membership in one sub-group does not exclude membership in others. Educators must consider the other elements in addition to income that make up the culture and background of a particular student or group. Each year, teachers greet new combinations of students with unique needs and strengths. Educators must strive to look beyond the label(s) to consider the whole inner child in order to plan appropriate, meaningful instruction.

Overall Conclusions

Two questions directed this study and the formation of the hypotheses:

1. Is the distribution of achievement scores across the performance levels consistent across income-level designation of grade-level buildings per subject? As a result of this study, I would answer the first question, "Yes, performance is consistent in most instances; in three types of building, only 9 out of 45 means showed any significant difference. The other three buildings showed no significant differences in means."

2. What is the degree of variance or consistency? The results showed small to moderate significant differences with two exceptions for the means of Middle School/Junior High Math and Reading.

Do varying income levels of SOE schools affect the performance of students in a particular type of SOE building? As with so many questions about education, it depends. Overall, major differences in performances were not evident among income groups for each type of building; however, some discrepancies exist. In the Exemplary performance level category, HINC buildings appear to have an advantage. In terms of significant mean differences in the Exemplary category, HINC buildings outperformed MINC and LINC buildings in Elementary Reading, Middle/Junior High Reading, and Middle/Junior High Math; in other categories, HINC had a significantly lower performance percentage. The general lack of significant mean differences and the mainly small to moderate magnitudes of the few significant differences speak well for the educational atmosphere and instructional approaches in 2005-06 SOE schools. SOE schools appear to have broken down barriers and bridged chasms, narrowing the achievement gap between buildings of different income levels. In general, students enrolled in SOE schools of a given educational level (e.g., Elementary Reading SOE building) and of varying income levels (i.e., HINC, MINC, and LINC buildings) could have similar performance scores for reading, math, or both in most of the performance level categories. The results do not imply that SOE schools can relax their efforts; LINC and MINC SOE buildings must continue their emphasis to raise achievement rates, particularly at the middle/junior high level with several moderate to large mean differences detected in reading and math. It

must be stressed that significant findings for any type of SOE building do not mean that income is always a factor on performance for that type of building.

As Kansas strives to have all students scoring in the three highest performance levels on the state assessments by the year 2014, the performances of low SES students and other sub-groups will continue as a focus, along with the instructional and affective aspects that impact achievement. The recommendations for future research, if implemented as studies, might provide qualitative factors to explain the quantitative results (e.g., high assessment performance for SOE schools). The low numbers of SOE LINC schools warrant discussion of system-wide support to raise performance rates in non-SOE LINC schools, especially at the senior high level. The results of this study could act as a springboard for examining educational practice at SOE schools and possibly inspiring other schools also striving to reduce achievement gaps.

References

Abrami, P. C., Cholmsky, P., & Gordon, R. (2001). *Statistical analysis for the social sciences.* Needham, MA: Allyn and Bacon.

Accountability Report 2000-2001. (2001). Retrieved May 2007 from the Kansas State Department of Education site: http://www.ksde.org/Default.aspx?tabid=228

Accountability Report 2001-2002. (2002). Retrieved May 2007 from the Kansas State Department of Education site: http://www.ksde.org/Default.aspx?tabid=228

Accountability Report 2004-2005. (2005). Retrieved May 2007 from the Kansas State Department of Education site: http://www.ksde.org/Default.aspx?tabid=228

Accountability Report 2005-2006. (2006). Retrieved May 2007 from the Kansas State Department of Education site: http://www.ksde.org/Default.aspx?tabid=228

Accountability Report 2006-2007. (2007). Retrieved January 2008 from the Kansas State Department of Education site: http://www.ksde.org/Default.aspx?tabid=228

After the Bell: Education Solutions outside the School. (2001, June 4-5). New York, NY: The NYU Center for Advanced Social Science Research & The Jerome Levy Economics Institute of Bard College. Retrieved June 2007 from the NYU site: http://www.nyu.edu/fas/cassr/conf01.htm

Alliance for Excellent Education. (2007, February). *Hidden Benefits: The Impact of High School Graduation on Household Wealth*. Issue Brief. Washington, D.C.: Author. Retrieved May 2007 from the Alliance for Effective Education site: http://www.all4ed.org/publications/IssueBriefs.html and May 2007 from the KSDE site: http://www.ksde.org/Default.aspx?tabid=232

American Association of School Administrators. (1983). *A nation at risk: The excellence report: Using it to improve your schools.* (AASA #021-00719). Washington, D.C.: Communications Dept: Author.

Anderson, B. (1989). *Reformation of the full education system.* Denver: Education Commission of the States.

Assessment Performance Level Descriptors 2005-2006. (2005). Retrieved May 2007 from Kansas State Department of Education site: www.ksde.org >MAIN ASSESSMENT PAGE >ASSESSMENT Information > Performance Level Descriptors: http://www.ksde.org/Default.aspx?tabid=420

Bartz, A. E. (1988). *Basic statistical concepts* (3rd ed.). New York: Macmillan.

Bernstein, A. (1994, August 15). Inequality: how the gap between the rich and poor hurts the economy. *Business Week*, 3385, 78-83.

Brief history of the Trends in Mathematics and Science Study. (n.d.) International Association for the Evaluation of Educational Achievement [IEA]. Hamburg, Germany and Amsterdam, Netherlands. Retrieved November 2007 from the IEA site: http://www.iea.nl/brief_history_of_iea.html

Bruner, J. (1996). *The culture of education.* Cambridge, Mass.: Harvard University Press.

Bryk, A. S., & Thum, Y. M. (1989). *The effects of high school organization on dropping out: An exploratory investigation.* New Brunswick, NJ: Center for Policy Research in Education.

Butts, M. L., Jr. (2004, April 7). *Oliver C. Cox on caste, class and race: theoretical and policy implications for a color blind society*. Paper presented to the 1st Annual Conference-Workshop of the Social Theory Forum. Panel: Transformations of the Self: Pedagogies from the Margin. University of Massachusetts: Boston

Camarota, S. A. (2005). *Immigrants at mid-decade: A snapshot of America's foreign-born population in 2005.* On-line article for the Center for Immigration Studies. Retrieved November 2007 from the CIS site: http://www.cis.org/articles/2005

Camarota, S. A. (2007). *Immigrants in the United States, 2007: A profile of America's foreign-born population.* On-line article for the Center for Immigration Studies. Retrieved November 2007 from the CIS site: http://www.cis.org/articles/2007

Carlin, John (1984, January 10). *Message of Governor John Carlin to the Kansas Legislature*. Retrieved June 2, 2007 from the Kansas State Library site: http://www.kslib.info/ref/message/carlin/1984.html

Civil Rights Act of 1964, 42 U.S.C. § 2000c-4, § 2000c-6. (Cornell University Law Schools, updated 2008, January). Retrieved March 2008 from the Cornell University Law School site: http://www.law.cornell.edu/uscode/html/uscode42/usc_sup_01_42_10_21.html

Cohen, Elizabeth G. (1972, February). Interracial interaction disability. *Human Relations* 24: 9-24.

Coleman, James S. (1966). *Equality of educational opportunity* (EEOS; Coleman study). Washington, DC: U.S. Department of Health, Education, and Welfare, Office of Education/National Center for Education Statistics [producer], 1999. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2007-04-27. [Computer file] http://webapp.icpsr.umich.edu/cocoon/ICPSR- /06389.xml#scope-of-study. ICPSR06389-v3.

Council of Superintendents Meetings. (1995-2006). Topeka, KS. Kansas State Department of Education. Retrieved May 2007 from the KSDE site: http://www.ksde.org/Default.aspx?tabid=1666 KSDE > Educators > Council of Superintendents > Meeting Minutes.

Creech, Joseph D. (1990). *Educational benchmarks.* Paper prepared for the Southern Regional Education Board. Atlanta, GA: SREB.

DARPA Over the Years. (2003). Retrieved March 20 from the Defense Advanced Research Projects Agency site: http://www.darpa.mil/body/overtheyears.html

Delisio, E. R. (rev. 2007). Department of Defense schools: Their secret weapons for success. Article. Retrieved from the Education World site May 2008: http://www.education-world.com/a_issues/issues349.shtml

Diaz, T. E., Le, H. A., & Wise, L. L. (2006, December 19). *NAEP-QA FY06 Special Study: 12th Grade Math Trend Estimates*. Prepared for U. S Department of Education, National Center for Education Statistics. (Order No. ED-02-PO-3120). Alexandria, VA: Human Resources Research Organization (HumRRO). Retrieved April 2008 from the HumRRO site: www.humrro.org

Draper, S. W. (2008). *The Hawthorne, Pygmalion, Placebo and other effects of expectation: some notes.* On-line article, updated 6 October 2008. Glasgow, Scotland: Department of Psychology, University of Glasgow. Retrieved November 12, 2008 from the University of Glasgow site: http://www.psy.gla.ac.uk/~steve/hawth.html#Finding

Edmonds, R. R. (1981). Making public schools effective. *Social Policy*. September/October, p. 56-60.

Edmonds, R.R., & Frederiksen, J. (1979). *Search for effective schools: The identification and analysis of city schools that are instructionally effective for our poor children.* Cambridge: Center for Urban Studies, Harvard University.

Educate America: A Call For Equity in School Reform. (1994). Chevy Chase, Md.: The Mid-Atlantic Equity Consortium. http://www.maec.org/educate/educate.html

Education Commission of the States: Task Force on Education for Economic Growth. (1983). *Action for Excellence.* Denver: author.

Education for All Handicapped Children Act of 1975, 20 U.S.C. §1400. (Cornell University Law Schools, updated 2008, January). Retrieved March 2008 from the Cornell University Law School site: http://www.law.cornell.edu/uscode/20/1400.html

Elmore, R.F., & McLaughlin, M.W. (1988). Steady work: policy, practice, and the reform of American education. (Report No. 3574-NIE/RC). Washington, DC: National Institute of Education.

Essex, N. L. (2006). *What every teacher should know about No Child Left Behind*. Boston, Massachusetts: Pearson – Allyn and Bacon.

Everybody Counts: A Report to the nation on the future of mathematics education (1989). Washington, DC: Mathematical Sciences Education Board.

Executive Office of the President (1990). *National goals for education*. ED319143. Washington, D.C.: U.S. Department of Education.

Fagan, T. W., & Held, C. (1991). Chapter one program improvement. *Phi Delta Kappan*, 72, 582-584.

Federal Register, Vol. 70, No. 52, March 18, 2005, pp. 13160-13162. Retrieved May 2007 from: www.technology.gov/Events/2005/RFID/0318_FedReg.pdf.

Finn, C., Jr. (1991). *We must take charge: Our schools and our future.* New York: The Free Press/McGraw-Hill

Flaherty, K. (2007, December 1). Elementaries celebrate standards of excellence. *The Morning Sun*, pp. 1A, 8A.

Fullan, M. with Stiegelbauer, S. (1991). *The new meaning of educational change* (2nd ed.). New York, NY: Teachers College Press.

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences.* New York: Basic Books.

Gates, H. L., Jr. (Interviewer). (1997, Spring). *Frontline: The two nations of black America* (transcript of televised interview with William J. Wilson). New York and Washington, DC: Public Broadcasting Service. Retrieved March 2008 from the PBS site: http://www.pbs.org/wgbh/pages/frontline/shows/race/interviews/wilson2.html

Gilmore, A. (2005, January). *The impact of PIRLS (2001) and TIMSS (2003) in low- and middle-income countries: An evaluation of the value of World Bank support for international surveys of reading literacy (PIRLS) and mathematics and science (TIMSS).* New Zealand: International Association for the Evaluation of Educational Achievement. Retrieved June 2007 from the IEA site, Studies Evaluation page: http://www.iea.nl

Good, T., & Brophy, J. (2000). *Looking in classrooms* (8th ed.). New York: HarperCollins.

Greene, J. P., & Forster, G. (2004, September). *The teachability index: Can disadvantaged students learn?* Education Working Paper No. 6. New York, New York. Manhattan Institute for Policy Research. Retrieved May 2007 from the Manhattan Institute site: http://www.manhattan-institute.org/html/ewp_06.htm

Gouskova, E., & Stafford, F. (2005). *Trends in household wealth dynamics, 2001-2003*. Ann Arbor, MI: Institute for Social Research, University of Michigan.

Gustafsson, J. E. (2006, November). *Understanding causal influences on educational achievement through analysis of within-country differences over time.* Invited paper presented at the 2nd IEA Research Conference, Washington, D.C. http://www.iea.nl/irc2006_brooking_ins.html

Harris, D. N. (2006). *Ending the blame game on educational inequity: a study of "high flying" schools and NCLB.* (Education Policy Studies Laboratory No. EPSL-0603-120-EPRU). Tempe, AZ: Arizona State University, Education Policy Research Unit (EPRU), College of Education. Retrieved March 2008 from the EPRU web site: http://edpolicylab.org

Havighurst, R., Bowman, P., Liddle, G., Mattens, C., & Perce, J . (1962). *Growing up in River City.* New York: J. Wiley.

Haycock, K. (2001, March). Closing the achievement gap. *Educational Leadership, 58 (6), 6-11.* Association for Supervision and Curriculum Development. Retrieved May 2007 from the ASCD Archived Issues site: http://www.ascd.org/portal/site/ascd/menuitem.459dee008f99653fb85516f762108a0c/

Hinkle, D. E., Wiersma, W., & Jurs, S. G. (1998). *Applied Statistics for the Behavioral Sciences* (4th ed.). Boston, MA: Houghton Mifflin Company

History of Education: Selected Moments...1966. The Coleman Report. (n.d.). Retrieved May 2007 from: http://fcis.oise.utoronto.ca/~daniel-schugurensky/assignment1/1996 coleman.html

Horne, Richard L. (1996). The education of children and youth with special needs: what do the laws say*? National Dissemination Center for Children and Youth with Disabilities News Digest,* ND15. Retrieved March 2008 from the NICHCY site: http://www.nichcy.org/newsdig.asp

Huck, S. W. (2000). *Reading Statistics and Research.* (3rd ed.). New York: Addison Wesley Longman, Inc.

Income eligibility guidelines. (2005, March 18). *Federal Register, 70* (52), 13162. Department of Agriculture, Food and Nutrition Services. Washington, DC: Government Printing Office. Retrieved June 2007 from http://www.gpoaccess.gov/fr/index.html and www.e-ratecentral.com/resources/IncomeEligibilityGuidelines/IEGs05-06.pdf

Individuals with Disabilities Education Act of 2004, 20 U.S.C. §1400. (Cornell University Law Schools 2008). Retrieved March 2008 from the Cornell University Law School site: http://www.law.cornell.edu/uscode/20/1400.html Page last updated Jan. 2008.

Jones, J., & Martinez, S. (2001). *Obstacles to Improved Student Learning*. Topeka, Kansas: KSDE. Retrieved June 2007 from the KSDE site (Data/Report Card > Research > Research Reports): http://www.ksde.org/Default.aspx?tabid=232

Kahlenberg, R. D. (2006, April 1). Integration by income. *American School Board Journal* [on-line article through The Century Foundation News and Commentary]. Retrieved March 2008 from the Century Foundation web site: http://www.tcf.org/

Kansas adequate yearly progress [AYP] Revised. (2006, Sept. 13). Kansas State Department of Education site: http://www.ksde.org/Default.aspx?tabid=228

Kansas Association of Social Curriculum Development (1992, July). *Recommendations for state standards.* Paper presented to the Kansas State Student Standards Writing Teams, July 14, 1992. Topeka, KS: Author.

Kansas curricular standards for mathematics. (2003, July). Topeka, KS: Kansas State Department of Education. Retrieved June 2007. http://www.ksde.org/Default.aspx?tabid=141

Kansas curricular standards for reading and writing. (1999). Topeka, KS: Kansas State Department of Education.

Kansas curricular standards for reading. (2003, July). Topeka, KS: Kansas State Department of Education. Retrieved June 2007. www.ksde.org/Default.aspx?tabid=142

Kansas learning first alliance survey of schools with high achievement or significantly improving achievement in mathematics. (2004, March). Topeka, KS: Kansas State Department of Education (KSDE), Kansas Learning First Alliance (KLFA), and Kansas Association of Teachers of Mathematics (KATM).

Kansas Quality Performance Accreditation (1991). Topeka, KS: Kansas State Board of Education.

Kansas Quality Performance Accreditation (rev. 1992). Topeka, KS: Kansas State Board of Education.

Kansas School Reform: A Quest for Quality: A Guide for Patrons (1992). Topeka, KS: Kansas Association of School Boards.

Kansas State Board of Education Minutes (1995, October). Topeka, KS: Author. Retrieved June 2007 from the KSDE site: http://www.ksde.org/Default.aspx?tabid=1823

Kansas State Department of Education [KSDE] K-12 School Reports (2005-06). Retrieved January 2008 from the KSDE K-12 School Reports site (Data/Report Card > Public Reports >K-12 School Reports): http://www.ksde.org/Default.aspx?tabid=223

KSDE Performance Level Descriptors Guidelines. (2006). Retrieved May 2007 from the KSDE Main Assessment Page: http://www.ksde.org/Default.aspx?tabid=420

KSDE Planning and Research. (2004, February). *Kansas School-Age Population and K-12 Enrollment Trends.* Report to the Kansas State Board of Education. Topeka, KS: Author. Retrieved June 2007 from the KSDE research reports site: http://www.ksde.org/Default.aspx?tabid=232 State Population and Enrollment Trends.

KSDE Planning and Research, Snider. (2005, May). *Quick School and State Facts 2005*. Report to the Kansas State Board of Education. Topeka, KS: Author. Retrieved June 2007 from the KSDE research reports site: http://www.ksde.org/Default.aspx?tabid=232 School Facts.

KSDE Report Card (1999-2000, 2000-01, 2002-03, 2004-05 and 2005-06). Kansas State Department of Education site: http://www.ksde.org/Default.aspx?tabid=229

Kansas State Library. Topeka, KS. http://skyways.lib.ks.us/KSL/

Keppel, F. (1966). *The necessary revolution in American education.* New York: Harper & Row.

Kerins, T. C. (1996, November). *What do we hope to learn about making education standards internationally competitive? From theory to practice: The state experience in Illinois.* Summary of remarks presented at the 1996 IEA Research Conference. Springfield, Illinois: Illinois State Board of Education. Retrieved June 2007 from the National Academies site: http://www7.nationalacademies.org/taking_stock_workshop/1Workshop_Papers_Kerins.html

Kilpatrick, J., Mesa, V., & Sloane, F. (2006, November). *U.S. algebra teaching and learning viewed internationally*. Paper presented at the 2nd IEA Research Conference, Washington, D.C. http://www.iea.nl/irc2006_brooking_ins.html.

Klein, L. G., & Knitzer, J. (2007, January). *Promoting effective early learning: what every policymaker and educator should know.* Columbia University. Mailman School of Public Health. Retrieved March 2008 from the NCCP site: http://www.nccp.org/publications

Kozol, J. (1991). *Savage inequalities: Children in America's schools.* New York: Crown.

Leading the fight against hunger: Federal nutrition service. (2007, June). On-line newsletter. Washington, DC: Food and Nutrition Service, U.S. Department of Agriculture. Retrieved June 5, 2007 from the FNS site: http://www.fns.usda.gov/cnd/Lunch/default.htm).

Lewandowski, A., & Moller, G. (1997). The change that matters. *Journal of Staff Development, 18*, (3) 45-49.

Lomshek, M. K. (1995, October). Key elements in educational reform. Paper. Kansas Council for the Social Studies Conference, Wichita, Ks.

Ma, X. (2001). Stability of socioeconomic gaps in mathematics and science achievement among Canadian schools. *Canadian Journal of Education, 26*, (1), 97-118. http://www.csse.ca/CJE/Articles/CJE26-1.htm

Ma, X., & Klinger, D.A. (2000). Hierarchical linear modeling of student and scheffects on academic achievement. *Canadian Journal of Education, 25*, (1), 41-55. http://www.csse.ca/CJE/Articles/CJE25-1.htm

Macionis, J. (2000). *Sociology* (6th ed.). Upper Saddle River, NJ: Prentice Hall.

McMillan, J. H. (2004). *Educational Research: Fundamentals for the Consumer.* Boston, MA: Pearson Education, Inc. – Allyn and Bacon.

McRel Mid-Continent Research for Education and Learning. (n.d., n.p., no author given). Retrieved June 2007 from the "Purpose" page of the McRel site: http://www.mcrel.org/standards-benchmarks/docs/purpose.asp

Milburn, J. (2007, June 25). Posny begins tenure as ed. commissioner after change. *The Morning Sun*, pp. 1A, 7A. Pittsburg, Kansas.

Morrison, G. S. (2000). Teaching in America: Historical Influences. In P. Smith & S. Dragin (Eds.), *Teaching in America* (2nd ed.). Needham Heights, Massachusetts: Allyn and Bacon.

Mosenthal, J., Lipson, M., & Torncello, S. (2004). Contexts and practices of six schools successful in obtaining reading achievement. *The Elementary School Journal, 104* (5), 343-67. Retrieved August 2007: http://links.jstor.org/sici?sici=0013-5984%28200405%29104%3A5%3C343%3ACAPOSS%3E2.0.CO%3B2-C

The nation's report card: National assessment of educational progress (NAEP): State profile: Kansas. (2006, March). U.S. Dept. of Education, Institute of Education Sciences, National Center for Education Statistics. Retrieved June 2007 from the NCES site: http://nces.ed.gov/nationsreportcard/states/profile.asp

The National Alliance of State Science and Mathematics Coalitions Report Summary. (1999). *1999 National Education Summit Briefing Book* (No. BRS-99-05). Third international mathematics and science study summary. National Education Summit, September 30-October 1, Palisades, New York. Retrieved April 2008 from the NASSMC site: http://notes.nassmc.org/nbsfile.nsf/f769d98dcde485b9852569bb00736fe7/894367792cd5675d852569d0004f1836?OpenDocument

NAEP and no child left behind. (2005, August). U.S. Dept. of Education, Institute of Education Sciences, National Center for Education Statistics. Retrieved December 2007 from the NCES site: http://nces.ed.gov/naep3/nclb.asp

NAEP summary data tables [Online]. (2007, May). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. Retrieved June 2007 from the NCES site: http://nces.ed.gov/nationsreportcard

National Center for Children in Poverty. (2005, November). *Family economic (in)security: a view from the states.* Columbia University. Mailman School of Public Health. Retrieved March 2008 from the NCCP site: http://www.nccp.org/publications

National Center for Children in Poverty. (2008, January 29*). Explanation of Terms and Data Sources*. Columbia University Mailman School of Public Health. Retrieved March 2008 from the NCCP site: http://www.nccp.org/tools/demographics/definitions.html

National Center for Children in Poverty. (2008, January). *Kansas: Demographics of Low-Income Children.* Columbia University Mailman School of Public Health. Retrieved March 2008 from the NCCP site: http://www.nccp.org/profiles

National Coalition of Educational Equity Advocates. (1994). *Educate America: A call For equity in school reform*. (no pp.). Chevy Chase, Md.: The Mid-Atlantic Equity Consortium. Retrieved May 2007 from: http://www.maec.org/educate/11.html

National Commission on Excellence in Education. (1983). *A nation at risk: The imperative for educational reform.* Washington, D.C.: Government Printing Office. Retrieved May 2007 from: http://www.goalline.org/Goal%20Line/NatAtRisk.html

National Council on Education Standards Testing; National Information Systems. (1992, January 24). *Raising standards for American education. A report to Congress, the Secretary of Education, the National Education Goals Panel, and the American people*. Washington, DC: U.S. Government Printing Office. Abstract retrieved April 2007 from ERIC database: ERIC # ED338721.

National Governors' Association. (1986). Annual Meeting Summary for 1986. Washington, DC: Author. Retrieved May 2007 from the NGA site: http://www.nga.org/

National Governors' Association. (1986). *Time for results: The governors' 1991 report on education.* Washington, DC: Author. Retrieved May 2007 from the NGA site: http://www.nga.org/

National Governors' Association. (1989). *Results in education 1989: The Governors' 1991 report on education.* Washington, DC: Author. Retrieved May 2007 from the NGA site: http://www.nga.org/

National Governors' Association. (1990). *Educating America: State strategies for achieving the national education goals.* Washington, DC: Author. Retrieved May 2007 from the NGA site: http://www.nga.org/

National Governors' Association. (1991). *From rhetoric to action: State progress in restructuring the education system.* Washington, DC: Author. Retrieved May 2007 from the NGA site: http://www.nga.org/

National Science Foundation. (1994). *NSF 88-16 A Brief History*. Presented to the U. S. Congress, House of Representatives, Representatives Committee on Science and Technology, 99th Congress, 2d session, Serial R, September 1986. Washington, DC: Author (NSF Org: OD/LPA File: nsf8816). Retrieved March 2008 from the NSF Science and Technology Information Service site: http://www.nsf.gov/pubs/stis1994/nsf8816/nsf8816.txt

No Child Left Behind Act of 2001, Pub. L. No. 107-110. Washington, DC: U.S. Dept. of Education Ed.gov site: http://www.ed.gov/policy/elsec/leg/esea02/index.html

Odden, A., & Marsh, D. (1988). How comprehensive reform legislation can improve secondary schools. *Phi Delta Kappan, 69* (8), 593-98.

Ogbu, John W. (1974). *The next generation*. New York, NY: Academic Press

Okpala, C.O., Okpala, A.O, & Smith, F.E. (November/December 2001). Parental involvement, instructional expenditures, family socioeconomic attributes, and student achievement. *Journal of Educational Research, 95* (2), 110-115.

Palmer, F. (1976). *The effects of early intervention on subsequent i.q. scores and reading achievement.* Paper presented, final report, Educational Commission of the States: Denver, CO.

Piaget, J. (1926). *The language and thought of the child* (M. Worden, Trans.). New York: Harcourt, Brace.

Piaget, J. (1929). *The child's conception of the world* (J. & A. Tomlinson, Trans.). Savage, Maryland: Littlefield Adams.

Popkewitz, T.S. (2000). The denial of change in educational change: Systems of ideas in the construction of national policy and evaluation. *Educational Researcher, January-February*, 17-29.

Porter, A., Smithson, J., & Osthoff, E. (1994). Standard setting as a strategy for upgrading high school mathematics and science. *The Governance of Curriculum: 1994 Yearbook of the Association for Supervision and Curriculum Development.* 138 – 166.

Possible Causes of and Solutions for Low Achievement (July 2006). Report for the Kansas State Board of Education. No author given. Topeka, Kansas: KSDE. Retrieved June 2007 from the KSDE site: Data/Report Card > Research > Research Reports http://www.ksde.org/Default.aspx?tabid=232

Process module: Kansas quality performance accreditation (1992, January). Topeka, KS: Outcomes Education Team, Kansas State Department of Education.

Public Law 94-142: see Education for All Handicapped Children Act of 1975

Public Law 108–446: see Individuals with Disabilities Education Act of 2004

Rutherford, F. J. (1997, October 14). *Reflecting on Sputnik: linking the past, present, and future of educational reform*. Paper presented at the symposium hosted by the Center for Science, Mathematics, and Engineering Education, American Association for the Advancement of Science, Washington, DC.

Ravitch, Diane. (November 7, 2005). Every state left behind. *The New York Times* on-line article. Brookings Institution Brown Center on Education. http://www.brookings.edu/views/op-ed/ravitch/20051107.htm

Report from the committee on accountability (1988, June). Paper presented to Gov. Mike Hayden and the Governor's Public School Advisory Council. Topeka, KS: Committee on Responsibility.

(SCANS) *The secretary's commission on achieving necessary skills.* (1991). Retrieved May 2007 from the U.S. Department of Labor, Employment & Training Administration site: http://wdr.doleta.gov/SCANS/whatwork/

Shapiro, T. (2004). *The hidden cost of being African American: How wealth perpetuates inequality*. New York: Oxford University Press.

Slavin, R., Madden, N., Dolan, L, & Wasik, B. (1994). Roots and wings: Inspiring academic excellence. *Educational Leadership, 52,* 10-14.

Southern Regional Education Board: Task Force on Higher Education and the Schools. (1981). *The need for quality: A report to the SREB by its task force on higher education and the schools.* Atlanta, GA: author.

Standard and Poor's School Evaluation Services. (2007, April). *Kansas school district efficiency study*. New York: Author.

Standard of excellence schools 2006 list. (2006, November-December). Topeka, KS. Retrieved May 2007 from the Kansas State Department of Education site: Assessments: Standard of Excellence: http://www.ksde.org/Default.aspx?tabid=420

STAT 480. (n.d.). Retrieved 4/9/08 from the STAT 480 Statistics Packages site, Lesson #12: T-Tests and Analysis of Variance). http://www.stat.psu.edu/~jglenn/stat480_ljs/12anova/03anova_anova.html).

Stulac, J. (1982). Students: Discussion: Expectations. In H. J. Walberg (Ed.), *Improving educational standards and productivity* (pp. 124-130). The National Society for the Study of Education. Berkeley, California: McCutchan Publishing Corporation.

Suydam, Marilyn N. (1990). Curriculum and evaluation standards for mathematics education. *ERIC/SMEAC Mathematics Education Digest No. 1*. ERIC Identifier: ED319630. ERIC Clearinghouse for Science Mathematics and Environmental Education. Columbus, OH. Retrieved June 2007 from the ERIC database site: http://www.ericdigests.org/pre-9215/evaluation.htm

Swanson, B. (1991, May). The national education goals: questions and answers. *ERIC Digest.* ERIC Identifier: ED334715. ACCESS ERIC: Rockville, MD

Testerman, J. (1996, January). Holding at-risk students: the secret is one-on-one. *Phi Delta Kappan, 77,* 364-365.

International Study Center. IEA, Boston College, Boston, Massachusetts. Retrieved June 2007 from the Boston College site: http://timss.bc.edu/

Thomas, M. D., & Bainbridge, W. L. (2001, May). All children can learn: fact and fallacies. *Phi Delta Kappan*. Retrieved March 2008 from the School Match site: http://www.schoolmatch.com/articles/PDKMAY01.htm

Toch, T. (1990). Giving kids a leg up: Educators debate how to best help deprived kids succeed in school. *U.S. News and World Report*, Oct. 22, 1990, p. 63.

Toch, T. (1991). *In the name of excellence.* New York: Oxford University Press.

Trends in international mathematics and science study. (2003). TIMSS and PIRLS International Study Center. IEA, Boston College, Boston, Massachusetts. Retrieved June 2007 from the Boston College site: http://timss.bc.edu/

Turning around low-performing schools: A guide for state and local leaders (1998). Washington, DC: U.S. Department of Education.

Tyler, R.W. (1949). *Basic principles of curriculum and instruction*. Chicago: University of Chicago Press.

U. S. Census Bureau, Median income by state. (2007). Washington, DC: Author. Retrieved June 2007 from U.S. Census Bureau site: http://www.census.gov

U. S. Census Bureau, Poverty Threshold. (2007). Washington, DC: Author. Retrieved June 2007 from U.S. Census Bureau site: http://www.census.gov

U. S. Census Bureau, Quick Facts, State and County: Kansas. (2007). Washington, D.C.: Author. Retrieved May 4, 2007 from http://quickfacts.census.gov/qfd/states/20000.html

U.S. Department of Agriculture: Food and Nutrition Service. (2007). Washington, DC: Food and Nutrition Service. Retrieved April 2007 from the Food and Nutrition Service site: http://www.fns.usda.gov/cnd/Lunch/default.htm

U. S. Department of Commerce, Bureau of the Census. (2006). Accumulated household wealth by state. Washington, DC: Author. Retrieved April 2007 from the KSDE site: http://www.ksde.org/Default.aspx?tabid=232

U. S. Department of Commerce, Bureau of the Census. (2006*). Educational attainment in the United States: 2005*. Table 8. Washington, DC: Author.

U. S. Department of Education. (n.d.) *NCLB and other elementary/secondary policy documents.* Retrieved June 2007 from: http://www.ed.gov/policy/elsec/guid/states/index.html

Univariate GLM: Statnotes, (n.d.). North Carolina State University. Retrieved April 2008 from the NCSU site: http://www2.chass.ncsu.edu/garson/PA765/anova.htm

Viadero, Debra. (2006, June 21). Article on the Coleman report and its legacy. *EdWeek*, Vol. 25, Issue 41, Pages 1, 21-24. Retrieved June 4, 2007 from: www.coveringeducation.org/.../EdWeek%202006%20Article%20on%20the%20Coleman%20Report%20and%20its%20legacy.doc

Westbrook, J.M., & Tipping, S.R. (1992). Improved site-based staff development through the S.O.S. program. *Journal of Staff Development*, *13* (4), 34-36.

Wiles, J. (2005). *Curriculum essentials: A resource for educators* (2nd ed.). Boston, Massachusetts: Pearson Education, Inc.: Allyn and Bacon.

Wilson, W. J. (1999). *The Bridge over the Racial Divide*. Berkeley, CA: University of California Press.

Yee, J. Y. (2007*). Kansas metropolitan location and high school size as variables in low income low achievement correlations*. Manhattan, KS: Unpublished Kansas State University Ph.D. dissertation. K-State Libraries, Digital Collection, K-Rex. http://krex.k-state.edu/dspace/handle/2097/330. identifier: http://hdl.handle.net/2097/330

Appendix A - Standard of Excellence Award Building Data Used in This Study

Elementary Reading

Table A.1 Elementary Reading Standard of Excellence (SOE) Data

Elementary reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	0.65	614	3	31.3%	38.3%	24.2%	5.0%	1.0%
MR	0.65	614	4	34.1%	36.5%	20.3%	7.3%	1.6%
MR	0.65	614	5	38.0%	26.0%	19.0%	11.0%	6.0%
MR	0.73	546	3	43.2%	25.9%	22.2%	4.9%	3.7%
MR	0.73	546	4	41.6%	35.7%	17.8%	3.5%	1.1%
MR	0.73	546	5	53.7%	28.3%	13.4%	2.9%	1.4%
MR	0.77	519	3	44.0%	28.5%	17.8%	4.7%	4.7%
MR	0.77	519	4	50.8%	24.5%	19.2%	5.2%	0.0%
MR	0.77	519	5	52.3%	20.6%	19.0%	6.3%	1.5%
MR	1.06	567	3	49.4%	38.4%	9.8%	1.0%	0.0%
MR	1.06	567	4	75.0%	18.0%	5.5%	1.3%	0.0%
MR	1.06	567	5	58.2%	25.3%	11.9%	0.0%	1.4%
MR	1.07	468	3	24.3%	32.4%	25.6%	6.7%	9.4%
MR	1.07	468	4	50.7%	35.2%	12.6%	0.0%	0.0%
MR	1.07	468	5	41.3%	31.0%	19.5%	4.5%	2.2%
MR	1.13	375	3	42.3%	30.7%	23.0%	1.9%	1.9%
MR	1.13	375	4	27.5%	37.9%	22.4%	8.6%	3.4%
MR	1.13	375	5	52.7%	21.8%	14.5%	9.0%	1.8%
MR	1.84	543	3	28.4%	42.1%	23.1%	3.1%	1.0%
MR	1.84	543	4	24.7%	28.2%	34.1%	9.4%	2.3%
MR	1.84	543	5	35.0%	23.7%	18.7%	12.5%	8.7%
MR	1.91	418	3	42.3%	32.2%	16.9%	5.0%	1.6%
MR	1.91	418	4	41.2%	35.0%	18.7%	1.2%	3.7%
MR	1.91	418	5	50.6%	28.7%	10.9%	9.5%	0.0%
R	1.98	404	3	24.3%	29.4%	33.3%	10.2%	2.5%
R	1.98	404	4	30.1%	25.3%	33.3%	4.7%	4.7%
R	1.98	404	5	35.5%	26.3%	26.3%	6.5%	5.2%
MR	2.06	578	3	41.7%	34.0%	16.4%	4.3%	1.0%
MR	2.06	578	4	50.0%	32.8%	17.1%	0.0%	0.0%
MR	2.06	578	5	57.5%	18.1%	19.6%	3.0%	1.5%
MR	2.19	730	3	35.5%	35.5%	22.0%	5.0%	0.8%
MR	2.19	730	4	33.6%	36.8%	20.4%	8.1%	0.8%

Elementary reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	2.19	730	5	45.4%	27.2%	18.1%	4.1%	4.9%
MR	2.44	778	3	48.8%	28.0%	14.4%	1.6%	0.8%
MR	2.44	778	4	39.6%	36.5%	18.2%	1.5%	0.7%
MR	2.44	778	5	51.5%	26.5%	17.1%	1.5%	0.7%
MR	2.50	320	3	49.0%	24.5%	9.4%	13.2%	3.7%
MR	2.50	320	4	37.7%	20.0%	31.1%	11.1%	0.0%
MR	2.50	320	5	52.1%	26.0%	8.6%	4.3%	6.5%
MR	2.51	438	3	41.1%	38.2%	11.7%	2.9%	0.0%
MR	2.51	438	4	46.6%	30.6%	16.0%	1.3%	1.3%
MR	2.51	438	5	67.0%	20.2%	7.5%	2.5%	1.2%
MR	2.87	349	3	55.0%	25.0%	20.0%	0.0%	0.0%
MR	2.87	349	4	54.2%	25.4%	11.8%	8.4%	0.0%
MR	2.87	349	5	57.1%	28.5%	10.2%	4.0%	0.0%
MR	3.06	589	3	22.8%	36.1%	25.7%	7.6%	4.7%
MR	3.06	589	4	29.5%	36.0%	26.2%	4.9%	2.4%
MR	3.06	589	5	47.9%	29.1%	16.6%	3.1%	1.0%
MR	3.09	453	3	49.1%	22.8%	17.5%	7.0%	3.5%
MR	3.09	453	4	52.5%	25.0%	18.7%	2.5%	0.0%
MR	3.09	453	5	50.0%	26.3%	13.8%	6.9%	1.3%
MR	3.13	416	3	43.3%	31.6%	21.6%	1.6%	1.6%
MR	3.13	416	4	33.9%	37.5%	21.4%	3.5%	1.7%
MR	3.13	416	5	58.3%	33.3%	6.6%	0.0%	1.6%
MR	3.26	675	3	51.0%	23.9%	15.2%	5.4%	4.3%
MR	3.26	675	4	45.0%	29.0%	20.0%	3.0%	3.0%
MR	3.26	675	5	55.0%	23.5%	16.8%	3.3%	1.1%
MR	3.52	597	3	31.5%	36.8%	20.0%	6.3%	3.1%
MR	3.52	597	4	28.5%	42.8%	21.8%	1.6%	3.3%
MR	3.52	597	5	35.5%	31.7%	21.1%	7.6%	3.8%
MR	3.59	474	3	45.1%	32.9%	17.0%	3.6%	0.0%
MR	3.59	474	4	36.4%	37.6%	22.3%	2.3%	1.1%
MR	3.59	474	5	53.0%	22.2%	22.2%	1.2%	0.0%
MR	3.83	574	3	32.5%	36.2%	21.2%	10.0%	0.0%
MR	3.83	574	4	36.1%	36.1%	22.8%	2.4%	2.4%
MR	3.83	574	5	53.0%	26.5%	15.6%	2.4%	2.4%
MR	3.85	494	3	36.0%	32.5%	20.9%	6.9%	3.4%
MR	3.85	494	4	46.0%	23.5%	22.4%	3.3%	3.3%
MR	3.85	494	5	50.6%	29.1%	16.4%	2.5%	0.0%
MR	4.04	371	3	47.1%	38.5%	12.8%	1.4%	0.0%
MR	4.04	371	4	53.4%	37.9%	8.6%	0.0%	0.0%
MR	4.04	371	5	80.2%	15.7%	1.3%	1.3%	0.0%
MR	4.72	508	3	34.9%	39.6%	23.8%	1.5%	0.0%
MR	4.72	508	4	32.3%	29.2%	13.8%	13.8%	9.2%
MR	4.72	508	5	58.5%	24.2%	15.7%	1.4%	0.0%
MR	4.73	444	3	38.5%	24.0%	30.1%	6.0%	1.2%

Elementary reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	4.73	444	4	35.5%	39.4%	23.6%	1.3%	0.0%
MR	4.73	444	5	61.0%	14.2%	10.3%	9.0%	3.8%
MR	4.76	378	3	44.1%	35.2%	11.7%	2.9%	0.0%
MR	4.76	378	4	37.5%	31.2%	27.0%	0.0%	2.0%
MR	4.76	378	5	38.1%	30.9%	20.0%	7.2%	0.0%
MR	4.84	475	3	39.2%	41.0%	14.2%	3.5%	0.0%
MR	4.84	475	4	56.9%	27.7%	13.8%	1.3%	0.0%
MR	4.84	475	5	43.2%	23.8%	19.4%	7.4%	4.4%
MR	4.92	528	3	52.3%	25.3%	11.1%	7.9%	1.5%
MR	4.92	528	4	35.4%	37.0%	16.1%	8.0%	3.2%
MR	4.92	528	5	46.3%	24.3%	20.7%	6.0%	2.4%
MR	4.96	565	3	38.8%	26.6%	22.2%	10.0%	1.1%
MR	4.96	565	4	38.0%	24.0%	31.0%	5.0%	2.0%
MR	4.96	565	5	39.2%	31.6%	18.9%	8.8%	1.2%
MR	5.02	757	3	43.3%	27.4%	20.3%	5.3%	3.5%
MR	5.02	757	4	26.4%	32.3%	29.4%	9.8%	1.9%
MR	5.02	757	5	44.0%	27.9%	22.5%	4.3%	1.0%
MR	5.08	610	3	25.6%	21.7%	35.8%	10.2%	5.1%
MR	5.08	610	4	37.7%	36.6%	18.8%	5.5%	1.1%
MR	5.08	610	5	48.7%	28.2%	14.1%	8.9%	0.0%
R	5.29	378	3	20.9%	38.7%	20.9%	8.0%	8.0%
R	5.29	378	4	35.4%	22.5%	33.8%	4.8%	3.2%
R	5.29	378	5	39.1%	28.3%	17.5%	9.4%	4.0%
MR	5.31	339	3	34.7%	26.0%	30.4%	4.3%	4.3%
MR	5.31	339	4	53.4%	31.0%	12.0%	1.7%	0.0%
MR	5.31	339	5	44.0%	30.0%	16.0%	6.0%	2.0%
MR	5.84	308	3	44.1%	32.3%	14.7%	5.8%	2.9%
MR	5.84	308	4	26.6%	40.0%	22.2%	4.4%	6.6%
MR	5.84	308	5	53.0%	26.5%	14.2%	6.1%	0.0%
MR	5.99	501	3	23.9%	43.6%	12.6%	14.0%	4.2%
MR	5.99	501	4	24.4%	32.6%	33.6%	5.1%	4.0%
MR	5.99	501	5	52.2%	24.4%	16.6%	5.5%	0.0%
MR	6.09	345	3	31.3%	31.3%	29.4%	3.9%	3.9%
MR	6.09	345	4	36.0%	34.0%	24.0%	4.0%	2.0%
MR	6.09	345	5	56.8%	15.6%	13.7%	13.7%	0.0%
MR	6.13	408	3	23.4%	40.4%	25.5%	8.5%	2.1%
MR	6.13	408	4	32.2%	33.8%	29.0%	3.2%	1.6%
MR	6.13	408	5	48.0%	21.1%	13.4%	13.4%	3.8%
MR	6.70	448	3	43.5%	32.2%	19.3%	3.2%	1.6%
MR	6.70	448	4	35.0%	36.8%	24.5%	1.7%	1.7%
MR	6.70	448	5	55.5%	12.9%	20.3%	7.4%	1.8%
R	6.72	372	3	33.3%	38.8%	16.6%	7.4%	3.7%
R	6.72	372	4	40.0%	25.4%	23.6%	7.2%	1.8%
R	6.72	372	5	50.0%	16.6%	21.4%	9.5%	0.0%

Elementary reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	6.84	380	3	24.4%	33.3%	22.2%	13.3%	4.4%
MR	6.84	380	4	37.5%	29.1%	25.0%	4.1%	4.1%
MR	6.84	380	5	38.2%	27.9%	26.4%	4.4%	1.4%
MR	8.20	439	3	28.7%	36.3%	24.2%	6.0%	3.0%
MR	8.20	439	4	25.8%	43.5%	24.1%	1.6%	3.2%
MR	8.20	439	5	49.2%	22.2%	14.2%	11.1%	3.1%
MR	8.50	494	3	33.7%	28.3%	21.6%	10.8%	5.4%
MR	8.50	494	4	33.8%	29.0%	20.9%	11.2%	3.2%
MR	8.50	494	5	44.0%	18.6%	25.4%	5.0%	5.0%
R	9.87	466	3	55.0%	16.6%	23.3%	3.3%	1.6%
R	9.87	466	4	15.0%	45.2%	20.5%	10.9%	6.8%
R	9.87	466	5	42.1%	17.1%	23.4%	12.5%	4.6%
MR	10.02	649	3	54.6%	24.7%	17.5%	0.0%	2.0%
MR	10.02	649	4	29.6%	37.0%	19.7%	9.8%	3.7%
MR	10.02	649	5	50.0%	16.6%	22.2%	11.1%	0.0%
MR	10.33	571	3	46.5%	22.7%	27.2%	3.4%	0.0%
MR	10.33	571	4	19.2%	42.3%	32.0%	5.1%	0.0%
MR	10.33	571	5	51.1%	27.7%	8.8%	10.0%	1.1%
MR	10.49	467	3	60.7%	22.7%	12.6%	1.2%	0.0%
MR	10.49	467	4	46.9%	28.9%	18.0%	2.4%	1.2%
MR	10.49	467	5	52.8%	24.1%	14.9%	4.5%	1.1%
MR	10.70	271	3	40.0%	22.5%	30.0%	7.5%	0.0%
MR	10.70	271	4	52.0%	27.0%	18.7%	2.0%	0.0%
MR	10.70	271	5	43.7%	31.2%	18.7%	6.2%	0.0%
MR	11.34	291	3	59.2%	25.9%	7.4%	0.0%	0.0%
MR	11.34	291	4	33.3%	35.4%	22.9%	2.0%	6.2%
MR	11.34	291	5	51.1%	16.2%	20.9%	9.3%	2.3%
MR	11.38	334	3	31.2%	32.8%	26.5%	9.3%	0.0%
MR	11.38	334	4	30.9%	32.7%	29.0%	5.4%	1.8%
R	11.47	619	3	41.8%	22.9%	13.5%	10.8%	5.4%
R	11.47	619	4	36.4%	27.0%	17.5%	12.1%	2.7%
R	11.47	619	5	35.4%	27.8%	24.0%	3.7%	5.0%
MR	11.68	394	3	44.6%	32.3%	16.9%	4.6%	1.5%
MR	11.68	394	4	24.0%	31.4%	42.5%	1.8%	0.0%
MR	11.68	394	5	43.7%	35.4%	16.6%	2.0%	2.0%
MR	11.87	699	3	36.4%	36.4%	18.5%	6.7%	0.2%
MR	11.87	699	4	29.6%	36.6%	20.6%	8.5%	4.0%
MR	11.87	699	5	36.4%	23.3%	22.2%	9.7%	8.1%
MR	12.06	481	3	38.4%	26.1%	27.6%	4.6%	1.5%
MR	12.06	481	4	34.7%	41.6%	18.0%	5.5%	0.0%
MR	12.06	481	5	39.7%	26.0%	20.5%	6.8%	6.8%
MR	12.38	404	3	32.2%	30.5%	37.2%	0.0%	0.0%
MR	12.38	404	4	36.0%	40.9%	13.1%	9.8%	0.0%
MR	12.38	404	5	34.8%	31.8%	18.1%	7.5%	7.5%

Elementary reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	12.50	648	3	26.4%	23.5%	36.2%	9.8%	3.9%
MR	12.50	648	4	23.2%	29.2%	35.3%	8.0%	3.0%
MR	12.50	648	5	42.6%	23.5%	21.3%	7.8%	4.4%
MR	12.66	379	3	36.3%	29.5%	25.0%	9.0%	0.0%
MR	12.66	379	4	31.9%	29.7%	29.7%	8.5%	0.0%
MR	12.66	379	5	62.9%	16.6%	14.8%	1.8%	1.8%
MR	12.73	330	3	37.7%	24.4%	31.1%	6.6%	0.0%
MR	12.73	330	4	15.6%	40.6%	21.8%	15.6%	6.2%
MR	12.73	330	5	66.6%	22.2%	11.1%	0.0%	0.0%
MR	13.64	154	3	27.5%	31.0%	31.0%	10.3%	0.0%
MR	13.64	154	4	29.1%	37.5%	20.8%	12.5%	0.0%
MR	13.64	154	5	17.3%	26.0%	30.4%	21.7%	4.3%
MR	13.67	395	3	45.4%	25.4%	21.8%	7.2%	0.0%
MR	13.67	395	4	31.2%	27.0%	31.2%	4.1%	6.2%
MR	13.67	395	5	40.3%	28.8%	17.3%	5.7%	7.6%
MR	13.88	677	3	24.8%	32.1%	32.8%	5.8%	3.6%
MR	13.88	677	4	27.5%	35.4%	29.1%	5.5%	2.3%
MR	13.96	394	3	34.9%	28.5%	22.2%	12.6%	0.0%
MR	13.96	394	4	34.6%	32.6%	30.6%	0.0%	2.0%
MR	13.96	394	5	32.2%	18.6%	23.7%	8.4%	13.5%
R	14.04	228	3	45.4%	31.8%	18.1%	4.5%	0.0%
R	14.04	228	4	38.2%	32.3%	20.5%	5.8%	2.9%
R	14.04	228	5	48.2%	31.0%	17.2%	3.4%	0.0%
R	14.35	237	3	30.0%	50.0%	12.0%	8.0%	0.0%
R	14.35	237	4	22.5%	15.0%	35.0%	17.5%	10.0%
R	14.35	237	5	45.7%	22.8%	17.1%	14.2%	0.0%
MR	14.58	192	3	31.8%	45.4%	9.0%	9.0%	4.5%
MR	14.58	192	4	42.3%	42.3%	15.3%	0.0%	0.0%
MR	14.58	192	5	40.5%	24.3%	18.9%	16.2%	0.0%
R	14.71	435	3	45.0%	33.3%	16.6%	3.3%	1.6%
R	14.71	435	4	36.2%	30.0%	22.5%	3.7%	6.2%
R	14.71	435	5	43.8%	28.0%	17.5%	5.2%	5.2%
MR	14.78	230	3	29.2%	29.2%	32.9%	4.8%	3.6%
MR	14.78	230	4	50.7%	29.2%	16.9%	1.5%	0.0%
MR	14.78	230	5	49.4%	31.0%	16.0%	1.1%	1.1%
MR	15.24	361	3	36.8%	36.8%	22.8%	3.5%	0.0%
MR	15.24	361	4	20.4%	32.8%	40.9%	0.0%	6.8%
MR	15.24	361	5	34.6%	32.6%	26.5%	2.0%	0.0%
MR	15.65	345	3	47.3%	50.0%	2.6%	0.0%	0.0%
MR	15.65	345	4	33.3%	46.1%	17.9%	2.5%	0.0%
MR	15.65	345	5	44.8%	13.7%	31.0%	6.8%	340.0%
MR	15.77	222	3	40.0%	40.0%	16.0%	4.0%	0.0%
MR	15.77	222	4	55.1%	31.0%	13.7%	0.0%	0.0%
MR	15.77	222	5	37.9%	34.4%	13.7%	6.8%	6.8%

Elementary reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	16.03	287	3	45.7%	37.1%	17.1%	0.0%	0.0%
MR	16.03	287	4	35.7%	35.7%	26.1%	2.3%	0.0%
MR	16.03	287	5	71.4%	17.1%	8.5%	0.0%	2.8%
R	16.29	178	3	40.0%	26.6%	33.3%	0.0%	0.0%
R	16.29	178	4	27.7%	33.3%	33.3%	0.0%	0.0%
R	16.29	178	5	41.1%	17.6%	29.4%	5.8%	0.0%
MR	16.86	255	3	43.5%	35.8%	20.5%	0.0%	0.0%
MR	16.86	255	4	27.9%	34.8%	30.2%	2.3%	0.0%
MR	16.86	255	5	39.5%	23.2%	27.9%	6.9%	0.0%
R	17.00	353	3	27.4%	15.6%	35.2%	11.7%	9.8%
R	17.00	353	4	14.2%	35.7%	32.1%	12.5%	5.3%
R	17.00	353	5	34.3%	29.6%	25.0%	6.2%	4.6%
MR	17.09	474	3	30.0%	35.7%	25.7%	7.1%	1.4%
MR	17.09	474	4	20.0%	20.0%	37.1%	12.8%	10.0%
MR	17.09	474	5	34.4%	25.8%	24.1%	12.0%	1.7%
R	17.10	193	3	11.5%	30.7%	34.6%	19.2%	3.8%
R	17.10	193	4	32.0%	16.0%	36.0%	12.0%	4.0%
R	17.10	193	5	42.8%	38.0%	19.0%	0.0%	0.0%
MR	17.19	477	3	29.6%	23.4%	32.8%	9.3%	3.1%
MR	17.19	477	4	34.1%	26.5%	34.1%	2.5%	1.2%
MR	17.19	477	5	59.0%	15.1%	19.6%	4.5%	1.5%
MR	17.22	302	3	26.6%	31.1%	28.8%	11.1%	2.2%
MR	17.22	302	4	41.8%	13.9%	39.5%	2.3%	2.3%
MR	17.22	302	5	36.8%	19.2%	24.5%	8.7%	8.7%
R	17.26	307	3	30.0%	33.3%	13.3%	10.0%	6.6%
R	17.26	307	4	17.0%	29.2%	29.2%	9.7%	7.3%
R	17.26	307	5	14.2%	14.2%	28.5%	22.8%	14.2%
MR	17.29	347	5	35.6%	30.4%	23.5%	6.8%	2.2%
MR	17.82	477	3	25.5%	37.7%	29.5%	7.1%	0.0%
MR	17.82	477	4	35.7%	27.3%	28.4%	7.3%	1.0%
R	17.94	563	3	22.2%	28.8%	38.8%	8.8%	0.0%
R	17.94	563	4	24.7%	40.0%	28.2%	4.7%	2.3%
R	17.94	563	5	27.8%	31.7%	23.0%	8.6%	7.6%
MR	18.8	351	5	40.1%	23.9%	21.5%	11.3%	2.9%
MR	18.87	604	3	33.7%	37.8%	25.6%	1.3%	0.0%
MR	18.87	604	4	30.2%	31.5%	22.3%	7.8%	6.5%
MR	18.87	604	5	40.4%	31.3%	13.1%	4.0%	9.0%
R	19.20	448	3	26.9%	33.3%	25.3%	11.1%	3.1%
R	19.20	448	4	25.9%	20.7%	42.8%	3.8%	5.1%
R	19.20	448	5	25.0%	38.3%	11.6%	10.0%	10.0%
R	19.71	411	3	41.6%	30.5%	25.0%	2.7%	0.0%
R	19.71	411	4	24.2%	45.4%	15.1%	12.1%	3.0%
R	19.71	411	5	44.6%	27.6%	17.0%	6.3%	2.1%
MR	19.77	263	3	26.9%	41.2%	26.9%	4.7%	0.0%

Elementary reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	19.77	263	4	31.9%	25.5%	25.5%	12.7%	4.2%
MR	20.00	290	3	36.3%	25.0%	31.8%	2.2%	2.2%
MR	20.00	290	4	26.9%	38.4%	21.1%	7.6%	3.8%
MR	20.00	290	5	25.4%	29.0%	30.9%	9.0%	3.6%
MR	20.00	355	3	36.2%	43.1%	17.2%	3.4%	0.0%
MR	20.00	355	4	42.2%	30.9%	22.5%	4.2%	0.0%
R	20.06	314	3	19.5%	41.4%	26.8%	4.8%	7.3%
R	20.06	314	4	28.5%	42.8%	17.1%	5.7%	2.8%
R	20.06	314	5	50.0%	30.0%	13.3%	3.3%	3.3%
MR	22.02	336	3	27.6%	42.5%	27.6%	2.1%	0.0%
MR	22.02	336	4	26.9%	50.0%	15.3%	5.7%	0.0%
MR	22.02	336	5	45.0%	23.5%	25.4%	3.9%	0.0%
MR	22.13	244	3	11.1%	27.7%	44.4%	11.1%	5.5%
MR	22.13	244	4	30.5%	47.2%	19.4%	2.7%	0.0%
MR	22.13	244	5	45.2%	23.8%	19.0%	2.3%	9.5%
MR	22.71	251	5	25.8%	24.1%	25.8%	9.6%	8.0%
MR	23.06	260	5	29.2%	27.6%	29.2%	7.6%	6.1%
MR	23.43	286	3	14.6%	48.7%	21.9%	4.8%	4.8%
MR	23.43	286	4	42.2%	31.1%	20.0%	4.4%	0.0%
MR	23.43	286	5	41.6%	25.0%	8.3%	13.8%	5.5%
MR	23.69	574	5	33.7%	22.5%	25.9%	11.6%	5.4%
MR	24.19	401	3	42.5%	27.6%	23.4%	4.2%	2.1%
MR	24.19	401	4	48.0%	22.0%	24.0%	6.0%	0.0%
MR	24.19	401	5	40.0%	36.6%	15.0%	5.0%	3.3%
MR	24.19	496	3	40.8%	29.0%	19.3%	8.6%	1.0%
MR	24.19	496	4	32.6%	27.8%	25.0%	8.6%	5.7%
R	24.32	185	5	15.5%	33.3%	37.7%	6.6%	6.6%
MR	24.35	193	5	31.2%	35.4%	26.0%	7.2%	0.0%
MR	24.43	348	3	47.2%	30.9%	9.0%	9.0%	3.6%
MR	24.43	348	4	38.0%	20.0%	34.0%	6.0%	2.0%
MR	24.43	348	5	38.8%	25.3%	23.8%	7.4%	4.4%
MR	25.07	363	3	29.4%	27.4%	21.5%	19.6%	1.9%
MR	25.07	363	4	30.9%	34.5%	20.0%	10.9%	3.6%
MR	25.07	363	5	31.0%	25.8%	32.7%	5.1%	5.1%
MR	25.36	351	3	40.7%	18.5%	20.3%	11.1%	9.2%
MR	25.36	351	4	27.0%	32.4%	29.7%	8.1%	2.7%
MR	25.36	351	5	22.6%	20.7%	39.6%	1.8%	15.0%
MR	25.66	265	3	30.7%	38.4%	21.5%	4.6%	4.6%
MR	25.78	384	3	31.2%	29.6%	26.5%	9.3%	3.1%
MR	25.78	384	4	38.0%	28.0%	26.0%	6.0%	2.0%
MR	25.90	278	3	37.0%	41.9%	13.5%	6.1%	0.0%
MR	25.90	278	4	36.1%	42.8%	19.0%	0.0%	1.9%
MR	25.90	278	5	44.0%	30.0%	19.0%	3.0%	1.0%
MR	26.07	349	3	35.0%	26.3%	29.8%	8.7%	0.0%

Elementary reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	26.07	349	4	40.0%	40.0%	20.0%	0.0%	0.0%
MR	26.07	349	5	28.3%	39.6%	28.3%	3.7%	0.0%
MR	26.11	429	3	37.3%	34.3%	17.9%	5.9%	0.0%
MR	26.11	429	4	21.6%	41.8%	22.9%	8.1%	4.0%
MR	26.11	429	5	53.4%	26.0%	12.3%	5.4%	2.7%
R	26.16	302	3	39.4%	23.6%	21.0%	7.8%	5.2%
R	26.16	302	4	32.2%	29.0%	19.3%	16.1%	3.2%
R	26.16	302	5	36.5%	12.1%	29.2%	14.6%	4.8%
MR	26.50	234	3	59.0%	31.8%	9.0%	0.0%	0.0%
MR	26.50	234	4	26.8%	31.7%	24.3%	12.1%	4.8%
MR	26.50	234	5	35.8%	20.5%	38.4%	5.1%	0.0%
MR	26.67	315	3	61.5%	17.3%	17.3%	1.9%	1.9%
MR	26.67	315	4	36.0%	32.0%	20.0%	6.0%	6.0%
MR	26.67	315	5	49.1%	22.8%	19.2%	7.0%	0.0%
MR	26.71	438	3	27.2%	36.3%	29.8%	5.1%	1.2%
MR	26.71	438	4	30.3%	39.2%	27.8%	1.2%	0.0%
MR	26.76	304	3	45.1%	41.9%	6.4%	3.2%	3.2%
MR	26.76	304	4	17.1%	34.2%	31.4%	8.5%	8.5%
MR	26.76	304	5	28.5%	20.0%	37.1%	14.2%	0.0%
MR	26.84	190	3	40.0%	25.0%	30.0%	5.0%	0.0%
MR	26.84	190	4	41.1%	35.2%	17.6%	2.9%	2.9%
MR	26.84	190	5	44.0%	24.0%	20.0%	8.0%	4.0%
R	26.95	334	3	28.9%	31.5%	26.3%	2.6%	10.5%
R	26.95	334	4	31.0%	34.4%	17.2%	10.3%	3.4%
R	26.95	334	5	20.0%	30.0%	26.6%	16.6%	6.6%
MR	27.74	310	3	38.4%	43.5%	7.6%	7.6%	0.0%
MR	27.74	310	4	24.0%	36.0%	34.0%	6.0%	0.0%
MR	27.74	310	5	50.0%	12.9%	16.1%	12.9%	8.0%
MR	27.86	280	3	51.8%	25.9%	14.8%	7.4%	0.0%
MR	27.86	280	4	21.0%	28.9%	26.3%	10.5%	13.1%
MR	27.86	280	5	40.7%	22.2%	25.9%	7.4%	3.7%
MR	28.29	403	3	24.0%	27.8%	27.8%	15.1%	3.7%
MR	28.29	403	4	41.0%	28.7%	23.2%	4.1%	1.3%
MR	28.29	403	5	36.0%	27.8%	21.3%	9.8%	4.9%
MR	28.52	526	3	23.6%	29.1%	37.5%	8.3%	1.3%
MR	28.52	526	4	34.6%	16.0%	30.6%	13.3%	4.0%
MR	28.52	526	5	46.3%	21.7%	21.7%	8.6%	1.4%
R	28.76	153	3	29.1%	33.3%	25.0%	4.1%	4.1%
R	28.76	153	4	21.4%	23.8%	47.6%	2.3%	4.7%
MR	29.02	379	3	41.4%	41.4%	14.6%	2.4%	0.0%
MR	29.02	379	4	27.6%	29.7%	34.0%	6.3%	0.0%
MR	29.02	379	5	37.5%	35.0%	20.0%	5.0%	2.5%
MR	29.33	150	4	28.5%	45.7%	20.0%	5.7%	0.0%
MR	29.33	150	5	66.6%	11.1%	22.2%	0.0%	0.0%

Elementary reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	29.71	175	3	45.0%	40.0%	10.0%	0.0%	0.0%
MR	29.71	175	4	46.4%	35.7%	14.2%	0.0%	3.5%
MR	29.71	175	5	50.0%	44.4%	5.5%	0.0%	0.0%
MR	30.04	273	3	28.9%	50.0%	18.4%	2.6%	0.0%
MR	30.04	273	4	36.7%	32.6%	26.5%	4.0%	0.0%
MR	30.04	273	5	48.9%	20.4%	24.4%	6.1%	0.0%
MR	30.21	331	3	29.4%	32.3%	26.4%	8.8%	0.0%
MR	30.21	331	4	31.4%	31.4%	22.8%	8.5%	2.8%
MR	30.21	331	5	42.1%	21.0%	26.3%	2.6%	2.6%
R	30.41	194	3	10.0%	45.0%	25.0%	10.0%	10.0%
R	30.41	194	4	17.6%	17.6%	52.9%	5.8%	5.8%
R	30.41	194	5	45.4%	18.1%	13.6%	9.0%	13.6%
MR	30.41	411	3	17.7%	33.3%	31.1%	8.8%	4.4%
MR	30.41	411	4	27.5%	27.5%	32.5%	7.5%	2.5%
MR	30.41	411	5	37.7%	24.4%	33.3%	2.2%	2.2%
R	30.77	403	3	16.9%	36.9%	26.1%	12.3%	6.1%
R	30.77	403	4	29.6%	35.9%	25.0%	7.8%	1.5%
R	30.77	403	5	51.4%	25.7%	14.2%	1.4%	7.1%
MR	31.05	306	3	44.8%	44.8%	8.1%	2.0%	0.0%
MR	31.05	306	4	36.7%	36.7%	22.4%	4.0%	0.0%
MR	31.05	306	5	31.1%	28.8%	24.4%	11.1%	2.2%
R	31.10	164	3	10.5%	31.5%	36.8%	10.5%	10.5%
R	31.10	164	4	23.0%	46.1%	23.0%	3.8%	3.8%
R	31.10	164	5	48.0%	16.0%	28.0%	8.0%	0.0%
R	32.04	181	3	10.0%	40.0%	30.0%	10.0%	10.0%
R	32.04	181	4	50.0%	25.0%	25.0%	0.0%	0.0%
R	32.04	181	5	35.7%	28.5%	14.2%	21.4%	0.0%
MR	32.06	340	3	34.8%	30.2%	30.2%	4.6%	0.0%
MR	32.06	340	4	22.2%	31.1%	28.8%	6.6%	11.1%
MR	32.06	340	5	26.5%	18.3%	28.5%	16.3%	10.2%
R	32.40	179	3	26.0%	43.4%	21.7%	8.6%	0.0%
R	32.40	179	4	20.0%	36.0%	36.0%	4.0%	4.0%
R	32.40	179	5	52.6%	15.7%	26.3%	5.2%	0.0%
MR	32.41	324	3	39.4%	31.5%	15.7%	10.5%	2.6%
MR	32.41	324	4	21.2%	40.4%	19.1%	14.8%	4.2%
MR	32.41	324	5	30.3%	25.0%	28.5%	12.5%	3.5%
R	32.61	184	3	17.6%	41.1%	23.5%	17.6%	0.0%
R	32.61	184	4	16.6%	33.3%	38.8%	11.1%	0.0%
R	32.61	184	5	42.3%	23.0%	11.5%	11.5%	7.6%
R	32.71	376	3	23.4%	29.6%	37.5%	6.2%	3.1%
R	32.71	376	4	30.8%	29.4%	29.4%	8.8%	1.4%
R	32.71	376	5	38.8%	29.8%	26.8%	4.4%	0.0%
MR	32.75	403	3	23.0%	40.3%	30.7%	3.8%	1.9%
MR	32.75	403	4	19.0%	39.6%	28.5%	9.5%	1.5%

Elementary reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	32.75	403	5	22.2%	31.1%	26.6%	11.1%	8.8%
MR	32.91	316	3	28.0%	28.0%	33.3%	3.5%	7.0%
MR	32.91	316	4	45.2%	30.9%	14.2%	7.1%	2.3%
MR	32.91	316	5	42.3%	32.6%	15.3%	5.7%	3.8%
MR	32.95	258	3	42.8%	31.4%	22.8%	2.8%	0.0%
MR	32.95	258	4	36.3%	30.3%	24.2%	6.0%	0.0%
MR	32.95	258	5	35.4%	29.1%	27.0%	6.2%	2.0%
MR	33.51	194	3	28.5%	28.5%	33.3%	9.5%	0.0%
MR	33.51	194	4	34.3%	40.6%	21.8%	3.1%	0.0%
MR	33.51	194	5	41.6%	33.3%	16.6%	8.3%	0.0%
MR	34.62	260	3	28.5%	48.5%	20.0%	2.8%	0.0%
MR	34.62	260	4	24.2%	30.3%	33.3%	9.0%	3.0%
MR	34.62	260	5	54.5%	21.2%	18.1%	6.0%	0.0%
R	34.77	302	3	30.7%	46.1%	15.3%	7.6%	0.0%
R	34.77	302	4	18.5%	35.1%	37.0%	7.4%	1.8%
R	34.77	302	5	37.2%	31.3%	25.4%	0.0%	5.8%
R	34.85	485	3	29.4%	23.5%	41.1%	1.9%	3.9%
R	34.85	485	4	27.8%	34.4%	29.5%	4.9%	3.2%
R	34.85	485	5	37.7%	29.5%	24.5%	8.1%	0.0%
MR	34.95	495	3	18.7%	28.7%	32.5%	11.2%	5.0%
MR	34.95	495	4	27.9%	25.0%	33.8%	7.3%	2.9%
MR	34.95	495	5	46.1%	26.9%	16.6%	3.8%	5.1%
R	35.61	278	3	32.2%	32.2%	29.0%	6.4%	0.0%
R	35.61	278	4	20.0%	48.0%	28.0%	0.0%	4.0%
R	35.61	278	5	28.1%	28.1%	21.8%	9.3%	6.2%
R	35.66	258	3	25.0%	56.2%	12.5%	6.2%	0.0%
R	35.66	258	4	37.5%	31.2%	25.0%	6.2%	0.0%
R	35.66	258	5	27.2%	31.8%	31.8%	9.0%	0.0%
MR	35.71	182	3	13.6%	40.9%	22.7%	13.6%	0.0%
MR	35.71	182	4	16.6%	38.8%	16.6%	22.2%	0.0%
MR	35.71	182	5	45.4%	22.7%	18.1%	4.5%	0.0%
R	35.88	262	3	37.5%	43.7%	12.5%	0.0%	0.0%
R	35.88	262	4	40.7%	18.5%	33.3%	7.4%	0.0%
R	35.88	262	5	31.5%	36.8%	10.5%	15.7%	5.2%
R	36.55	249	3	15.0%	30.0%	40.0%	10.0%	5.0%
R	36.55	249	4	42.8%	39.2%	14.2%	3.5%	0.0%
R	36.55	249	5	43.3%	16.6%	26.6%	3.3%	10.0%
R	36.93	306	3	31.7%	21.9%	26.8%	7.3%	7.3%
R	36.93	306	4	23.0%	48.7%	20.5%	7.6%	0.0%
R	36.93	306	5	35.8%	30.7%	20.5%	7.6%	2.5%
R	36.96	184	3	23.0%	38.4%	23.0%	11.5%	0.0%
R	36.96	184	4	28.9%	26.3%	23.6%	7.8%	10.5%
R	36.96	184	5	35.0%	37.5%	15.0%	7.5%	2.5%
MR	36.96	276	4	31.8%	34.0%	18.1%	6.8%	2.2%

Elementary reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	36.96	276	5	38.7%	28.5%	16.3%	4.0%	2.0%
MR	37.86	243	3	51.5%	36.3%	12.1%	0.0%	0.0%
MR	37.86	243	4	16.6%	22.9%	37.5%	8.3%	12.5%
MR	37.86	243	5	50.0%	25.0%	25.0%	0.0%	0.0%
MR	38.02	363	3	28.8%	26.9%	34.6%	7.6%	1.9%
R	38.02	363	4	28.5%	44.8%	20.4%	4.0%	2.0%
R	38.02	363	5	47.8%	21.7%	19.5%	8.6%	2.1%
MR	38.35	206	5	38.4%	25.0%	25.0%	9.6%	0.0%
MR	38.64	339	3	61.3%	27.2%	9.0%	0.0%	0.0%
MR	38.64	339	4	31.7%	53.6%	12.1%	0.0%	0.0%
MR	38.64	339	5	45.4%	20.4%	25.0%	4.5%	2.2%
MR	39.42	378	3	29.7%	51.0%	12.7%	2.1%	2.1%
MR	39.42	378	4	26.5%	34.6%	22.4%	12.2%	2.0%
MR	39.42	378	5	28.8%	24.4%	24.4%	13.3%	6.6%
MR	39.69	383	3	22.6%	39.6%	35.8%	1.8%	0.0%
MR	39.69	383	4	25.0%	43.3%	25.0%	6.6%	0.0%
MR	39.69	383	5	42.4%	28.7%	25.7%	1.5%	1.5%
MR	39.83	231	3	38.1%	23.6%	27.2%	5.4%	1.8%
MR	39.92	496	3	16.3%	25.4%	23.6%	18.1%	16.3%
MR	39.92	496	4	8.8%	33.3%	33.3%	8.8%	15.5%
MR	39.92	496	5	21.4%	26.7%	28.5%	16.0%	7.1%
MR	39.93	278	3	35.0%	35.0%	22.5%	7.5%	0.0%
MR	39.93	278	4	27.2%	45.4%	21.2%	3.0%	3.0%
MR	39.93	278	5	48.3%	16.1%	32.2%	0.0%	3.2%
R	40.70	285	5	42.4%	24.2%	21.2%	6.0%	4.5%
MR	40.91	242	3	44.7%	26.3%	21.0%	2.6%	5.2%
MR	40.91	242	4	17.6%	47.0%	20.5%	8.8%	0.0%
MR	40.91	242	5	53.6%	12.1%	24.3%	4.8%	4.8%
MR	41.04	212	3	47.6%	28.5%	19.0%	4.7%	0.0%
MR	41.04	212	4	53.8%	34.6%	11.5%	0.0%	0.0%
MR	41.04	212	5	36.3%	18.1%	31.8%	13.6%	0.0%
MR	41.05	285	3	31.7%	31.7%	24.3%	4.8%	4.8%
MR	41.05	285	4	26.6%	31.1%	26.6%	4.4%	6.6%
MR	41.05	285	5	39.5%	32.5%	18.6%	4.6%	0.0%
R	41.06	358	3	37.2%	32.5%	23.2%	6.9%	0.0%
R	41.06	358	4	21.2%	38.2%	29.7%	10.6%	0.0%
R	41.06	358	5	33.3%	33.3%	33.3%	0.0%	0.0%
R	41.15	260	3	20.0%	24.0%	40.0%	4.0%	8.0%
R	41.15	260	4	20.6%	24.1%	37.9%	10.3%	3.4%
R	41.15	260	5	35.8%	23.0%	10.2%	12.8%	17.9%
R	41.20	398	3	24.0%	29.6%	25.9%	14.8%	1.8%
R	41.20	398	4	24.4%	32.6%	24.4%	6.1%	6.1%
R	41.20	398	5	47.4%	23.7%	15.2%	6.7%	3.3%
MR	41.81	354	3	53.8%	38.4%	5.1%	0.0%	0.0%

Elementary reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	41.81	354	4	43.8%	21.0%	22.8%	5.2%	7.0%
MR	41.81	354	5	45.7%	22.0%	23.7%	8.4%	0.0%
MR	41.96	224	3	61.2%	9.6%	12.9%	0.0%	0.0%
MR	41.96	224	4	80.0%	20.0%	0.0%	0.0%	0.0%
MR	41.96	224	5	87.5%	12.5%	0.0%	0.0%	0.0%
MR	42.21	526	3	33.3%	37.1%	25.6%	3.8%	0.0%
MR	42.21	526	4	33.3%	35.8%	24.3%	3.8%	2.5%
MR	42.21	526	5	38.7%	19.3%	31.1%	8.6%	2.1%
R	42.22	334	3	27.2%	18.1%	45.4%	3.0%	6.0%
R	42.22	334	4	18.0%	44.0%	30.0%	6.0%	2.0%
R	42.22	334	5	38.0%	35.7%	16.6%	9.5%	0.0%
R	42.32	449	3	14.5%	29.1%	39.5%	8.3%	8.3%
R	42.32	449	4	23.5%	17.6%	33.3%	17.6%	7.8%
R	42.32	449	5	29.5%	25.0%	20.4%	18.1%	4.5%
MR	42.35	340	3	25.0%	15.3%	46.1%	11.5%	0.0%
MR	42.35	340	4	16.2%	32.5%	34.8%	11.6%	2.3%
MR	42.35	340	5	39.1%	23.9%	21.7%	8.6%	2.1%
MR	42.73	227	3	38.8%	36.1%	22.2%	2.7%	0.0%
MR	42.73	227	4	21.8%	27.2%	36.3%	10.9%	1.8%
R	42.74	248	3	36.3%	45.4%	18.1%	0.0%	0.0%
R	42.74	248	4	39.1%	26.0%	30.4%	4.3%	0.0%
R	42.74	248	5	35.7%	14.2%	17.8%	17.8%	14.2%
R	43.64	236	3	20.5%	28.2%	35.8%	12.8%	0.0%
R	43.64	236	4	23.0%	26.9%	42.3%	3.8%	3.8%
R	43.64	236	5	48.7%	12.8%	25.6%	10.2%	2.5%
MR	43.65	323	3	7.8%	36.8%	34.2%	13.1%	7.8%
MR	43.65	323	4	50.0%	16.6%	30.0%	3.3%	0.0%
MR	43.65	323	5	31.5%	26.3%	36.8%	2.6%	2.6%
R	43.95	314	3	37.8%	37.8%	21.6%	0.0%	0.0%
R	43.95	314	4	15.3%	51.2%	25.6%	2.5%	5.1%
R	43.95	314	5	41.1%	23.5%	27.9%	4.4%	2.9%
MR	44.00	150	3	30.0%	35.0%	30.0%	5.0%	0.0%
MR	44.00	150	4	18.1%	45.4%	27.2%	9.0%	0.0%
MR	44.00	150	5	40.0%	30.0%	25.0%	0.0%	5.0%
R	44.13	247	3	12.5%	33.3%	45.8%	8.3%	0.0%
R	44.13	247	4	38.7%	29.0%	19.3%	6.4%	0.0%
R	44.13	247	5	35.0%	25.0%	20.0%	20.0%	0.0%
MR	44.53	265	5	41.6%	30.0%	13.3%	6.6%	8.3%
R	45.13	277	5	36.8%	26.3%	22.8%	8.7%	3.5%
MR	45.37	205	3	32.1%	46.4%	7.1%	7.1%	0.0%
MR	45.37	205	4	54.5%	31.8%	13.6%	0.0%	0.0%
MR	45.37	205	5	48.3%	22.5%	16.1%	9.6%	3.2%
MR	45.85	253	3	45.8%	35.4%	16.6%	0.0%	0.0%
MR	45.85	253	4	53.3%	40.0%	4.4%	0.0%	2.2%

Elementary reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	45.85	253	5	70.1%	19.2%	8.7%	0.0%	0.0%
R	45.90	244	3	28.5%	28.5%	17.8%	21.4%	3.5%
R	45.90	244	4	18.5%	29.6%	40.7%	7.4%	3.7%
R	45.90	244	5	19.4%	22.2%	36.1%	16.6%	5.5%
R	46.02	415	4	38.3%	34.2%	15.0%	6.8%	5.4%
R	46.02	415	5	17.3%	28.9%	31.8%	14.4%	7.2%
MR	46.70	227	3	27.9%	44.1%	25.5%	2.3%	0.0%
MR	46.70	227	4	30.0%	43.3%	16.6%	3.3%	3.3%
MR	46.70	227	5	30.0%	27.5%	32.5%	10.0%	0.0%
MR	46.72	351	3	34.7%	36.9%	19.5%	4.3%	2.1%
MR	46.72	351	4	34.2%	34.2%	28.9%	2.6%	0.0%
MR	46.72	351	5	36.5%	24.3%	24.3%	12.1%	2.4%
MR	46.78	233	3	33.3%	33.3%	27.7%	2.7%	2.7%
MR	46.78	233	4	28.1%	34.3%	25.0%	9.3%	3.1%
MR	46.78	233	5	29.1%	29.1%	25.0%	16.6%	0.0%
MR	47.26	237	3	20.0%	48.5%	28.5%	0.0%	0.0%
MR	47.26	237	4	30.7%	38.4%	25.6%	2.5%	0.0%
MR	47.26	237	5	41.1%	25.4%	27.4%	3.9%	1.9%
MR	47.37	247	3	60.5%	28.9%	10.5%	0.0%	0.0%
MR	47.37	247	4	47.8%	26.0%	21.7%	4.3%	0.0%
MR	47.37	247	5	34.1%	24.3%	31.7%	9.7%	0.0%
MR	47.60	208	3	28.0%	36.0%	28.0%	4.0%	0.0%
MR	47.60	208	4	20.0%	33.3%	40.0%	3.3%	3.3%
MR	47.60	208	5	41.6%	19.4%	22.2%	8.3%	8.3%
MR	48.00	150	3	50.0%	31.8%	18.1%	0.0%	0.0%
MR	48.00	150	4	26.6%	40.0%	20.0%	13.3%	0.0%
MR	48.00	150	5	37.5%	37.5%	20.8%	4.1%	0.0%
MR	48.21	195	3	38.0%	40.4%	19.0%	0.0%	0.0%
MR	48.81	293	3	50.0%	25.0%	17.8%	3.5%	0.0%
MR	48.81	293	4	20.4%	28.5%	38.7%	8.1%	0.0%
MR	48.81	293	5	36.8%	18.4%	23.6%	13.1%	7.8%
MR	49.08	163	3	58.8%	23.5%	17.6%	0.0%	0.0%
MR	49.08	163	4	29.4%	52.9%	5.8%	11.7%	0.0%
MR	49.08	163	5	44.4%	37.0%	14.8%	0.0%	3.7%
MR	49.67	300	3	15.1%	45.4%	21.2%	15.1%	0.0%
MR	49.67	300	4	31.9%	27.6%	31.9%	6.3%	2.1%
MR	49.67	300	5	33.3%	7.6%	23.0%	28.2%	7.6%
MR	49.77	217	3	26.0%	52.1%	21.7%	0.0%	0.0%
MR	49.77	217	4	42.8%	31.4%	20.0%	5.7%	0.0%
MR	49.77	217	5	34.6%	38.4%	23.0%	3.8%	0.0%
MR	50.60	313	3	31.5%	42.1%	18.4%	7.8%	0.0%
MR	50.60	313	4	35.4%	29.1%	27.0%	4.1%	4.1%
MR	50.60	313	5	59.0%	27.2%	9.0%	4.5%	0.0%
MR	50.63	237	3	57.1%	28.5%	7.1%	0.0%	0.0%

Elementary reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	50.63	237	4	65.7%	23.6%	7.8%	0.0%	0.0%
MR	50.63	237	5	65.8%	29.2%	4.8%	0.0%	0.0%
R	50.88	171	3	15.0%	35.0%	30.0%	10.0%	5.0%
R	50.88	171	4	4.0%	48.0%	32.0%	8.0%	8.0%
R	50.88	171	5	23.0%	38.4%	30.7%	0.0%	7.6%
MR	51.58	349	3	38.0%	28.5%	23.8%	4.7%	4.7%
MR	51.58	349	4	20.0%	30.0%	35.0%	8.3%	6.6%
MR	51.58	349	5	52.2%	20.4%	20.4%	4.5%	2.2%
MR	51.84	299	3	21.8%	43.7%	28.1%	3.1%	3.1%
MR	51.84	299	4	30.7%	41.0%	25.6%	2.5%	0.0%
MR	51.84	299	5	55.5%	40.7%	3.7%	0.0%	0.0%
MR	53.63	289	3	30.0%	43.3%	23.3%	0.0%	0.0%
MR	53.63	289	4	18.9%	24.3%	32.4%	21.6%	2.7%
MR	53.63	289	5	64.2%	25.0%	7.1%	3.5%	0.0%
R	53.82	249	3	63.6%	15.1%	18.1%	3.0%	0.0%
R	53.82	249	4	44.4%	22.2%	16.6%	5.5%	5.5%
R	53.82	249	5	29.2%	21.9%	21.9%	17.0%	9.7%
R	53.82	249	3	31.5%	34.2%	26.3%	2.6%	5.2%
R	53.82	249	4	21.0%	36.8%	26.3%	13.1%	2.6%
R	53.82	249	5	36.3%	33.3%	27.2%	3.0%	0.0%
MR	54.02	348	3	35.8%	41.7%	16.4%	4.4%	0.0%
MR	54.02	348	4	29.4%	42.6%	22.0%	5.8%	0.0%
MR	54.50	309	3	19.3%	38.7%	35.4%	3.2%	0.0%
MR	54.50	309	4	30.7%	30.7%	26.9%	7.6%	0.0%
MR	54.50	309	5	29.1%	25.0%	16.6%	25.0%	4.1%
MR	54.60	163	3	11.1%	50.0%	33.3%	0.0%	0.0%
MR	54.60	163	4	21.4%	21.4%	57.1%	0.0%	0.0%
MR	54.60	163	5	33.3%	23.8%	23.8%	14.2%	4.7%
R	55.00	160	3	29.4%	29.4%	35.2%	0.0%	0.0%
R	55.00	160	4	48.1%	29.6%	18.5%	3.7%	0.0%
R	55.00	160	5	29.1%	41.6%	16.6%	8.3%	0.0%
R	55.50	200	3	7.4%	22.2%	44.4%	25.9%	0.0%
R	55.50	200	4	34.4%	37.9%	24.1%	3.4%	0.0%
R	55.50	200	5	40.7%	22.2%	37.0%	0.0%	0.0%
MR	57.57	304	3	16.6%	21.4%	42.8%	11.9%	4.7%
MR	57.57	304	4	37.8%	37.8%	18.9%	0.0%	2.7%
MR	57.57	304	5	38.4%	7.6%	43.5%	5.1%	5.1%
R	58.30	259	3	31.4%	8.5%	45.7%	8.5%	2.8%
R	58.30	259	4	27.0%	27.0%	21.6%	10.8%	5.4%
R	58.30	259	5	34.8%	16.2%	27.9%	4.6%	6.9%
MR	58.66	179	3	53.5%	32.1%	10.7%	3.5%	0.0%
MR	58.66	179	4	15.7%	52.6%	21.0%	10.5%	0.0%
MR	58.66	179	5	35.2%	35.2%	23.5%	0.0%	0.0%
R	59.94	337	3	18.1%	29.0%	32.7%	18.1%	1.8%

Elementary reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
R	59.94	337	4	41.0%	26.7%	30.3%	1.7%	0.0%
R	59.94	337	5	44.0%	28.8%	18.6%	6.7%	1.6%
R	60.73	275	3	25.0%	31.2%	22.9%	12.5%	6.2%
R	60.73	275	4	21.5%	31.3%	29.4%	13.7%	3.9%
MR	61.19	438	3	30.7%	28.5%	24.1%	12.0%	1.0%
R	61.35	163	3	0.0%	40.0%	30.0%	20.0%	10.0%
R	61.35	163	4	5.5%	44.4%	33.3%	16.6%	0.0%
R	61.35	163	5	30.7%	23.0%	0.0%	7.6%	38.4%
MR	61.43	433	3	30.0%	32.0%	30.0%	4.0%	2.0%
MR	61.43	433	4	39.6%	47.1%	7.5%	0.0%	5.6%
MR	61.43	433	5	54.8%	25.8%	16.1%	3.2%	0.0%
MR	61.67	180	3	37.9%	34.4%	20.6%	3.4%	3.4%
MR	61.67	180	4	43.2%	40.5%	13.5%	0.0%	2.7%
MR	61.67	180	5	17.2%	44.8%	17.2%	13.7%	3.4%
MR	61.90	210	3	28.0%	40.0%	24.0%	4.0%	4.0%
MR	61.90	210	4	29.1%	20.8%	16.6%	29.1%	4.1%
MR	61.90	210	5	15.3%	34.6%	42.3%	7.6%	0.0%
MR	62.37	388	3	24.6%	33.7%	25.9%	10.3%	3.8%
MR	62.37	388	4	35.8%	35.8%	17.9%	5.1%	5.1%
MR	62.37	388	5	40.0%	21.6%	16.6%	13.3%	6.6%
R	63.27	245	3	30.3%	33.3%	30.3%	6.0%	0.0%
R	63.27	245	4	9.0%	39.3%	36.3%	15.1%	0.0%
R	63.27	245	5	38.6%	22.7%	15.9%	11.3%	11.3%
MR	66.04	371	3	45.8%	41.6%	10.4%	0.0%	2.0%
MR	66.04	371	4	17.0%	41.4%	24.3%	12.1%	4.8%
MR	66.04	371	5	25.5%	20.9%	34.8%	13.9%	2.3%
MR	66.67	162	3	20.6%	31.0%	31.0%	8.6%	6.8%
MR	66.67	162	4	20.3%	27.7%	31.4%	9.2%	3.7%
MR	66.67	162	5	37.7%	24.5%	15.0%	13.2%	5.6%
MR	70.06	167	3	35.0%	35.0%	15.0%	10.0%	5.0%
MR	70.06	167	4	24.0%	48.0%	12.0%	12.0%	0.0%
MR	70.06	167	5	17.3%	43.4%	30.4%	4.3%	4.3%
MR	71.21	264	3	23.5%	58.8%	14.7%	0.0%	0.0%
MR	71.21	264	4	35.1%	43.2%	10.8%	2.7%	0.0%
MR	71.21	264	5	36.5%	34.1%	29.2%	0.0%	0.0%
MR	81.30	262	3	35.7%	40.4%	19.0%	2.3%	0.0%
MR	82.08	547	3	29.4%	35.2%	21.1%	3.5%	0.0%
MR	82.08	547	4	37.9%	44.8%	10.3%	0.0%	0.0%
MR	82.08	547	5	61.3%	21.3%	12.0%	2.6%	0.0%

Middle School/Junior High Reading

Table A.2 Middle School/Junior High Reading Standard of Excellence (SOE) Data

Middle/junior high reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	0.73	546	6	54.1%	34.1%	11.7%	0.0%	0.0%
MR	0.77	519	6	38.8%	27.7%	29.1%	1.3%	2.7%
MR	1.13	375	6	25.0%	29.5%	22.7%	13.6%	9.0%
MR	2.06	578	6	50.6%	31.1%	11.6%	2.5%	2.5%
MR	2.36	594	6	40.7%	35.0%	16.4%	7.7%	0.0%
MR	2.36	594	7	58.4%	25.1%	12.3%	2.5%	0.5%
MR	2.36	594	8	49.0%	32.8%	13.8%	1.9%	1.4%
MR	2.50	320	6	52.5%	27.5%	10.0%	5.0%	2.5%
MR	2.69	521	6	45.6%	32.9%	18.1%	1.6%	1.0%
MR	2.69	521	7	35.2%	38.2%	15.2%	6.4%	1.7%
MR	2.69	521	8	41.0%	33.1%	21.9%	2.2%	1.6%
MR	2.87	349	6	52.8%	33.9%	11.3%	1.8%	0.0%
R	2.94	579	6	31.8%	34.0%	24.8%	4.3%	4.3%
R	2.94	579	7	41.3%	32.7%	18.2%	4.8%	2.6%
R	2.94	579	8	35.9%	37.3%	17.2%	5.1%	3.7%
MR	3.06	556	6	36.9%	34.0%	16.3%	6.3%	2.9%
MR	3.06	556	7	51.5%	26.4%	13.0%	5.3%	2.6%
MR	3.06	556	8	42.0%	33.6%	20.5%	1.8%	0.0%
MR	3.09	453	6	54.0%	29.7%	10.8%	4.0%	1.3%
MR	3.13	416	6	60.0%	31.6%	8.3%	0.0%	0.0%
MR	3.26	675	6	55.2%	23.5%	17.6%	2.3%	2.3%
MR	3.33	540	6	49.4%	32.4%	15.3%	1.0%	1.0%
MR	3.33	540	7	46.6%	35.2%	13.4%	2.5%	0.5%
MR	3.33	540	8	47.1%	30.1%	19.3%	3.4%	0.0%
R	3.58	865	7	41.3%	31.5%	15.5%	8.8%	2.3%
R	3.58	865	8	37.3%	30.7%	20.2%	7.6%	3.6%
MR	3.90	641	6	49.1%	30.2%	16.2%	3.2%	0.0%
MR	3.90	641	7	47.2%	34.0%	13.1%	2.7%	1.0%
MR	3.90	641	8	33.3%	40.4%	20.5%	2.4%	1.7%
MR	4.08	711	6	37.1%	27.0%	22.2%	7.8%	5.6%
MR	4.08	711	7	32.6%	38.9%	19.6%	3.7%	4.6%
MR	4.08	711	8	35.0%	32.2%	22.7%	5.5%	3.9%
MR	4.72	508	6	30.0%	40.0%	18.5%	11.4%	0.0%
MR	4.84	475	6	52.7%	33.3%	11.1%	2.7%	0.0%
MR	4.92	528	6	50.6%	24.6%	19.1%	5.4%	0.0%
MR	5.02	757	6	47.2%	35.1%	10.8%	2.7%	2.7%
MR	5.04	595	6	35.2%	31.0%	23.6%	5.2%	2.1%
MR	5.04	595	7	56.6%	25.1%	13.3%	2.1%	2.1%
MR	5.04	595	8	50.9%	30.6%	13.6%	2.8%	1.4%
MR	5.08	610	6	45.6%	27.1%	18.5%	7.4%	1.2%

Middle/junior high reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	5.31	339	6	40.0%	40.0%	11.6%	5.0%	1.6%
MR	5.84	308	6	32.6%	42.8%	22.4%	2.0%	0.0%
MR	6.09	345	6	46.8%	23.4%	23.4%	6.3%	0.0%
MR	6.13	408	6	37.7%	31.1%	26.2%	4.9%	0.0%
MR	6.70	448	6	57.4%	23.4%	17.0%	0.0%	2.1%
R	6.72	372	6	39.0%	34.1%	19.5%	4.8%	0.0%
MR	6.84	380	6	51.5%	25.0%	17.1%	1.5%	1.5%
MR	6.86	787	7	41.7%	31.2%	19.9%	4.2%	1.5%
MR	6.86	787	8	30.4%	27.2%	28.8%	9.3%	3.6%
MR	7.04	611	6	36.7%	31.8%	20.6%	6.2%	3.1%
MR	7.04	611	7	35.5%	35.1%	22.0%	5.4%	0.9%
MR	7.04	611	8	34.9%	28.8%	26.3%	4.9%	3.6%
MR	7.80	346	6	40.3%	40.3%	15.3%	2.8%	0.0%
MR	7.80	346	7	22.6%	26.8%	33.6%	7.5%	5.8%
MR	7.80	346	8	35.3%	25.5%	27.8%	4.5%	5.2%
MR	8.20	439	6	47.4%	28.8%	15.2%	5.0%	3.3%
R	8.45	367	7	33.0%	23.2%	24.6%	11.9%	7.0%
R	8.45	367	8	30.2%	31.6%	20.4%	9.8%	6.3%
MR	8.50	494	6	39.0%	31.2%	21.8%	3.1%	4.6%
MR	9.01	533	7	44.6%	30.9%	15.2%	6.8%	1.9%
MR	9.01	533	8	45.8%	28.9%	16.5%	5.2%	1.8%
R	9.87	466	6	39.1%	21.6%	22.9%	8.1%	6.7%
R	9.88	334	7	29.2%	29.2%	21.4%	11.6%	3.8%
R	9.88	334	8	30.2%	31.3%	19.1%	8.7%	5.2%
MR	10.02	649	6	32.0%	35.8%	14.8%	11.1%	4.9%
R	10.27	477	6	31.4%	29.3%	25.1%	7.6%	4.8%
R	10.27	477	7	51.2%	27.1%	10.8%	3.6%	5.4%
R	10.27	477	8	39.6%	28.9%	21.3%	4.4%	5.6%
MR	10.33	571	6	22.3%	38.8%	29.4%	7.0%	0.0%
MR	10.45	507	6	27.1%	32.4%	32.4%	5.9%	0.6%
MR	10.45	507	7	39.5%	29.0%	25.0%	4.6%	1.1%
MR	10.45	507	8	47.0%	27.6%	20.0%	2.9%	1.7%
MR	10.56	606	7	51.7%	25.5%	13.9%	4.0%	2.7%
MR	10.56	606	8	43.8%	25.2%	19.6%	5.3%	4.9%
R	10.69	477	6	38.2%	26.5%	25.3%	5.5%	3.7%
R	10.69	477	7	50.0%	35.9%	10.9%	2.4%	0.6%
R	10.69	477	8	44.6%	32.0%	20.0%	2.6%	0.6%
MR	10.70	271	6	39.3%	18.1%	39.3%	3.0%	0.0%
MR	11.34	291	6	31.2%	40.6%	15.6%	9.3%	3.1%
MR	11.35	828	7	41.8%	31.5%	18.5%	6.1%	1.4%
MR	11.35	828	8	33.4%	34.4%	24.8%	5.0%	1.6%
R	11.47	619	6	27.3%	24.5%	26.2%	6.7%	8.9%
MR	11.68	394	6	46.7%	27.4%	22.5%	1.6%	1.6%
MR	11.80	745	7	41.6%	31.6%	16.2%	5.7%	3.8%

Middle/junior high reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	11.80	745	8	25.4%	28.9%	28.9%	9.2%	6.1%
MR	12.06	481	6	37.5%	31.2%	23.4%	7.8%	0.0%
MR	12.08	298	6	43.2%	35.5%	18.2%	2.8%	0.0%
MR	12.08	298	7	43.6%	40.9%	12.7%	0.0%	0.0%
MR	12.08	298	8	42.3%	30.5%	18.8%	5.8%	0.0%
MR	12.38	404	6	50.7%	25.3%	15.8%	6.3%	0.0%
R	12.50	664	6	23.4%	32.5%	26.3%	10.8%	6.0%
R	12.50	664	7	41.8%	31.5%	18.5%	6.1%	1.4%
MR	12.50	648	6	41.2%	31.9%	20.6%	4.1%	2.0%
MR	12.73	330	6	56.4%	25.6%	15.3%	2.5%	0.0%
MR	12.73	330	7	25.6%	46.1%	20.5%	7.6%	0.0%
MR	12.73	330	8	39.5%	37.2%	23.2%	0.0%	0.0%
MR	13.15	365	7	32.8%	28.9%	31.5%	5.2%	1.3%
MR	13.15	365	8	43.5%	30.6%	20.9%	3.2%	0.0%
MR	13.67	395	6	26.6%	43.3%	16.6%	10.0%	3.3%
MR	13.96	394	6	21.5%	29.1%	34.1%	11.3%	3.7%
MR	14.04	228	6	41.6%	29.1%	25.0%	4.1%	0.0%
MR	14.35	237	6	47.3%	23.6%	13.1%	10.5%	5.2%
MR	14.37	661	7	33.8%	27.5%	22.1%	7.1%	5.9%
MR	14.37	661	8	36.9%	26.3%	20.1%	7.7%	6.2%
MR	14.58	192	6	44.4%	25.9%	18.5%	7.4%	0.0%
R	14.71	435	6	43.1%	18.9%	22.4%	8.6%	5.1%
MR	15.24	361	6	39.2%	29.4%	23.5%	5.8%	1.9%
MR	15.65	345	6	30.4%	30.4%	23.9%	13.0%	2.1%
MR	15.65	345	7	20.9%	37.2%	16.2%	20.9%	4.6%
MR	15.65	345	8	14.2%	35.7%	30.9%	14.2%	0.0%
MR	15.77	222	6	22.5%	40.0%	32.5%	5.0%	0.0%
MR	16.03	287	6	41.3%	26.0%	28.2%	2.1%	2.1%
R	16.16	198	6	50.9%	23.5%	19.6%	3.9%	1.9%
R	16.16	198	7	32.7%	34.5%	21.8%	9.0%	1.8%
R	16.16	198	8	45.7%	28.5%	21.4%	4.2%	0.0%
R	16.18	649	7	25.7%	32.1%	21.2%	9.9%	7.2%
R	16.18	649	8	41.3%	26.0%	17.2%	6.9%	5.1%
R	16.29	178	6	30.4%	52.1%	17.3%	0.0%	0.0%
R	16.29	178	7	35.0%	55.0%	10.0%	0.0%	0.0%
R	16.29	178	8	31.8%	31.8%	31.8%	4.5%	0.0%
R	16.72	329	7	29.7%	23.2%	29.1%	10.7%	6.5%
R	16.72	329	8	32.1%	25.7%	26.3%	8.7%	5.8%
MR	16.76	179	7	37.1%	45.7%	11.4%	2.8%	2.8%
MR	16.76	179	8	26.0%	65.2%	4.3%	4.3%	0.0%
MR	17.00	406	6	22.1%	29.5%	31.5%	11.4%	5.3%
MR	17.00	406	7	28.1%	28.8%	30.3%	8.8%	2.9%
MR	17.00	406	8	26.8%	33.5%	24.6%	6.7%	7.4%
MR	17.09	474	6	24.3%	32.4%	29.7%	9.4%	2.7%

Middle/junior high reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
R	17.10	193	6	68.1%	22.7%	4.5%	4.5%	0.0%
R	17.12	333	7	25.0%	35.5%	27.6%	7.2%	4.6%
R	17.12	333	8	23.7%	31.6%	25.9%	12.4%	5.0%
MR	17.19	477	6	50.7%	31.8%	17.3%	0.0%	0.0%
MR	17.22	302	6	48.6%	24.3%	21.6%	2.7%	0.0%
R	17.26	307	6	35.7%	25.0%	32.1%	3.5%	3.5%
R	17.26	307	7	40.6%	46.8%	9.3%	3.1%	0.0%
R	17.26	307	8	65.0%	5.0%	15.0%	0.0%	15.0%
MR	17.29	347	6	33.1%	34.3%	25.4%	5.3%	1.1%
R	17.44	195	6	36.0%	31.1%	26.2%	3.2%	1.6%
R	17.44	195	7	28.1%	45.3%	17.1%	7.8%	1.5%
R	17.44	195	8	23.9%	18.3%	33.8%	16.9%	5.6%
R	18.29	421	6	25.5%	26.3%	30.0%	9.7%	8.2%
R	18.29	421	7	34.0%	31.8%	26.6%	4.4%	2.9%
R	18.29	421	8	28.3%	30.9%	26.4%	6.4%	7.7%
MR	18.79	660	7	31.2%	27.9%	20.9%	11.9%	5.3%
MR	18.79	660	8	28.4%	23.5%	29.3%	11.1%	7.5%
MR	18.80	351	6	20.9%	33.3%	32.2%	9.6%	3.2%
MR	18.87	604	6	37.0%	29.2%	19.1%	3.3%	7.8%
R	18.92	592	7	31.1%	29.1%	15.7%	11.3%	8.9%
R	18.92	592	8	30.6%	28.0%	17.8%	6.6%	11.2%
R	19.20	448	6	30.1%	23.8%	31.7%	9.5%	3.1%
MR	19.32	207	6	36.5%	19.2%	30.7%	5.7%	3.8%
MR	19.32	207	7	24.4%	39.5%	32.5%	3.4%	0.0%
MR	19.32	207	8	28.5%	31.4%	25.7%	8.5%	5.7%
MR	19.67	839	7	38.5%	31.0%	22.1%	5.7%	2.1%
MR	19.67	839	8	35.7%	36.0%	20.9%	4.2%	2.3%
R	19.71	411	6	11.7%	21.5%	47.0%	11.7%	7.8%
R	19.71	411	7	37.2%	25.4%	27.1%	10.1%	0.0%
R	19.71	411	8	21.5%	45.0%	25.4%	5.8%	0.0%
R	20.06	314	6	33.3%	25.0%	29.1%	4.1%	8.3%
R	20.06	314	7	43.9%	31.7%	21.9%	2.4%	0.0%
R	20.06	314	8	15.5%	33.3%	31.1%	15.5%	4.4%
R	20.63	223	7	23.3%	43.3%	23.3%	10.0%	0.0%
R	20.63	223	8	23.9%	32.6%	30.4%	10.8%	2.1%
R	20.97	453	6	30.6%	28.5%	25.1%	9.5%	5.4%
R	20.97	453	7	24.3%	34.7%	31.2%	7.6%	2.0%
R	20.97	453	8	27.3%	28.0%	30.9%	10.0%	3.5%
MR	21.11	199	6	22.2%	29.6%	40.7%	0.0%	7.4%
MR	21.11	199	7	17.8%	21.4%	46.4%	10.7%	3.5%
MR	21.11	199	8	20.5%	26.4%	35.2%	14.7%	2.9%
R	21.18	557	7	27.3%	32.6%	25.0%	9.6%	5.0%
R	21.18	557	8	24.1%	32.2%	24.1%	9.9%	9.2%
MR	21.91	178	6	34.7%	30.4%	21.7%	8.6%	4.3%

Middle/junior high reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	21.91	178	7	47.6%	19.0%	9.5%	14.2%	4.7%
MR	21.91	178	8	41.3%	20.6%	27.5%	3.4%	3.4%
MR	21.93	529	7	32.2%	28.6%	23.9%	7.6%	5.0%
MR	21.93	529	8	34.7%	32.8%	16.9%	6.7%	6.4%
MR	22.02	336	6	27.8%	24.5%	36.0%	4.9%	6.5%
MR	22.03	177	6	49.2%	33.3%	14.2%	3.1%	0.0%
MR	22.03	177	7	43.0%	30.7%	20.0%	1.5%	3.0%
MR	22.03	177	8	37.2%	29.4%	21.5%	5.8%	3.9%
R	22.05	195	7	23.6%	36.5%	25.8%	10.7%	3.2%
R	22.05	195	8	23.7%	36.0%	31.9%	6.1%	2.0%
MR	22.13	244	6	57.1%	20.4%	20.4%	0.0%	2.0%
R	22.66	278	7	43.7%	31.2%	18.7%	3.1%	3.1%
R	22.66	278	8	25.0%	38.8%	33.3%	2.7%	0.0%
MR	22.71	251	6	29.5%	26.7%	33.8%	4.2%	5.6%
MR	22.71	251	7	59.0%	34.4%	6.5%	0.0%	0.0%
MR	22.71	251	8	44.8%	37.9%	17.2%	0.0%	0.0%
MR	22.73	176	7	42.8%	14.2%	35.7%	7.1%	0.0%
MR	22.73	176	8	53.8%	34.6%	11.5%	0.0%	0.0%
R	23.06	260	6	60.0%	20.0%	16.0%	2.0%	0.0%
R	23.06	260	7	33.3%	31.9%	26.3%	8.3%	0.0%
R	23.06	260	8	42.0%	31.8%	10.1%	13.0%	2.8%
MR	23.16	354	7	22.8%	26.3%	36.8%	10.5%	3.5%
MR	23.16	354	8	36.6%	28.3%	20.0%	11.6%	3.3%
MR	23.43	286	6	36.6%	46.6%	16.6%	0.0%	0.0%
MR	23.53	170	6	26.9%	30.7%	30.7%	11.5%	0.0%
MR	23.53	170	7	36.7%	38.7%	18.3%	6.1%	0.0%
MR	23.53	170	8	32.2%	32.2%	20.3%	13.5%	1.6%
MR	23.69	574	6	39.7%	25.4%	24.7%	8.3%	1.7%
R	23.71	232	6	18.3%	28.3%	36.6%	10.0%	6.6%
R	23.71	232	7	28.9%	33.7%	24.0%	9.6%	3.6%
R	23.71	232	8	23.5%	31.4%	25.8%	13.4%	4.4%
MR	24.12	170	7	25.0%	33.3%	16.6%	25.0%	0.0%
MR	24.12	170	8	20.0%	36.6%	36.6%	6.6%	0.0%
R	24.18	550	6	18.1%	34.6%	28.4%	8.5%	9.0%
R	24.18	550	7	24.4%	31.3%	28.7%	7.9%	5.3%
R	24.18	550	8	30.6%	29.0%	21.5%	9.6%	6.9%
MR	24.19	401	6	53.7%	27.7%	14.8%	0.0%	3.7%
R	24.28	313	6	38.5%	26.6%	17.4%	11.9%	5.5%
R	24.28	313	7	14.5%	39.8%	33.0%	6.7%	5.8%
R	24.28	313	8	28.0%	33.6%	27.1%	2.8%	6.5%
R	24.32	185	6	17.9%	41.0%	30.7%	7.6%	2.5%
R	24.32	185	7	27.6%	38.2%	27.6%	2.1%	4.2%
R	24.32	185	8	26.0%	36.0%	24.0%	12.0%	2.0%
MR	24.35	193	6	43.8%	26.9%	25.8%	1.1%	2.2%

Middle/junior high reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	24.93	377	7	29.6%	37.0%	29.6%	0.0%	1.8%
MR	24.93	377	8	25.8%	35.4%	27.4%	4.8%	6.4%
R	25.00	204	7	32.0%	40.0%	24.0%	4.0%	0.0%
R	25.00	204	8	14.2%	31.4%	31.4%	14.2%	5.7%
R	25.23	218	7	31.7%	29.2%	26.8%	7.3%	4.8%
R	25.23	218	8	16.6%	47.6%	11.9%	19.0%	4.7%
MR	25.29	170	7	52.3%	14.2%	19.0%	9.5%	4.7%
MR	25.29	170	8	33.3%	44.4%	18.5%	3.7%	0.0%
MR	25.36	351	6	47.1%	26.4%	13.2%	5.6%	5.6%
MR	26.07	349	6	35.4%	35.4%	20.8%	8.3%	0.0%
R	26.16	302	6	30.7%	34.6%	23.0%	11.5%	0.0%
R	26.16	302	7	38.4%	30.7%	19.2%	11.5%	0.0%
R	26.16	302	8	34.2%	23.6%	31.5%	5.2%	2.6%
MR	26.40	481	6	22.6%	26.1%	29.0%	9.8%	11.0%
MR	26.40	481	7	21.8%	37.5%	26.0%	7.8%	4.8%
MR	26.40	481	8	40.8%	30.6%	17.0%	6.1%	3.4%
MR	26.76	304	6	31.2%	28.1%	31.2%	9.3%	0.0%
MR	26.76	304	7	26.1%	30.9%	30.9%	11.9%	0.0%
MR	26.76	304	8	14.7%	23.5%	23.5%	17.6%	20.5%
MR	26.84	190	6	8.8%	35.2%	47.0%	2.9%	2.9%
R	26.86	592	7	19.3%	30.1%	30.6%	13.7%	4.5%
R	26.86	592	8	24.2%	25.7%	29.6%	10.6%	6.7%
R	26.95	334	6	19.2%	42.3%	19.2%	7.6%	11.5%
R	26.95	334	7	42.3%	23.0%	15.3%	19.2%	0.0%
R	26.95	334	8	27.5%	48.2%	13.7%	6.8%	3.4%
MR	27.74	310	6	35.7%	33.3%	21.4%	4.7%	4.7%
MR	27.86	280	6	31.0%	31.0%	27.5%	6.8%	3.4%
MR	27.86	280	7	26.6%	23.3%	20.0%	20.0%	10.0%
MR	27.86	280	8	16.6%	44.4%	22.2%	11.1%	5.5%
R	28.15	302	7	50.0%	24.0%	14.8%	7.4%	3.7%
R	28.15	302	8	36.5%	38.4%	19.2%	3.8%	1.9%
R	28.19	188	7	18.9%	37.8%	16.2%	18.9%	8.1%
R	28.19	188	8	30.0%	36.6%	20.0%	10.0%	3.3%
MR	28.52	526	6	33.3%	33.3%	20.8%	11.1%	1.3%
MR	28.85	156	6	21.1%	34.6%	25.0%	7.6%	9.6%
MR	28.85	156	7	40.8%	30.6%	16.3%	8.1%	4.0%
MR	28.85	156	8	35.4%	37.5%	22.9%	2.0%	2.0%
MR	29.02	379	6	30.7%	48.7%	17.9%	2.5%	0.0%
MR	29.02	379	7	29.1%	25.0%	29.1%	10.4%	6.2%
MR	29.02	379	8	18.3%	38.7%	22.4%	16.3%	4.0%
MR	29.04	303	6	25.0%	26.0%	33.3%	10.4%	4.1%
MR	29.04	303	7	37.7%	29.5%	24.4%	2.0%	4.0%
MR	29.04	303	8	37.9%	32.7%	21.5%	4.3%	2.5%
MR	29.33	150	6	23.5%	29.4%	41.1%	5.8%	0.0%

Middle/junior high reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	29.33	150	7	53.3%	20.0%	26.6%	0.0%	0.0%
MR	29.33	150	8	52.9%	26.4%	20.5%	0.0%	0.0%
R	29.38	177	6	29.8%	36.8%	29.8%	1.7%	1.7%
R	29.38	177	7	16.6%	40.7%	33.3%	7.4%	1.8%
R	29.38	177	8	28.9%	31.8%	26.0%	7.2%	5.7%
MR	29.71	175	6	42.1%	21.0%	26.3%	5.2%	5.2%
MR	29.79	235	7	33.6%	35.2%	23.7%	6.5%	0.8%
MR	29.79	235	8	35.0%	34.1%	20.0%	6.6%	4.1%
R	30.09	545	7	27.2%	28.4%	28.9%	10.0%	5.3%
R	30.09	545	8	23.9%	30.8%	23.4%	12.7%	7.9%
MR	30.21	331	6	41.4%	29.2%	14.6%	12.1%	2.4%
MR	30.25	162	6	30.0%	40.0%	30.0%	0.0%	0.0%
MR	30.25	162	8	30.0%	20.0%	40.0%	0.0%	10.0%
R	30.35	369	7	34.5%	29.0%	23.6%	7.2%	5.4%
R	30.35	369	8	41.8%	25.4%	23.6%	1.8%	7.2%
R	30.41	194	6	35.0%	35.0%	25.0%	5.0%	0.0%
R	30.41	194	7	25.0%	25.0%	43.7%	6.2%	0.0%
R	30.41	194	8	9.0%	50.0%	13.6%	18.1%	9.0%
MR	30.41	411	6	28.3%	35.8%	22.6%	9.4%	3.7%
MR	30.41	411	7	18.1%	36.3%	40.9%	0.0%	2.2%
MR	30.41	411	8	33.3%	26.3%	21.0%	12.2%	5.2%
MR	30.64	235	6	24.0%	30.6%	32.0%	12.0%	0.0%
MR	30.64	235	7	34.5%	35.8%	22.2%	4.9%	1.2%
MR	30.64	235	8	12.5%	30.0%	32.5%	18.7%	6.2%
R	30.86	619	7	28.7%	22.3%	28.1%	13.2%	5.3%
R	30.86	619	8	18.1%	30.8%	25.4%	12.7%	9.8%
R	31.02	461	7	11.3%	45.2%	32.0%	1.8%	9.4%
R	31.02	461	8	27.4%	30.6%	22.5%	12.9%	6.4%
R	31.10	164	6	36.3%	22.7%	27.2%	13.6%	0.0%
R	31.47	232	6	39.7%	22.0%	27.9%	5.8%	4.4%
R	31.47	232	7	17.2%	42.5%	20.6%	13.7%	5.7%
R	31.47	232	8	32.8%	31.5%	25.0%	5.2%	3.9%
R	31.49	235	6	31.1%	24.5%	29.5%	6.5%	8.1%
R	31.49	235	7	33.6%	30.4%	22.8%	13.0%	0.0%
R	31.49	235	8	39.2%	35.4%	18.9%	6.3%	0.0%
R	31.54	241	7	24.1%	27.5%	27.5%	17.2%	3.4%
R	31.54	241	8	20.5%	25.6%	20.5%	17.9%	15.3%
MR	31.59	459	6	36.3%	30.3%	23.2%	6.5%	2.3%
MR	31.59	459	7	39.5%	35.4%	20.1%	4.1%	0.6%
MR	31.59	459	8	38.6%	28.2%	23.4%	6.8%	2.0%
R	32.04	181	6	18.7%	25.0%	18.7%	31.2%	6.2%
R	32.04	181	7	32.0%	36.0%	12.0%	16.0%	4.0%
R	32.04	181	8	50.0%	19.2%	11.5%	15.3%	3.8%
MR	32.06	340	6	26.7%	37.5%	32.1%	3.5%	0.0%

Middle/junior high reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
R	32.31	229	6	23.8%	40.2%	22.3%	8.9%	4.4%
R	32.31	229	7	39.2%	21.4%	22.6%	5.9%	4.7%
R	32.31	229	8	18.6%	29.3%	32.0%	10.6%	8.0%
R	32.34	235	7	21.0%	26.3%	26.3%	15.7%	5.2%
R	32.34	235	8	30.7%	28.2%	28.2%	10.2%	2.5%
R	32.40	179	6	30.3%	24.2%	39.3%	6.0%	0.0%
MR	32.41	324	6	13.9%	27.9%	37.2%	13.9%	6.9%
R	32.50	240	7	19.4%	19.4%	52.7%	5.5%	2.7%
R	32.50	240	8	23.0%	41.0%	28.2%	7.6%	0.0%
R	32.61	184	6	7.6%	23.0%	53.8%	7.6%	7.6%
R	32.61	184	7	25.9%	48.1%	22.2%	3.7%	0.0%
R	32.61	184	8	19.2%	38.4%	26.9%	7.6%	3.8%
MR	32.75	403	6	46.4%	26.7%	25.0%	1.7%	0.0%
R	33.50	206	7	27.2%	51.5%	15.1%	3.0%	0.0%
R	33.50	206	8	38.4%	25.6%	28.2%	5.1%	2.5%
MR	33.51	194	6	31.0%	24.1%	34.4%	10.3%	0.0%
R	33.75	214	7	40.0%	30.0%	10.0%	10.0%	5.0%
R	33.75	214	8	22.5%	19.3%	29.0%	16.1%	12.9%
R	34.04	188	6	27.8%	29.5%	34.4%	3.2%	4.9%
R	34.04	188	7	31.0%	39.6%	18.9%	6.8%	3.4%
R	34.04	188	8	28.3%	32.8%	22.3%	10.4%	5.9%
MR	34.62	260	6	48.5%	25.7%	25.7%	0.0%	0.0%
R	34.77	302	6	21.1%	36.5%	36.5%	1.9%	0.0%
R	34.85	485	6	25.6%	25.6%	37.8%	4.0%	4.0%
R	35.61	278	6	27.5%	27.5%	27.5%	13.7%	0.0%
R	35.61	278	7	34.4%	31.0%	24.1%	10.3%	0.0%
R	35.61	278	8	26.3%	36.8%	23.6%	7.8%	2.6%
R	35.66	258	6	40.9%	40.9%	13.6%	4.5%	0.0%
R	35.66	258	7	48.8%	37.7%	11.1%	0.0%	2.2%
R	35.66	258	8	42.5%	27.5%	25.0%	5.0%	0.0%
MR	35.71	182	6	36.8%	15.7%	42.1%	5.2%	0.0%
MR	35.71	182	7	36.3%	36.3%	13.6%	4.5%	0.0%
MR	35.71	182	8	46.1%	34.6%	15.3%	3.8%	0.0%
R	35.88	262	6	30.7%	30.7%	20.5%	10.2%	5.1%
R	35.88	262	7	29.6%	40.7%	22.2%	7.4%	0.0%
R	35.88	262	8	19.3%	51.6%	22.5%	6.4%	0.0%
R	36.09	169	7	17.8%	35.7%	35.7%	3.5%	7.1%
R	36.09	169	8	25.0%	46.4%	21.4%	7.1%	0.0%
MR	36.25	160	7	25.0%	41.6%	25.0%	0.0%	8.3%
MR	36.25	160	8	29.6%	40.7%	14.8%	11.1%	3.7%
R	36.31	493	6	20.1%	31.0%	25.8%	12.0%	9.7%
R	36.31	493	7	35.3%	35.9%	20.1%	4.8%	3.0%
R	36.31	493	8	28.7%	25.2%	29.8%	8.6%	6.8%
R	36.55	249	6	36.6%	33.3%	13.3%	10.0%	3.3%

Middle/junior high reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
R	36.55	249	7	40.0%	40.0%	20.0%	0.0%	0.0%
R	36.55	249	8	11.5%	50.0%	11.5%	7.6%	11.5%
R	36.93	306	6	16.2%	20.9%	51.1%	6.9%	4.6%
MR	36.96	276	6	28.8%	25.4%	28.8%	3.3%	6.7%
MR	36.96	276	7	23.3%	30.0%	30.0%	8.3%	3.3%
MR	36.96	276	8	18.3%	35.0%	36.6%	8.3%	1.6%
MR	37.81	365	7	28.1%	38.2%	17.9%	10.1%	4.6%
MR	37.81	365	8	21.1%	22.9%	33.0%	14.6%	7.3%
MR	37.87	169	7	36.6%	43.3%	16.6%	0.0%	3.3%
MR	37.87	169	8	26.0%	34.7%	21.7%	13.0%	4.3%
R	38.02	363	6	35.4%	43.7%	14.5%	4.1%	2.0%
R	38.10	189	7	13.3%	40.0%	26.6%	13.3%	6.6%
R	38.10	189	8	12.9%	35.4%	29.0%	9.6%	12.9%
MR	38.29	525	6	28.2%	35.0%	25.1%	8.3%	2.6%
MR	38.29	525	7	19.6%	30.6%	30.6%	11.5%	6.3%
MR	38.29	525	8	28.0%	34.7%	26.2%	7.3%	2.4%
MR	38.32	274	6	35.5%	16.6%	28.8%	7.7%	8.8%
MR	38.32	274	7	30.2%	44.1%	19.7%	1.1%	1.1%
MR	38.32	274	8	31.3%	33.3%	18.6%	9.8%	5.8%
MR	38.35	206	6	31.1%	26.6%	28.8%	11.1%	2.2%
MR	38.35	206	7	37.0%	50.0%	12.9%	0.0%	0.0%
MR	38.35	206	8	25.0%	34.6%	32.6%	3.8%	0.0%
R	38.59	539	7	31.7%	34.1%	18.8%	9.4%	4.7%
R	38.59	539	8	25.0%	23.5%	23.5%	17.6%	10.2%
MR	38.64	339	6	48.6%	35.1%	16.2%	0.0%	0.0%
R	38.89	234	6	26.4%	27.9%	25.0%	11.7%	8.8%
R	38.89	234	7	26.0%	43.7%	23.9%	4.1%	2.0%
R	38.89	234	8	30.6%	29.0%	30.6%	9.6%	0.0%
R	38.89	288	6	31.7%	20.7%	24.3%	7.3%	10.9%
R	38.89	288	7	29.7%	37.2%	19.1%	9.5%	2.1%
R	38.89	288	8	24.7%	32.3%	28.5%	11.4%	0.9%
MR	39.42	378	6	23.2%	31.5%	34.2%	8.2%	2.7%
MR	39.92	496	6	9.8%	26.2%	45.9%	11.4%	6.5%
MR	39.92	496	7	32.0%	28.0%	16.0%	18.0%	6.0%
MR	39.92	496	8	25.8%	27.4%	24.1%	11.2%	11.2%
MR	39.93	278	6	42.1%	34.2%	23.6%	0.0%	0.0%
R	40.39	203	7	27.5%	32.5%	32.5%	7.5%	0.0%
R	40.39	203	8	25.0%	23.5%	23.5%	17.6%	10.2%
R	41.06	358	6	22.5%	54.8%	22.5%	0.0%	0.0%
R	41.06	358	7	17.9%	46.1%	35.8%	0.0%	0.0%
R	41.06	358	8	24.4%	40.8%	22.4%	12.2%	0.0%
R	41.15	260	6	15.7%	31.5%	36.8%	15.7%	0.0%
R	41.15	260	7	24.2%	39.3%	24.2%	9.0%	0.0%
R	41.15	260	8	27.2%	33.3%	21.2%	9.0%	9.0%

Middle/junior high reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	41.81	354	6	36.0%	38.0%	20.0%	6.0%	0.0%
R	42.21	154	7	25.0%	25.0%	29.1%	12.5%	8.3%
R	42.21	154	8	31.5%	36.8%	31.5%	0.0%	0.0%
R	42.22	334	6	26.8%	31.3%	29.8%	5.9%	4.4%
R	42.32	449	6	27.6%	31.9%	29.7%	4.2%	6.3%
R	42.32	449	7	25.0%	45.4%	20.4%	2.2%	2.2%
R	42.32	449	8	37.2%	29.4%	21.5%	5.8%	3.9%
MR	42.35	340	6	17.3%	25.0%	36.5%	15.3%	5.7%
R	42.74	248	6	44.0%	16.0%	24.0%	12.0%	4.0%
R	42.74	248	7	44.0%	36.0%	20.0%	0.0%	0.0%
R	42.74	248	8	33.3%	33.3%	26.6%	6.6%	0.0%
MR	43.19	433	6	44.1%	35.8%	16.6%	1.6%	1.6%
MR	43.19	433	7	35.5%	29.7%	23.9%	7.9%	2.1%
MR	43.19	433	8	40.9%	25.1%	25.1%	6.2%	1.5%
R	43.20	169	6	21.7%	43.4%	21.7%	8.6%	4.3%
R	43.20	169	7	18.1%	22.7%	36.3%	18.1%	4.5%
R	43.20	169	8	27.7%	38.8%	16.6%	11.1%	5.5%
R	43.63	864	6	18.6%	27.7%	34.3%	11.3%	7.2%
R	43.63	864	7	24.8%	30.8%	25.5%	9.3%	7.3%
R	43.63	864	8	24.7%	31.3%	26.0%	8.3%	8.0%
MR	43.65	323	6	32.3%	26.4%	32.3%	8.8%	0.0%
MR	43.65	323	7	27.7%	41.6%	25.0%	5.5%	0.0%
MR	43.65	323	8	29.4%	20.5%	35.2%	14.7%	0.0%
MR	44.00	150	6	20.0%	40.0%	33.3%	0.0%	6.6%
R	44.13	247	6	41.3%	34.4%	20.6%	3.4%	0.0%
MR	44.53	265	6	35.2%	19.7%	33.8%	7.0%	4.2%
MR	44.53	265	7	39.4%	40.8%	12.6%	2.8%	4.2%
MR	44.53	265	8	54.0%	19.6%	18.0%	3.2%	3.2%
R	45.08	366	7	16.6%	31.8%	37.8%	10.6%	3.0%
R	45.08	366	8	25.8%	32.2%	20.9%	14.5%	6.4%
R	45.13	277	6	19.4%	38.8%	38.8%	5.5%	4.1%
R	45.13	277	7	23.6%	20.8%	38.8%	8.3%	8.3%
R	45.13	277	8	13.1%	27.6%	31.5%	10.5%	14.4%
MR	45.37	205	6	30.0%	36.6%	30.0%	3.3%	0.0%
R	45.90	244	6	12.5%	37.5%	43.7%	6.2%	0.0%
R	45.90	244	7	31.2%	43.7%	15.6%	9.3%	0.0%
R	45.90	244	8	29.0%	32.2%	35.4%	3.2%	0.0%
R	46.02	415	6	13.7%	25.0%	25.0%	25.0%	12.5%
R	46.02	415	7	8.4%	28.4%	44.2%	14.7%	4.2%
R	46.02	415	8	37.3%	46.1%	10.9%	2.1%	2.1%
MR	46.72	351	6	13.8%	50.0%	22.2%	11.1%	2.7%
MR	46.72	351	7	34.7%	39.1%	19.5%	2.1%	4.3%
MR	46.72	351	8	53.8%	20.5%	17.9%	0.0%	5.1%
R	46.83	698	7	33.3%	24.3%	20.5%	8.9%	10.6%

Middle/junior high reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
R	46.83	698	8	39.4%	22.0%	15.9%	12.2%	7.9%
MR	47.60	208	6	26.9%	30.7%	34.6%	3.8%	0.0%
R	48.26	290	6	22.2%	27.2%	26.2%	11.1%	13.1%
R	48.26	290	7	17.9%	33.7%	23.5%	12.3%	11.2%
R	48.26	290	8	27.6%	37.2%	27.6%	5.3%	2.1%
R	48.84	215	6	16.4%	31.3%	32.8%	13.4%	5.9%
R	48.84	215	7	19.4%	33.7%	32.4%	11.6%	2.5%
R	48.84	215	8	25.0%	30.5%	31.9%	9.7%	1.3%
MR	49.08	163	6	47.0%	11.7%	41.1%	0.0%	0.0%
MR	49.08	163	7	20.0%	20.0%	13.3%	26.6%	20.0%
MR	49.08	163	8	13.3%	33.3%	33.3%	6.6%	13.3%
MR	49.67	300	6	45.4%	18.1%	27.2%	9.0%	0.0%
MR	49.77	217	6	26.9%	53.8%	19.2%	0.0%	0.0%
R	50.31	489	7	37.7%	33.1%	18.0%	6.9%	2.4%
R	50.31	489	8	25.9%	33.7%	26.7%	9.4%	4.1%
R	50.33	153	7	20.8%	49.2%	25.3%	2.9%	1.4%
R	50.33	153	8	20.2%	26.9%	32.5%	12.3%	7.8%
R	50.54	461	6	25.6%	28.0%	26.2%	8.5%	9.7%
R	50.54	461	7	27.5%	31.1%	29.7%	8.6%	1.4%
R	50.54	461	8	33.5%	23.6%	27.3%	11.1%	2.4%
MR	50.60	313	6	36.3%	20.4%	38.6%	4.5%	0.0%
R	50.88	171	6	50.0%	20.0%	20.0%	10.0%	0.0%
R	50.88	171	7	19.2%	34.6%	30.7%	7.6%	7.6%
R	50.88	171	8	56.2%	18.7%	25.0%	0.0%	0.0%
MR	51.84	299	6	20.9%	44.1%	30.2%	2.3%	2.3%
R	52.09	215	7	24.2%	51.5%	21.2%	3.0%	0.0%
R	52.09	215	8	16.6%	26.6%	30.0%	16.6%	6.6%
R	53.21	218	6	21.7%	34.7%	26.0%	8.6%	7.2%
R	53.21	218	7	21.7%	26.9%	30.7%	15.3%	2.5%
R	53.21	218	8	31.0%	35.1%	28.3%	2.7%	2.7%
R	53.55	366	6	30.0%	23.8%	33.6%	4.4%	6.1%
R	53.55	366	7	20.7%	40.5%	24.3%	8.1%	3.6%
R	53.55	366	8	18.9%	25.7%	34.0%	14.3%	3.7%
MR	53.63	289	6	12.0%	36.0%	16.0%	16.0%	16.0%
MR	53.63	289	7	40.7%	22.2%	22.2%	11.1%	3.7%
MR	53.63	289	8	13.7%	24.1%	37.9%	17.2%	6.8%
R	53.82	249	6	27.6%	21.2%	21.2%	21.2%	6.3%
MR	54.50	309	6	15.6%	40.6%	31.2%	3.1%	9.3%
MR	54.50	309	7	50.0%	23.6%	21.0%	5.2%	0.0%
MR	54.50	309	8	22.5%	35.0%	27.5%	12.5%	2.5%
MR	54.60	163	6	33.3%	25.0%	33.3%	4.1%	4.1%
MR	54.84	331	7	53.3%	26.6%	13.3%	0.0%	0.0%
MR	54.84	331	8	31.2%	31.2%	18.7%	12.5%	6.2%
R	55.00	160	6	35.7%	28.5%	25.0%	7.1%	3.5%

Middle/junior high reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
R	56.88	640	6	23.5%	29.4%	29.9%	10.1%	5.9%
R	56.88	640	7	23.7%	27.9%	27.9%	12.5%	6.0%
R	56.88	640	8	26.6%	33.8%	22.3%	9.0%	6.1%
MR	57.57	304	6	29.7%	37.8%	16.2%	10.8%	5.4%
R	58.30	259	6	26.3%	42.1%	23.6%	5.2%	0.0%
MR	58.66	179	6	39.1%	30.4%	30.4%	0.0%	0.0%
R	60.96	187	6	24.6%	26.1%	23.0%	12.3%	7.6%
R	60.96	187	7	21.5%	30.7%	23.0%	12.3%	10.7%
R	60.96	187	8	27.5%	27.5%	27.5%	8.6%	4.3%
R	61.35	163	6	42.8%	21.4%	28.5%	7.1%	0.0%
R	61.35	163	7	36.0%	32.0%	16.0%	8.0%	8.0%
R	61.35	163	8	45.4%	40.9%	9.0%	4.5%	0.0%
MR	61.43	433	6	27.0%	35.4%	20.8%	6.2%	10.4%
MR	61.43	433	7	32.6%	26.0%	30.4%	8.6%	2.1%
MR	61.43	433	8	22.7%	29.5%	40.9%	0.0%	4.5%
MR	66.04	371	6	20.4%	34.6%	30.6%	10.2%	0.0%

Senior High School Reading

Table A.3 Senior High Reading Standard of Excellence (SOE) Data

Senior high reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	2.18	1377	11	35.6%	40.1%	17.1%	5.0%	1.5%
MR	2.62	1603	11	48.7%	30.0%	15.5%	2.5%	2.0%
MR	2.88	1530	11	33.5%	30.5%	21.2%	9.2%	3.2%
MR	3.45	1999	11	41.9%	33.8%	18.2%	3.6%	1.6%
MR	4.08	1374	11	42.4%	32.8%	19.2%	3.6%	1.2%
R	4.21	761	11	25.0%	27.6%	21.7%	8.5%	6.5%
MR	4.59	458	11	20.4%	31.9%	26.2%	9.0%	8.1%
MR	5.75	1912	11	23.0%	27.3%	26.9%	12.1%	6.0%
MR	5.85	1350	11	31.7%	29.4%	25.4%	8.8%	3.2%
MR	6.14	228	11	34.3%	37.3%	20.8%	4.4%	1.4%
MR	6.35	1402	11	36.4%	28.8%	20.4%	9.6%	3.6%
MR	6.67	720	11	32.1%	28.5%	25.0%	11.3%	2.9%
MR	8.43	1233	11	39.2%	31.4%	21.2%	4.4%	2.7%
MR	9.10	1835	11	38.3%	31.2%	21.0%	5.3%	2.2%
R	9.86	507	11	24.5%	30.5%	27.1%	12.7%	2.5%
R	10.05	189	11	30.7%	33.3%	28.2%	5.1%	2.5%
MR	10.12	959	11	21.6%	28.5%	29.1%	14.8%	1.5%
MR	10.85	258	11	25.0%	38.3%	21.6%	8.3%	5.0%
R	12.37	590	11	16.3%	34.0%	29.0%	15.6%	4.9%
R	12.75	1373	11	23.2%	33.6%	28.6%	7.2%	6.2%
MR	13.15	365	11	50.8%	25.4%	20.3%	1.6%	0.0%
R	13.19	182	11	29.1%	31.2%	20.8%	8.3%	10.4%
R	13.24	234	11	15.5%	27.5%	32.7%	15.5%	5.1%
R	13.25	468	11	18.3%	29.7%	22.9%	19.8%	8.3%
MR	13.47	2042	11	34.8%	35.6%	17.8%	6.1%	4.1%
MR	13.72	452	11	28.8%	32.6%	25.9%	8.6%	1.9%
R	14.00	169	11	34.2%	31.4%	28.5%	5.7%	0.0%
R	14.19	761	11	22.6%	31.2%	28.8%	7.3%	8.5%
MR	14.56	261	11	36.3%	29.0%	18.1%	14.5%	0.0%
R	14.72	394	11	18.3%	29.0%	20.6%	20.6%	9.9%
MR	16.23	1060	11	46.6%	25.7%	19.1%	5.7%	0.4%
MR	16.76	179	11	48.2%	27.5%	17.2%	6.8%	0.0%
R	16.88	450	11	40.1%	29.1%	23.6%	5.5%	0.0%
R	16.93	880	11	30.5%	32.6%	19.1%	8.2%	5.6%
MR	17.21	1644	11	33.4%	32.5%	17.8%	7.0%	7.6%
R	17.23	708	11	28.4%	39.6%	25.1%	3.9%	1.1%
R	17.55	1966	11	29.3%	27.5%	23.3%	8.0%	9.1%
R	17.68	724	11	24.0%	34.9%	22.2%	12.0%	4.8%

Senior high reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
R	17.99	428	11	15.5%	32.0%	27.1%	13.5%	10.6%
MR	18.16	358	11	32.1%	31.0%	22.9%	5.7%	6.8%
R	18.20	588	11	22.2%	35.1%	25.6%	10.1%	4.7%
R	18.55	825	11	26.9%	30.0%	27.3%	9.6%	5.3%
R	18.58	226	11	15.5%	29.3%	31.0%	8.6%	10.3%
R	18.75	1285	11	36.5%	29.1%	16.1%	7.9%	7.1%
R	18.97	290	11	25.0%	26.4%	36.7%	5.8%	5.8%
R	19.39	361	11	23.4%	29.6%	30.8%	49.0%	7.4%
MR	19.52	415	11	29.5%	36.7%	22.4%	4.0%	6.1%
MR	19.79	384	11	24.2%	31.7%	29.9%	11.2%	1.8%
MR	20.11	184	11	26.0%	41.3%	19.5%	6.5%	4.3%
MR	20.18	342	11	25.6%	25.6%	25.6%	10.8%	5.4%
MR	20.60	267	11	55.2%	22.3%	11.9%	7.4%	2.9%
R	20.63	223	11	22.2%	1.6%	27.7%	5.5%	2.7%
R	20.80	226	11	18.7%	39.5%	25.0%	10.4%	6.2%
MR	20.89	1738	11	32.6%	32.6%	24.1%	7.2%	1.4%
MR	21.11	199	11	12.5%	29.1%	37.5%	20.8%	0.0%
R	21.84	467	11	29.8%	30.7%	14.0%	14.9%	8.7%
MR	21.91	178	11	41.1%	35.2%	20.5%	2.9%	0.0%
MR	21.91	178	11	41.1%	35.2%	20.5%	2.9%	0.0%
R	22.66	278	11	22.9%	39.5%	16.6%	16.6%	2.0%
MR	22.73	176	11	31.5%	26.3%	34.2%	5.2%	0.0%
MR	22.73	176	11	31.5%	26.3%	34.2%	5.2%	0.0%
MR	23.06	386	11	31.5%	28.8%	24.3%	9.9%	1.8%
MR	23.16	354	11	17.7%	31.6%	24.0%	15.1%	8.8%
MR	23.64	1328	11	32.4%	26.1%	20.9%	9.4%	8.7%
R	23.73	177	11	19.3%	45.1%	22.5%	3.2%	9.6%
R	23.76	463	11	25.0%	32.5%	26.2%	13.7%	1.2%
R	23.84	172	11	36.5%	19.5%	26.8%	7.3%	4.8%
MR	24.12	170	11	19.4%	33.3%	19.4%	16.6%	11.1%
R	24.45	165	11	20.0%	16.0%	40.0%	16.0%	4.0%
R	24.48	1062	11	31.7%	21.0%	24.7%	15.4%	6.5%
R	24.78	230	11	30.6%	35.4%	17.7%	12.9%	3.2%
MR	24.93	377	11	13.4%	38.8%	41.7%	4.4%	0.0%
R	25.00	204	11	18.6%	30.2%	23.2%	20.9%	6.9%
R	25.23	218	11	33.3%	13.3%	20.0%	26.6%	6.6%
MR	25.29	170	11	33.3%	36.6%	26.6%	3.3%	0.0%
R	25.34	292	11	44.2%	27.1%	14.2%	8.5%	4.2%
R	25.54	231	11	19.1%	33.8%	22.0%	16.1%	8.8%
MR	25.71	661	11	24.5%	36.0%	21.3%	12.2%	4.0%
MR	25.87	344	11	26.5%	34.1%	27.8%	8.8%	2.5%
R	26.21	1381	11	15.6%	27.5%	29.9%	13.5%	9.0%

Senior high reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
R	27.31	238	11	27.9%	35.2%	25.0%	5.8%	2.9%
R	28.15	302	11	44.2%	26.9%	17.3%	5.7%	3.8%
MR	28.19	298	11	21.5%	30.3%	25.3%	20.2%	1.2%
R	28.19	188	11	34.6%	23.0%	23.0%	7.6%	11.5%
R	28.82	288	11	21.2%	22.7%	42.4%	10.6%	3.0%
MR	29.00	151	11	40.0%	43.3%	13.3%	0.0%	0.0%
R	29.53	386	11	31.1%	31.1%	18.2%	11.8%	7.5%
R	29.96	257	11	30.5%	32.2%	25.4%	8.4%	3.3%
R	30.00	152	11	21.4%	25.0%	35.7%	14.2%	3.5%
R	30.35	369	11	23.4%	26.5%	34.3%	9.3%	3.1%
R	30.73	1536	11	27.5%	33.9%	21.4%	7.4%	6.1%
R	31.00	189	11	20.7%	33.9%	18.8%	18.8%	7.5%
R	31.02	461	11	17.3%	30.6%	32.6%	14.2%	3.0%
R	31.10	373	11	21.5%	27.8%	24.0%	12.6%	7.5%
R	31.18	170	11	32.4%	32.4%	18.9%	8.1%	5.4%
R	31.19	202	11	18.6%	30.5%	37.2%	5.0%	3.3%
R	31.54	241	11	18.1%	47.7%	25.0%	4.5%	4.5%
R	31.74	167	11	27.2%	21.2%	24.2%	15.1%	9.0%
R	31.76	340	11	18.9%	31.6%	29.1%	13.9%	6.3%
MR	32.00	151	11	20.5%	35.2%	29.4%	11.7%	2.9%
R	32.34	235	11	29.5%	27.2%	25.0%	9.0%	6.8%
R	32.50	240	11	21.6%	24.3%	40.5%	10.8%	0.0%
R	33.13	160	11	27.6%	25.5%	21.2%	12.7%	8.5%
R	33.24	349	11	28.9%	26.0%	28.9%	13.0%	2.8%
R	33.50	206	11	16.6%	25.0%	33.3%	11.1%	11.1%
R	33.75	214	11	32.3%	29.4%	29.4%	5.8%	0.0%
MR	33.92	325	11	30.6%	30.6%	20.0%	13.3%	4.0%
MR	33.97	209	11	18.9%	31.0%	25.8%	13.7%	8.6%
R	34.00	161	11	25.6%	35.8%	25.6%	7.6%	5.1%
R	34.65	1065	11	18.6%	31.3%	26.5%	9.9%	8.7%
MR	34.75	305	11	16.4%	29.4%	30.5%	16.4%	7.0%
R	34.87	152	11	34.3%	31.2%	18.7%	12.5%	3.1%
R	35.29	323	11	15.3%	28.2%	32.0%	12.8%	10.2%
MR	35.76	344	11	32.9%	31.6%	15.1%	8.8%	11.3%
R	36.09	169	11	36.3%	27.2%	21.2%	12.1%	3.0%
MR	36.25	160	11	30.7%	26.9%	26.9%	3.8%	7.6%
R	36.32	647	11	27.6%	28.9%	21.7%	13.1%	3.9%
R	36.56	320	11	17.2%	29.3%	27.5%	17.2%	0.0%
MR	37.65	170	11	25.5%	25.5%	37.2%	6.9%	4.6%
R	37.81	246	11	33.3%	25.3%	30.1%	4.7%	3.1%
R	37.84	222	11	35.2%	25.4%	25.4%	7.8%	3.9%
MR	37.87	169	11	7.6%	34.6%	34.6%	11.5%	11.5%

Senior high reading 2005-06 F/R = free and reduced; MR = math and reading; R = reading								
SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed reading	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	37.92	269	11	29.3%	27.5%	31.0%	6.8%	3.4%
R	38.10	189	11	23.0%	28.2%	33.3%	5.1%	10.2%
R	38.32	796	11	22.7%	21.5%	34.8%	11.3%	6.3%
R	38.42	622	11	18.4%	29.0%	28.3%	15.6%	7.8%
R	38.46	273	11	22.2%	31.7%	28.5%	12.6%	1.5%
R	38.59	539	11	24.4%	22.0%	31.3%	12.7%	8.1%
R	39.34	1591	11	17.4%	24.6%	27.6%	15.8%	8.8%
R	40.26	385	11	17.6%	30.5%	32.9%	8.2%	9.4%
R	40.39	203	11	24.4%	22.0%	31.3%	12.7%	8.1%
R	40.47	215	11	43.6%	18.1%	34.5%	1.8%	0.0%
R	40.85	634	11	18.4%	23.9%	37.6%	15.7%	4.1%
R	41.79	658	11	26.5%	23.1%	32.6%	10.2%	7.4%
R	41.88	277	11	26.2%	24.5%	27.8%	0.0%	4.9%
R	42.21	154	11	40.0%	20.0%	13.3%	20.0%	0.0%
R	43.20	169	11	19.2%	42.3%	23.0%	3.8%	11.5%
R	44.57	1059	11	20.5%	26.9%	29.4%	8.3%	11.7%
R	45.08	366	11	13.4%	34.6%	30.7%	19.2%	1.9%
R	45.40	883	11	23.4%	27.3%	26.8%	9.7%	9.2%
R	45.58	520	11	16.3%	30.6%	19.0%	14.9%	8.1%
R	45.62	1563	11	19.5%	26.9%	26.2%	11.3%	9.7%
MR	47.71	568	11	30.8%	42.1%	15.0%	7.5%	3.0%
R	48.39	217	11	16.6%	33.3%	27.7%	22.2%	0.0%
MR	49.00	172	11	27.0%	48.6%	18.9%	2.7%	2.7%
R	49.04	1674	11	25.8%	29.0%	23.4%	7.1%	8.9%
R	51.86	644	11	20.2%	27.5%	28.2%	14.4%	6.5%
R	53.01	183	11	41.6%	33.3%	12.5%	8.3%	4.1%
R	64.63	229	11	14.2%	14.2%	31.4%	5.7%	2.8%

Elementary Mathematics

Table A.4 Elementary Mathematics Standard of Excellence (SOE) Data

Elementary mathematics 2005-06
F/R = free and reduced; MR = math and reading; M = math

SOE subject	School % F/R lunch	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	0.65	614	3	49.4%	32.3%	14.1%	4.0%	0.0%
MR	0.65	614	4	43.0%	24.3%	23.5%	5.6%	3.2%
MR	0.65	614	5	43.0%	18.0%	29.0%	8.0%	2.0%
MR	0.73	546	3	27.1%	34.5%	25.9%	6.1%	6.1%
MR	0.73	546	4	40.4%	30.9%	23.8%	2.3%	2.3%
MR	0.73	546	5	56.7%	16.4%	22.3%	2.9%	1.4%
MR	0.77	519	3	34.5%	28.5%	26.1%	4.7%	5.9%
MR	0.77	519	4	52.6%	26.3%	19.2%	1.7%	0.0%
MR	0.77	519	5	46.0%	33.3%	12.6%	3.1%	4.7%
MR	1.06	567	3	67.0%	24.1%	7.6%	0.0%	0.0%
MR	1.06	567	4	59.7%	31.9%	8.3%	0.0%	0.0%
MR	1.06	567	5	47.7%	31.3%	14.9%	1.4%	1.4%
MR	1.07	468	3	13.5%	22.9%	41.8%	13.5%	6.7%
MR	1.07	468	4	40.8%	36.6%	19.7%	1.4%	0.0%
MR	1.07	468	5	41.3%	32.1%	22.9%	1.1%	1.1%
MR	1.13	375	3	38.4%	34.6%	19.2%	3.8%	3.8%
MR	1.13	375	4	27.5%	37.9%	27.5%	5.1%	1.7%
MR	1.13	375	5	65.4%	20.0%	12.7%	0.0%	1.8%
MR	1.84	543	3	46.3%	46.3%	18.9%	4.2%	0.0%
MR	1.84	543	4	25.8%	28.2%	32.9%	7.0%	4.7%
MR	1.84	543	5	4.7%	30.0%	25.0%	7.5%	8.7%
MR	1.91	418	3	33.8%	30.5%	20.3%	11.8%	1.6%
MR	1.91	418	4	41.2%	28.7%	27.5%	2.5%	0.0%
MR	1.91	418	5	34.2%	30.1%	27.3%	6.8%	1.3%
MR	2.06	578	3	34.0%	29.6%	27.4%	3.2%	3.2%
MR	2.06	578	4	52.6%	31.5%	15.7%	0.0%	0.0%
MR	2.06	578	5	53.0%	27.2%	16.6%	3.0%	0.0%
MR	2.19	730	3	38.9%	24.5%	27.9%	6.7%	1.6%
MR	2.19	730	4	1.6%	31.9%	31.9%	8.1%	3.2%
MR	2.19	730	5	38.8%	38.8%	23.1%	4.1%	4.1%
MR	2.44	778	3	42.4%	24.0%	24.0%	3.2%	1.6%
MR	2.44	778	4	34.1%	32.5%	29.3%	0.7%	0.7%
MR	2.44	778	5	23.4%	35.9%	31.2%	3.9%	3.1%
MR	2.50	320	3	50.9%	15.0%	20.7%	9.4%	3.7%
MR	2.50	320	4	20.0%	37.7%	31.1%	11.1%	0.0%
MR	2.50	320	5	36.9%	43.4%	17.3%	2.1%	0.0%
MR	2.51	438	3	48.5%	33.8%	13.2%	2.9%	0.0%
MR	2.51	438	4	34.6%	38.6%	21.3%	2.6%	1.3%
MR	2.51	438	5	43.0%	32.9%	17.7%	1.2%	3.7%
MR	2.87	349	3	50.0%	40.0%	10.0%	0.0%	0.0%

Elementary mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
SOE subject	School % F/R lunch	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	2.87	349	4	52.5%	25.4%	16.9%	3.3%	1.6%
MR	2.87	349	5	57.1%	28.5%	14.2%	0.0%	0.0%
MR	3.06	589	3	25.7%	30.4%	34.2%	6.6%	1.9%
MR	3.06	589	4	26.2%	36.0%	27.8%	5.7%	3.2%
MR	3.06	589	5	21.8%	32.2%	33.3%	6.2%	5.2%
MR	3.09	453	3	35.0%	28.0%	24.5%	10.5%	1.7%
MR	3.09	453	4	48.7%	27.5%	20.0%	3.7%	0.0%
MR	3.09	453	5	34.7%	27.7%	27.7%	6.9%	2.7%
MR	3.13	416	3	36.6%	25.0%	30.0%	5.0%	3.3%
MR	3.13	416	4	23.2%	46.4%	23.2%	3.5%	1.7%
MR	3.13	416	5	43.3%	35.0%	18.3%	1.6%	1.6%
MR	3.26	675	3	46.7%	23.9%	22.8%	5.4%	1.0%
MR	3.26	675	4	41.0%	37.0%	14.0%	6.0%	2.0%
MR	3.26	675	5	58.4%	20.2%	14.6%	4.4%	2.2%
MR	3.52	597	3	40.0%	25.2%	23.1%	6.3%	3.1%
MR	3.52	597	4	36.1%	32.7%	21.0%	5.8%	3.3%
MR	3.52	597	5	13.4%	26.9%	41.3%	10.5%	7.6%
MR	3.59	474	3	31.7%	31.7%	24.3%	10.9%	1.2%
MR	3.59	474	4	38.8%	37.6%	18.8%	1.1%	3.5%
MR	3.59	474	5	48.1%	19.7%	25.9%	3.7%	2.4%
MR	3.83	574	3	36.2%	26.2%	30.0%	6.2%	1.2%
MR	3.83	574	4	44.5%	28.9%	22.8%	1.2%	2.4%
MR	3.83	574	5	49.3%	19.2%	26.5%	3.6%	1.2%
MR	3.85	494	3	27.9%	26.7%	38.3%	3.4%	3.4%
MR	3.85	494	4	48.3%	24.7%	19.1%	3.3%	3.3%
MR	3.85	494	5	32.9%	31.6%	27.8%	6.3%	0.0%
MR	4.04	371	3	55.7%	28.5%	12.8%	2.8%	0.0%
MR	4.04	371	4	56.8%	24.1%	18.9%	0.0%	0.0%
MR	4.04	371	5	76.3%	18.4%	1.3%	0.0%	1.3%
MR	4.72	508	3	33.3%	42.8%	20.6%	1.5%	1.5%
MR	4.72	508	4	30.7%	20.0%	36.9%	6.1%	6.1%
MR	4.72	508	5	57.1%	24.2%	18.5%	0.0%	0.0%
MR	4.73	444	3	26.5%	22.8%	39.7%	6.0%	4.8%
MR	4.73	444	4	32.8%	32.8%	31.5%	2.6%	0.0%
MR	4.73	444	5	48.0%	19.4%	20.7%	3.8%	6.4%
MR	4.76	378	3	47.0%	29.4%	17.6%	0.0%	0.0%
MR	4.76	378	4	45.8%	18.7%	27.0%	4.1%	2.0%
MR	4.76	378	5	40.0%	25.4%	27.2%	5.4%	0.0%
MR	4.84	475	3	48.2%	25.0%	17.8%	7.1%	0.0%
MR	4.84	475	4	52.7%	25.0%	20.8%	0.0%	1.3%
MR	4.84	475	5	49.2%	25.3%	14.9%	4.4%	4.4%
MR	4.92	528	3	55.5%	14.2%	26.9%	1.5%	0.0%
MR	4.92	528	4	41.9%	29.0%	22.5%	4.8%	1.6%
MR	4.92	528	5	36.5%	31.7%	24.3%	2.4%	4.8%

Elementary mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
SOE subject	School % F/R lunch	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	4.96	565	3	31.1%	33.3%	17.7%	10.0%	6.6%
MR	4.96	565	4	34.0%	26.0%	32.0%	7.0%	1.0%
MR	4.96	565	5	26.5%	34.1%	27.8%	5.0%	5.0%
MR	5.02	757	3	42.4%	30.9%	21.2%	3.5%	1.7%
MR	5.02	757	4	33.3%	34.3%	24.5%	5.8%	1.9%
MR	5.02	757	5	44.0%	34.4%	17.2%	3.2%	1.0%
MR	5.08	610	3	26.9%	28.2%	32.0%	7.6%	5.1%
MR	5.08	610	4	41.1%	28.8%	25.5%	1.1%	3.3%
MR	5.08	610	5	29.4%	37.1%	26.9%	2.5%	3.8%
MR	5.31	339	3	39.1%	17.3%	28.2%	15.2%	0.0%
MR	5.31	339	4	41.3%	32.7%	18.9%	3.4%	1.7%
MR	5.31	339	5	28.0%	28.0%	28.0%	12.0%	2.0%
MR	5.84	308	3	38.2%	38.2%	17.6%	0.0%	5.8%
MR	5.84	308	4	35.5%	28.8%	28.8%	6.6%	0.0%
MR	5.84	308	5	44.8%	30.6%	20.4%	0.0%	4.0%
MR	5.99	501	3	29.5%	29.5%	29.5%	5.6%	4.2%
MR	5.99	501	4	31.6%	34.6%	31.6%	1.0%	1.0%
MR	5.99	501	5	30.0%	38.8%	25.5%	4.4%	0.0%
MR	6.09	345	3	39.2%	33.3%	21.5%	1.9%	3.9%
MR	6.09	345	4	46.0%	20.0%	28.0%	2.0%	4.0%
MR	6.09	345	5	29.4%	35.2%	23.5%	5.8%	5.8%
MR	6.13	408	3	23.4%	27.6%	38.2%	8.5%	2.1%
MR	6.13	408	4	33.8%	32.2%	29.0%	1.6%	3.2%
MR	6.13	408	5	38.4%	36.5%	19.2%	3.8%	1.9%
MR	6.70	448	3	46.7%	30.6%	19.3%	3.2%	0.0%
MR	6.70	448	4	45.6%	35.0%	17.5%	1.7%	0.0%
MR	6.70	448	5	46.2%	20.3%	27.7%	3.7%	0.0%
MR	6.84	380	3	31.1%	26.6%	20.0%	15.5%	4.4%
MR	6.84	380	4	16.6%	33.3%	33.3%	12.5%	4.1%
MR	6.84	380	5	45.5%	29.4%	17.6%	4.4%	1.4%
MR	8.20	439	3	36.3%	24.2%	31.8%	7.5%	0.0%
MR	8.20	439	4	40.3%	30.6%	24.1%	1.6%	3.2%
MR	8.20	439	5	42.8%	28.5%	20.6%	6.3%	1.5%
MR	8.50	494	3	32.4%	17.5%	35.1%	10.8%	4.0%
MR	8.50	494	4	30.6%	30.6%	30.6%	1.6%	4.8%
MR	8.50	494	5	32.2%	33.8%	22.0%	8.4%	1.6%
MR	10.02	649	3	44.3%	28.8%	23.7%	1.0%	1.0%
MR	10.02	649	4	35.8%	30.8%	25.9%	2.4%	4.9%
MR	10.02	649	5	41.1%	28.8%	20.0%	5.5%	4.4%
MR	10.33	571	3	54.5%	26.1%	15.9%	2.2%	1.1%
MR	10.33	571	4	30.7%	32.0%	26.9%	7.6%	1.2%
MR	10.33	571	5	50.0%	23.3%	17.7%	4.4%	2.2%
MR	10.49	467	3	56.9%	30.3%	12.6%	0.0%	0.0%
MR	10.49	467	4	53.0%	33.7%	9.6%	1.2%	0.0%

Elementary mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
SOE subject	School % F/R lunch	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	10.49	467	5	47.1%	27.5%	22.9%	1.1%	0.0%
MR	10.70	271	3	35.0%	30.0%	30.0%	2.5%	2.5%
MR	10.70	271	4	60.4%	25.0%	14.5%	0.0%	0.0%
MR	10.70	271	5	59.3%	18.7%	15.6%	6.2%	0.0%
M	11.00	291	3	21.0%	28.9%	28.9%	10.5%	7.8%
M	11.00	291	4	39.2%	25.0%	25.0%	7.1%	3.5%
M	11.00	291	5	40.4%	23.4%	23.4%	10.6%	2.1%
MR	11.34	291	3	59.2%	29.6%	3.7%	0.0%	0.0%
MR	11.34	291	4	45.8%	22.9%	27.0%	0.0%	4.1%
MR	11.34	291	5	25.5%	23.2%	32.5%	11.6%	6.9%
MR	11.38	334	3	46.8%	37.5%	15.6%	0.0%	0.0%
MR	11.38	334	4	29.0%	30.9%	34.5%	1.8%	3.6%
MR	11.68	394	3	64.6%	15.3%	18.4%	0.0%	1.5%
MR	11.68	394	4	46.2%	37.0%	12.9%	3.7%	0.0%
MR	11.68	394	5	52.0%	27.0%	14.5%	4.1%	2.0%
MR	12.06	481	3	32.3%	36.9%	23.0%	3.0%	3.0%
MR	12.06	481	4	62.5%	23.6%	8.3%	4.1%	1.3%
MR	12.06	481	5	52.0%	20.5%	23.2%	1.3%	2.7%
MR	12.38	404	3	23.7%	37.2%	28.8%	8.4%	1.6%
MR	12.38	404	4	47.5%	27.8%	24.5%	0.0%	0.0%
MR	12.38	404	5	16.6%	28.7%	39.3%	6.0%	9.0%
MR	12.50	648	3	35.2%	31.3%	23.5%	4.9%	4.9%
MR	12.50	648	4	36.3%	21.2%	33.3%	5.0%	3.0%
MR	12.50	648	5	44.9%	24.7%	23.5%	5.6%	1.1%
MR	12.66	379	3	40.9%	29.5%	22.7%	6.8%	0.0%
MR	12.66	379	4	27.6%	25.5%	34.0%	10.6%	2.1%
MR	12.66	379	5	42.5%	31.4%	22.2%	3.7%	0.0%
MR	12.73	330	3	35.5%	28.8%	28.8%	4.4%	2.2%
MR	12.73	330	4	12.5%	18.7%	46.8%	9.3%	12.5%
MR	12.73	330	5	51.8%	18.5%	29.6%	0.0%	0.0%
MR	13.64	154	3	17.2%	31.0%	44.8%	0.0%	6.8%
MR	13.64	154	4	29.1%	50.0%	16.6%	4.1%	0.0%
MR	13.64	154	5	30.4%	30.4%	34.7%	4.3%	0.0%
MR	13.67	395	3	49.0%	32.7%	18.1%	0.0%	0.0%
MR	13.67	395	4	33.3%	33.3%	25.0%	8.3%	0.0%
MR	13.67	395	5	25.0%	28.8%	26.9%	7.6%	11.5%
MR	13.88	677	3	40.1%	28.4%	24.0%	4.3%	1.4%
MR	13.88	677	4	36.2%	27.5%	31.4%	2.3%	2.3%
MR	13.96	394	3	60.3%	22.2%	14.2%	1.5%	0.0%
MR	13.96	394	4	55.1%	28.5%	12.2%	2.0%	2.0%
MR	13.96	394	5	42.3%	27.1%	18.6%	5.0%	3.3%
M	14.36	404	3	35.0%	42.1%	15.7%	3.5%	3.5%
M	14.36	404	4	42.5%	27.6%	14.8%	6.3%	8.5%
M	14.36	404	5	28.2%	25.6%	23.0%	17.9%	5.1%

Elementary mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
SOE subject	School % F/R lunch	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	14.58	192	3	45.4%	27.2%	13.6%	9.0%	4.5%
MR	14.58	192	4	61.5%	23.0%	15.3%	0.0%	0.0%
MR	14.58	192	5	21.6%	40.5%	32.4%	5.4%	0.0%
MR	14.78	230	3	32.9%	35.3%	26.8%	3.6%	1.2%
MR	14.78	230	4	38.4%	38.4%	16.9%	3.0%	1.5%
MR	14.78	230	5	60.9%	22.9%	14.9%	0.0%	0.0%
MR	15.24	361	3	38.5%	36.8%	19.2%	1.7%	3.5%
MR	15.24	361	4	22.7%	27.2%	38.6%	6.8%	4.5%
MR	15.24	361	5	26.5%	24.4%	38.7%	2.0%	4.0%
MR	15.65	345	3	36.8%	36.8%	26.3%	0.0%	0.0%
MR	15.65	345	4	17.9%	33.3%	30.7%	15.3%	2.5%
MR	15.65	345	5	41.3%	27.5%	20.6%	6.8%	3.4%
MR	15.77	222	3	44.0%	36.0%	20.0%	0.0%	0.0%
MR	15.77	222	4	68.9%	13.7%	13.7%	3.4%	0.0%
MR	15.77	222	5	48.2%	24.1%	20.6%	6.8%	0.0%
MR	16.03	287	3	51.4%	34.2%	14.2%	0.0%	0.0%
MR	16.03	287	4	40.4%	30.9%	26.1%	2.3%	0.0%
MR	16.03	287	5	31.4%	40.0%	25.7%	2.8%	0.0%
MR	16.86	255	3	46.1%	35.8%	15.3%	2.5%	0.0%
MR	16.86	255	4	58.1%	23.2%	11.6%	0.0%	2.3%
MR	16.86	255	5	74.4%	16.2%	6.9%	0.0%	2.3%
MR	17.09	474	3	38.5%	40.0%	20.0%	0.0%	1.4%
MR	17.09	474	4	15.7%	18.5%	37.1%	15.7%	12.8%
MR	17.09	474	5	27.5%	25.8%	36.2%	10.3%	0.0%
MR	17.19	477	3	28.1%	25.0%	29.6%	12.5%	3.1%
MR	17.19	477	4	32.9%	30.3%	29.1%	6.3%	0.0%
MR	17.19	477	5	40.9%	24.2%	22.7%	4.5%	7.5%
MR	17.22	302	3	37.7%	17.7%	35.5%	6.6%	2.2%
MR	17.22	302	4	34.8%	20.9%	41.8%	0.0%	2.3%
MR	17.22	302	5	40.3%	26.3%	21.0%	7.0%	5.2%
MR	17.29	347	5	29.3%	31.6%	27.5%	7.4%	2.8%
MR	17.82	477	3	32.6%	42.8%	20.4%	3.0%	1.0%
MR	17.82	477	4	25.2%	28.4%	33.6%	9.4%	3.1%
MR	18.80	351	5	49.1%	22.7%	19.7%	5.3%	2.9%
MR	18.87	604	3	37.8%	28.3%	27.0%	5.4%	0.0%
MR	18.87	604	4	34.2%	23.6%	30.2%	5.2%	5.2%
MR	18.87	604	5	46.4%	21.2%	18.1%	5.0%	7.0%
MR	19.77	263	3	38.0%	30.1%	26.9%	3.1%	1.5%
MR	19.77	263	4	40.4%	25.5%	25.5%	4.2%	4.2%
MR	20.00	290	3	52.2%	25.0%	18.1%	4.5%	0.0%
MR	20.00	355	3	55.1%	37.9%	6.8%	0.0%	0.0%
MR	20.00	290	4	50.0%	13.4%	26.9%	3.8%	5.7%
MR	20.00	355	4	45.0%	28.1%	22.5%	1.4%	2.8%
MR	20.00	290	5	32.7%	20.0%	36.3%	9.0%	0.0%

Elementary mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
SOE subject	School % F/R lunch	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
M	20.92	325	3	32.1%	14.2%	28.5%	25.0%	0.0%
M	20.92	325	4	39.3%	30.3%	27.2%	3.0%	0.0%
M	20.92	325	5	34.2%	25.7%	31.4%	8.5%	0.0%
MR	22.02	336	3	34.0%	27.6%	17.0%	21.2%	0.0%
MR	22.02	336	4	17.3%	40.3%	32.6%	5.7%	1.9%
MR	22.02	336	5	43.1%	23.5%	21.5%	3.9%	5.8%
MR	22.13	244	3	22.2%	36.1%	33.3%	5.5%	2.7%
MR	22.13	244	4	27.7%	30.5%	36.1%	5.5%	0.0%
MR	22.13	244	5	45.2%	30.9%	21.4%	2.3%	0.0%
MR	22.71	251	5	27.4%	22.5%	35.4%	0.0%	8.0%
MR	23.43	286	3	26.8%	21.9%	36.5%	7.3%	4.8%
MR	23.43	286	4	28.8%	35.5%	24.4%	2.2%	8.8%
MR	23.43	286	5	38.8%	19.4%	25.0%	11.1%	2.7%
MR	23.69	574	5	29.0%	31.0%	29.6%	5.8%	3.7%
MR	24.19	401	3	51.0%	23.4%	23.4%	2.1%	0.0%
MR	24.19	401	4	40.0%	28.0%	28.0%	4.0%	0.0%
MR	24.19	401	5	30.0%	35.0%	33.3%	1.6%	0.0%
MR	24.19	496	3	47.3%	21.5%	24.7%	3.2%	2.1%
MR	24.19	496	4	27.8%	25.0%	30.7%	8.6%	7.6%
MR	24.35	193	5	34.3%	28.1%	34.3%	2.0%	1.0%
MR	24.43	348	3	50.9%	27.2%	18.1%	3.6%	0.0%
MR	24.43	348	4	32.0%	36.0%	22.0%	6.0%	4.0%
MR	24.43	348	5	44.7%	31.3%	17.9%	4.4%	1.4%
MR	25.07	363	3	37.2%	31.3%	27.4%	1.9%	1.9%
MR	25.07	363	4	43.6%	40.0%	16.3%	0.0%	0.0%
MR	25.07	363	5	18.9%	25.8%	46.5%	6.8%	1.7%
M	25.15	171	3	25.5%	34.0%	31.9%	4.2%	4.2%
MR	25.36	351	3	27.7%	25.9%	24.0%	9.2%	12.9%
MR	25.36	351	4	45.9%	18.9%	27.0%	2.7%	5.4%
MR	25.36	351	5	16.9%	24.5%	33.9%	16.9%	7.5%
MR	25.66	265	3	41.5%	35.3%	16.9%	3.0%	3.0%
MR	25.78	384	3	50.0%	28.1%	14.0%	7.8%	0.0%
MR	25.78	384	4	48.0%	22.0%	30.0%	0.0%	0.0%
MR	25.90	278	3	60.4%	20.9%	11.1%	3.7%	0.0%
MR	25.90	278	4	23.8%	32.3%	30.4%	7.6%	4.7%
MR	25.90	278	5	55.0%	27.0%	14.0%	0.0%	0.0%
MR	26.07	349	3	59.6%	31.5%	7.0%	0.0%	1.7%
MR	26.07	349	4	44.0%	48.0%	8.0%	0.0%	0.0%
MR	26.07	349	5	39.6%	47.1%	13.2%	0.0%	0.0%
MR	26.11	429	3	55.2%	23.8%	14.9%	4.4%	1.4%
MR	26.11	429	4	40.5%	25.6%	24.3%	5.4%	2.7%
MR	26.11	429	5	53.4%	28.7%	15.0%	0.0%	2.7%
MR	26.50	234	3	72.7%	22.7%	0.0%	4.5%	0.0%
MR	26.50	234	4	17.0%	26.8%	41.4%	7.3%	7.3%

Elementary mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
SOE subject	School % F/R lunch	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	26.50	234	5	28.2%	33.3%	28.2%	10.2%	0.0%
MR	26.67	315	3	61.5%	26.9%	11.5%	0.0%	0.0%
MR	26.67	315	4	24.0%	28.0%	36.0%	6.0%	6.0%
MR	26.67	315	5	29.8%	24.5%	36.8%	7.0%	0.0%
MR	26.71	438	3	57.1%	29.8%	10.3%	1.2%	1.2%
MR	26.71	438	4	41.7%	34.1%	22.7%	0.0%	0.0%
MR	26.76	304	3	64.5%	16.1%	16.1%	3.2%	0.0%
MR	26.76	304	4	34.2%	17.1%	34.2%	14.2%	0.0%
MR	26.76	304	5	28.5%	25.7%	37.1%	8.5%	0.0%
MR	26.84	190	3	50.0%	30.0%	20.0%	0.0%	0.0%
MR	26.84	190	4	50.0%	35.2%	14.7%	0.0%	0.0%
MR	26.84	190	5	20.0%	52.0%	24.0%	4.0%	0.0%
MR	27.74	310	3	53.8%	28.2%	12.8%	2.5%	0.0%
MR	27.74	310	4	22.0%	24.0%	44.0%	8.0%	2.0%
MR	27.74	310	5	30.6%	24.1%	29.0%	8.0%	8.0%
M	27.84	485	3	24.6%	26.1%	36.9%	7.6%	4.6%
M	27.84	485	4	24.6%	18.8%	30.4%	13.0%	7.2%
M	27.84	485	5	25.3%	28.9%	30.1%	6.0%	6.0%
MR	27.86	280	3	44.4%	25.9%	22.2%	7.4%	0.0%
MR	27.86	280	4	7.8%	31.5%	47.3%	7.8%	5.2%
MR	27.86	280	5	37.0%	44.4%	14.8%	3.7%	0.0%
MR	28.29	403	3	13.9%	37.9%	30.3%	7.5%	8.8%
MR	28.29	403	4	38.3%	24.6%	30.1%	4.1%	1.3%
MR	28.29	403	5	37.7%	24.5%	27.8%	4.9%	4.9%
MR	28.52	526	3	27.7%	25.0%	36.1%	6.9%	4.1%
MR	28.52	526	4	32.0%	26.6%	33.3%	5.3%	1.3%
MR	28.52	526	5	43.4%	26.0%	26.0%	2.8%	1.4%
MR	29.02	379	3	43.9%	31.7%	21.9%	2.4%	0.0%
MR	29.02	379	4	23.4%	25.5%	38.2%	6.3%	4.2%
MR	29.02	379	5	30.0%	10.0%	42.5%	10.0%	7.5%
MR	29.33	150	4	34.2%	25.7%	31.4%	8.5%	0.0%
MR	29.33	150	5	38.8%	27.7%	33.3%	0.0%	0.0%
MR	29.71	175	3	50.0%	30.0%	15.0%	0.0%	0.0%
MR	29.71	175	4	28.5%	21.4%	39.2%	7.1%	3.5%
MR	29.71	175	5	55.5%	27.7%	16.6%	0.0%	0.0%
M	30.00	200	3	40.0%	14.2%	37.1%	2.8%	2.8%
M	30.00	200	4	11.5%	46.1%	26.9%	3.8%	7.6%
M	30.00	200	5	27.7%	38.8%	27.7%	5.5%	0.0%
MR	30.04	273	3	50.0%	31.5%	18.4%	0.0%	0.0%
MR	30.04	273	4	46.9%	24.4%	24.4%	4.0%	0.0%
MR	30.04	273	5	46.9%	28.5%	24.4%	0.0%	0.0%
MR	30.21	331	3	38.2%	14.7%	26.4%	11.7%	5.8%
MR	30.21	331	4	20.0%	37.1%	28.5%	5.7%	5.7%
MR	30.21	331	5	36.8%	15.7%	34.2%	7.8%	0.0%

Elementary mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
SOE subject	School % F/R lunch	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	30.41	411	3	11.1%	26.6%	35.5%	15.5%	6.6%
MR	30.41	411	4	30.0%	27.5%	32.5%	7.5%	2.5%
MR	30.41	411	5	35.5%	20.0%	35.5%	2.2%	4.4%
M	30.42	401	3	20.0%	33.3%	37.7%	8.8%	0.0%
M	30.42	401	4	22.6%	24.5%	37.7%	7.5%	7.5%
M	30.42	401	5	19.6%	29.5%	37.7%	9.8%	3.2%
M	30.61	379	3	23.8%	30.1%	39.6%	1.5%	4.7%
M	30.61	379	4	21.2%	23.4%	42.5%	6.3%	6.3%
M	30.61	379	5	33.9%	30.1%	26.4%	3.7%	3.7%
MR	31.05	306	3	57.1%	30.6%	12.2%	0.0%	0.0%
MR	31.05	306	4	36.7%	42.8%	20.4%	0.0%	0.0%
MR	31.05	306	5	17.7%	33.3%	37.7%	2.2%	6.6%
MR	32.06	340	3	48.4%	25.5%	20.9%	2.3%	2.3%
MR	32.06	340	4	40.0%	28.8%	31.1%	0.0%	0.0%
MR	32.06	340	5	24.4%	30.6%	32.6%	6.1%	6.1%
MR	32.41	324	3	78.9%	13.1%	5.2%	2.6%	0.0%
MR	32.41	324	4	40.4%	14.8%	36.1%	4.2%	4.2%
MR	32.41	324	5	17.8%	28.5%	44.6%	7.1%	1.7%
MR	32.75	403	3	36.5%	26.9%	25.0%	5.7%	5.7%
MR	32.75	403	4	25.3%	20.6%	38.0%	7.9%	6.3%
MR	32.75	403	5	22.2%	15.5%	33.3%	20.0%	8.8%
MR	32.91	316	3	35.0%	28.0%	19.2%	10.5%	7.0%
MR	32.91	316	4	40.4%	38.0%	16.6%	4.7%	0.0%
MR	32.91	316	5	36.5%	30.7%	21.1%	5.7%	5.7%
MR	32.95	258	3	77.1%	14.2%	5.7%	2.8%	0.0%
MR	32.95	258	4	36.3%	30.3%	30.3%	3.0%	0.0%
MR	32.95	258	5	33.3%	31.2%	20.8%	8.3%	6.2%
MR	33.51	194	3	38.0%	33.3%	23.8%	4.7%	0.0%
MR	33.51	194	4	28.1%	21.8%	43.7%	3.1%	3.1%
MR	33.51	194	5	20.8%	50.0%	29.1%	0.0%	0.0%
M	33.53	173	3	48.4%	24.2%	19.0%	4.7%	0.0%
M	34.01	247	3	24.4%	28.8%	26.6%	13.3%	6.6%
M	34.01	247	4	24.4%	46.6%	15.5%	8.8%	4.4%
M	34.01	247	5	29.7%	27.0%	35.1%	5.4%	2.7%
MR	34.62	260	3	48.5%	37.1%	14.2%	0.0%	0.0%
MR	34.62	260	4	18.1%	33.3%	33.3%	12.1%	3.0%
MR	34.62	260	5	24.2%	33.3%	30.3%	9.0%	3.0%
MR	34.95	495	3	15.0%	33.7%	36.2%	10.0%	1.2%
MR	34.95	495	4	29.4%	26.4%	30.8%	8.8%	1.4%
MR	34.95	495	5	42.3%	21.7%	28.2%	3.8%	2.5%
MR	35.71	182	3	18.1%	27.2%	45.4%	0.0%	0.0%
MR	35.71	182	4	11.1%	27.7%	50.0%	5.5%	0.0%
MR	35.71	182	5	18.1%	31.8%	40.9%	0.0%	0.0%
M	36.34	388	3	32.6%	26.5%	32.6%	4.0%	4.0%

Elementary mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
SOE subject	School % F/R lunch	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
M	36.34	388	4	25.7%	31.8%	30.3%	7.5%	4.5%
M	36.34	388	5	21.0%	35.0%	31.5%	8.7%	1.7%
MR	36.96	276	4	31.8%	31.8%	25.0%	4.5%	4.5%
MR	36.96	276	5	32.6%	38.7%	18.3%	0.0%	0.0%
M	37.11	194	3	74.0%	18.5%	41.6%	4.1%	4.1%
M	37.11	194	4	31.9%	38.2%	44.8%	0.0%	6.8%
MR	37.86	243	3	54.5%	24.2%	15.1%	0.0%	0.0%
MR	37.86	243	4	16.6%	29.1%	41.6%	6.2%	4.1%
MR	37.86	243	5	47.5%	27.5%	25.0%	0.0%	0.0%
MR	38.02	363	3	28.8%	28.8%	32.6%	7.6%	1.9%
MR	38.02	363	4	34.6%	36.7%	26.5%	0.0%	2.0%
MR	38.02	363	5	32.6%	30.4%	36.9%	0.0%	0.0%
MR	38.35	206	5	30.7%	30.7%	30.7%	3.8%	1.9%
MR	38.64	339	3	52.2%	31.8%	13.6%	0.0%	0.0%
MR	38.64	339	4	39.0%	48.7%	9.7%	0.0%	0.0%
MR	38.64	339	5	52.2%	31.8%	9.0%	0.0%	4.5%
M	39.13	161	3	44.2%	32.6%	16.6%	4.1%	0.0%
M	39.13	161	4	21.1%	25.0%	34.7%	4.3%	0.0%
M	39.13	161	5	28.3%	36.6%	30.0%	10.0%	0.0%
MR	39.42	378	3	44.6%	36.1%	12.7%	6.3%	0.0%
MR	39.42	378	4	30.6%	20.4%	38.7%	6.1%	4.0%
MR	39.42	378	5	33.3%	26.6%	37.7%	0.0%	0.0%
MR	39.69	383	3	37.7%	28.3%	28.3%	5.6%	0.0%
MR	39.69	383	4	28.3%	31.6%	30.0%	5.0%	3.3%
MR	39.69	383	5	43.9%	28.7%	22.7%	3.0%	1.5%
MR	39.83	231	3	27.2%	27.2%	27.2%	10.9%	3.6%
MR	39.92	496	3	12.7%	27.2%	25.4%	20.0%	14.5%
MR	39.92	496	4	11.1%	26.6%	40.0%	8.8%	13.3%
MR	39.92	496	5	14.2%	17.8%	41.0%	16.0%	10.7%
MR	39.93	278	3	37.5%	25.0%	22.5%	10.0%	2.5%
MR	39.93	278	4	45.4%	27.2%	24.2%	0.0%	3.0%
MR	39.93	278	5	35.4%	25.8%	35.4%	3.2%	0.0%
MR	40.91	242	3	52.6%	28.9%	10.5%	5.2%	0.0%
MR	40.91	242	4	38.2%	29.4%	17.6%	5.8%	2.9%
MR	40.91	242	5	65.8%	14.6%	12.1%	2.4%	4.8%
MR	41.04	212	3	57.1%	28.5%	9.5%	0.0%	4.7%
MR	41.04	212	4	42.3%	34.6%	23.0%	0.0%	0.0%
MR	41.04	212	5	9.0%	31.8%	45.4%	13.6%	0.0%
MR	41.05	285	3	43.9%	29.2%	21.9%	4.8%	0.0%
MR	41.05	285	4	26.6%	31.1%	33.3%	2.2%	2.2%
MR	41.05	285	5	46.5%	25.5%	20.9%	0.0%	2.3%
M	41.06	207	3	52.5%	27.5%	17.5%	0.0%	0.0%
M	41.06	207	4	24.1%	44.8%	20.6%	3.4%	6.8%
M	41.06	207	5	18.6%	23.2%	34.8%	16.2%	6.9%

Elementary mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
SOE subject	School % F/R lunch	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
M	41.78	304	3	44.4%	36.1%	16.6%	0.0%	0.0%
M	41.78	304	4	26.8%	19.5%	41.4%	4.8%	4.8%
M	41.78	304	5	15.3%	30.7%	35.8%	12.8%	5.1%
MR	41.81	354	3	66.6%	20.5%	10.2%	0.0%	0.0%
MR	41.81	354	4	40.3%	33.3%	24.5%	0.0%	1.7%
MR	41.81	354	5	32.2%	27.1%	35.5%	3.3%	1.6%
MR	41.96	224	3	32.2%	38.7%	22.5%	0.0%	0.0%
MR	41.96	224	4	76.0%	8.0%	12.0%	4.0%	0.0%
MR	41.96	224	5	41.6%	41.6%	16.6%	0.0%	0.0%
MR	42.21	526	3	34.6%	34.6%	25.6%	5.1%	0.0%
MR	42.21	526	4	32.0%	30.7%	30.7%	3.8%	2.5%
MR	42.21	526	5	15.0%	38.7%	40.8%	2.1%	3.2%
M	42.35	174	3	0.0%	14.2%	71.4%	9.5%	4.7%
M	42.35	174	4	40.6%	37.5%	21.8%	0.0%	0.0%
M	42.35	174	5	26.6%	40.0%	26.6%	0.0%	6.6%
MR	42.35	340	3	23.0%	36.5%	34.6%	1.9%	3.8%
MR	42.35	340	4	37.2%	20.9%	30.2%	2.3%	9.3%
MR	42.35	340	5	43.4%	21.7%	26.0%	4.3%	2.1%
MR	42.73	227	3	47.2%	27.7%	16.6%	5.5%	2.7%
MR	42.73	227	4	21.8%	29.0%	34.5%	9.0%	3.6%
M	43.24	296	3	37.8%	28.7%	19.6%	7.5%	3.0%
MR	43.65	323	3	34.2%	23.6%	31.5%	7.8%	2.6%
MR	43.65	323	4	36.6%	33.3%	26.6%	0.0%	3.3%
MR	43.65	323	5	23.6%	28.9%	39.4%	2.6%	5.2%
M	43.65	417	3	36.5%	15.3%	28.8%	13.4%	5.7%
M	43.65	417	4	28.0%	22.0%	32.0%	12.0%	6.0%
M	43.65	417	5	36.3%	29.0%	29.0%	5.4%	0.0%
MR	44.00	150	3	35.0%	25.0%	30.0%	10.0%	0.0%
MR	44.00	150	4	18.1%	45.4%	36.3%	0.0%	0.0%
MR	44.00	150	5	45.0%	30.0%	20.0%	5.0%	0.0%
M	44.70	481	3	19.6%	37.5%	28.5%	7.1%	5.3%
M	44.70	481	4	37.5%	26.7%	26.7%	3.5%	3.5%
MR	44.53	265	5	21.6%	25.0%	40.0%	10.0%	3.3%
M	45.22	502	3	15.3%	27.6%	36.9%	9.2%	10.7%
M	45.22	502	4	27.9%	32.3%	32.3%	5.8%	1.4%
M	45.22	502	5	34.4%	34.4%	24.1%	3.4%	3.4%
MR	45.37	205	3	17.8%	25.0%	35.7%	10.7%	3.5%
MR	45.37	205	4	45.4%	36.3%	18.1%	0.0%	0.0%
MR	45.37	205	5	41.9%	29.0%	25.8%	0.0%	3.2%
MR	45.85	253	3	72.9%	18.7%	6.2%	0.0%	0.0%
MR	45.85	253	4	80.0%	17.7%	2.2%	0.0%	0.0%
MR	45.85	253	5	77.1%	17.5%	5.2%	0.0%	0.0%
M	46.06	434	3	29.6%	25.0%	29.6%	7.8%	6.2%
M	46.06	434	4	41.2%	14.2%	33.3%	4.7%	4.7%

Elementary mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
SOE subject	School % F/R lunch	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
M	46.06	434	5	29.2%	33.8%	24.6%	9.2%	3.0%
MR	46.70	227	3	53.4%	25.5%	20.9%	0.0%	0.0%
MR	46.70	227	4	56.6%	20.0%	13.3%	3.3%	0.0%
MR	46.70	227	5	37.5%	32.5%	25.0%	5.0%	0.0%
MR	46.72	351	3	43.4%	30.4%	17.3%	4.3%	2.1%
MR	46.72	351	4	50.0%	36.8%	7.8%	2.6%	2.6%
MR	46.72	351	5	12.1%	19.5%	39.0%	17.0%	12.1%
MR	46.78	233	3	22.2%	47.2%	13.8%	11.1%	5.5%
MR	46.78	233	4	40.6%	21.8%	25.0%	9.3%	0.0%
MR	46.78	233	5	29.1%	20.8%	41.6%	8.3%	0.0%
MR	47.26	237	3	25.7%	28.5%	40.0%	2.8%	0.0%
MR	47.26	237	4	20.5%	48.7%	25.6%	0.0%	0.0%
MR	47.26	237	5	25.4%	47.0%	23.5%	3.9%	0.0%
MR	47.37	247	3	50.0%	36.8%	10.5%	2.6%	0.0%
MR	47.37	247	4	52.1%	34.7%	13.0%	0.0%	0.0%
MR	47.37	247	5	21.9%	26.8%	39.0%	12.1%	0.0%
MR	47.60	208	3	40.0%	24.0%	28.0%	0.0%	4.0%
MR	47.60	208	4	43.3%	20.0%	33.3%	3.3%	0.0%
MR	47.60	208	5	27.7%	41.6%	19.4%	8.3%	0.0%
MR	48.00	150	3	45.4%	40.9%	13.6%	0.0%	0.0%
MR	48.00	150	4	33.3%	40.0%	20.0%	6.6%	0.0%
MR	48.00	150	5	29.1%	33.3%	37.5%	0.0%	0.0%
MR	48.21	195	3	23.8%	52.3%	19.0%	0.0%	2.3%
M	48.80	166	3	26.4%	26.4%	29.4%	8.8%	0.0%
M	48.80	166	4	27.7%	27.7%	33.3%	11.1%	0.0%
M	48.80	166	5	52.0%	28.0%	12.0%	4.0%	0.0%
MR	48.81	293	3	75.0%	7.1%	7.1%	0.0%	10.7%
MR	48.81	293	4	40.8%	20.4%	26.5%	6.1%	2.0%
MR	48.81	293	5	55.2%	28.9%	7.8%	5.2%	2.6%
MR	49.08	163	3	88.2%	5.8%	5.8%	0.0%	0.0%
MR	49.08	163	4	58.8%	29.4%	0.0%	11.7%	0.0%
MR	49.08	163	5	77.7%	18.5%	3.7%	0.0%	0.0%
MR	49.67	300	3	36.3%	33.3%	15.1%	9.0%	6.0%
MR	49.67	300	4	34.0%	25.5%	34.0%	2.1%	4.2%
MR	49.67	300	5	23.0%	12.8%	41.0%	17.9%	5.1%
MR	49.77	217	3	30.4%	47.8%	21.7%	0.0%	0.0%
MR	49.77	217	4	22.8%	37.1%	37.1%	2.8%	0.0%
MR	49.77	217	5	42.3%	26.9%	26.9%	0.0%	3.8%
M	49.85	335	3	33.8%	32.2%	32.2%	3.3%	0.0%
M	49.85	335	4	23.4%	34.0%	34.0%	6.3%	2.1%
M	49.85	335	5	53.0%	30.6%	10.2%	6.1%	0.0%
MR	50.60	334	3	39.4%	42.1%	18.4%	0.0%	0.0%
MR	50.60	334	4	27.0%	31.2%	35.4%	6.2%	0.0%
MR	50.60	334	5	52.2%	31.8%	15.9%	0.0%	0.0%

Elementary mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
SOE subject	School % F/R lunch	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	50.63	237	3	71.4%	21.4%	2.3%	0.0%	0.0%
MR	50.63	237	4	65.7%	28.9%	5.2%	0.0%	0.0%
MR	50.63	237	5	75.6%	19.5%	4.8%	0.0%	0.0%
MR	51.58	349	3	38.0%	28.5%	23.8%	4.7%	4.7%
MR	51.58	349	4	20.0%	30.0%	35.0%	8.3%	6.6%
MR	51.58	349	5	52.2%	20.4%	20.4%	4.5%	2.2%
MR	51.84	299	3	46.8%	37.5%	12.5%	3.1%	0.0%
MR	51.84	299	4	25.6%	46.1%	25.6%	2.5%	0.0%
MR	51.84	299	5	37.0%	44.4%	18.5%	0.0%	0.0%
M	51.88	239	3	50.0%	28.5%	21.4%	0.0%	0.0%
M	51.88	239	4	57.5%	15.1%	21.2%	3.0%	0.0%
M	51.88	239	5	9.3%	23.2%	32.5%	30.2%	4.6%
M	53.14	318	3	38.0%	28.5%	23.8%	9.5%	0.0%
M	53.15	254	3	40.4%	25.5%	23.4%	8.5%	2.1%
M	53.15	254	4	23.5%	27.4%	33.3%	11.7%	3.9%
MR	53.63	289	3	50.0%	26.6%	6.6%	13.3%	0.0%
MR	53.63	289	4	27.0%	27.0%	29.7%	10.8%	5.4%
MR	53.63	289	5	57.1%	32.1%	10.7%	0.0%	0.0%
MR	54.02	348	3	35.8%	34.3%	23.8%	5.9%	0.0%
MR	54.02	348	4	33.8%	33.8%	26.4%	4.4%	1.4%
MR	54.50	309	3	35.4%	32.2%	32.2%	0.0%	0.0%
MR	54.50	309	4	23.0%	42.3%	30.7%	0.0%	0.0%
MR	54.50	309	5	45.8%	20.8%	25.0%	4.1%	4.1%
MR	54.60	163	3	44.4%	22.2%	27.7%	0.0%	0.0%
MR	54.60	163	4	14.2%	28.5%	42.8%	0.0%	14.2%
MR	54.60	163	5	28.5%	47.6%	19.0%	4.7%	0.0%
M	54.71	435	3	33.3%	31.7%	26.9%	4.7%	3.1%
M	54.71	435	4	28.3%	36.4%	28.3%	4.0%	2.7%
M	54.71	435	5	22.2%	23.8%	38.0%	14.2%	0.0%
M	55.50	200	3	59.3%	34.3%	0.0%	6.2%	0.0%
MR	57.57	304	3	28.5%	16.6%	40.4%	11.9%	2.3%
MR	57.57	304	4	40.5%	24.3%	32.4%	0.0%	2.7%
MR	57.57	304	5	25.6%	38.4%	30.7%	0.0%	2.5%
MR	58.66	179	3	67.8%	25.0%	7.1%	0.0%	0.0%
MR	58.66	179	4	47.3%	31.5%	21.0%	0.0%	0.0%
MR	58.66	179	5	23.5%	52.9%	17.6%	0.0%	0.0%
M	59.93	277	3	25.0%	35.7%	21.4%	8.9%	7.1%
M	59.93	277	4	34.8%	20.9%	37.2%	6.9%	0.0%
MR	61.19	438	3	37.3%	27.4%	20.8%	5.4%	4.3%
MR	61.43	433	3	46.0%	36.0%	14.0%	2.0%	0.0%
MR	61.43	433	4	41.5%	30.1%	18.8%	3.7%	5.6%
MR	61.43	433	5	51.6%	25.8%	19.3%	0.0%	3.2%
MR	61.67	180	3	24.1%	44.8%	27.5%	0.0%	3.4%
MR	61.67	180	4	51.3%	29.7%	16.2%	0.0%	2.7%

Elementary mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
SOE subject	School % F/R lunch	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	61.67	180	5	41.3%	20.6%	31.0%	3.4%	0.0%
MR	61.90	210	3	36.0%	32.0%	28.0%	0.0%	0.0%
MR	61.90	210	4	37.5%	16.6%	33.3%	8.3%	4.1%
MR	61.90	210	5	34.6%	26.9%	26.9%	7.6%	0.0%
MR	62.37	388	3	40.2%	20.7%	28.5%	5.1%	5.1%
MR	62.37	388	4	56.4%	20.5%	10.2%	2.5%	10.2%
MR	62.37	388	5	45.0%	23.3%	26.6%	3.3%	1.6%
MR	66.04	371	3	47.9%	31.2%	12.5%	6.2%	2.0%
MR	66.04	371	4	29.2%	41.4%	24.3%	4.8%	0.0%
MR	66.04	371	5	27.9%	20.9%	34.8%	11.6%	2.3%
MR	66.67	162	3	39.6%	32.7%	18.9%	3.4%	1.7%
MR	66.67	162	4	14.8%	31.4%	37.0%	3.7%	7.4%
MR	66.67	162	5	24.5%	32.0%	28.3%	11.3%	1.8%
M	66.79	265	3	55.1%	31.0%	10.3%	3.4%	0.0%
M	66.79	265	4	3.0%	18.1%	45.4%	18.1%	9.0%
M	66.79	265	5	15.6%	37.5%	34.3%	6.2%	6.2%
M	68.31	243	3	29.2%	14.6%	41.4%	9.7%	2.4%
M	68.31	243	4	24.2%	30.3%	42.4%	3.0%	0.0%
MR	70.06	167	3	50.0%	15.0%	25.0%	5.0%	5.0%
MR	70.06	167	4	32.0%	20.0%	32.0%	12.0%	0.0%
MR	70.06	167	5	26.0%	26.0%	34.7%	4.3%	8.6%
M	70.51	312	3	52.3%	14.2%	19.0%	4.7%	9.5%
M	70.51	312	4	27.7%	22.2%	38.8%	11.1%	0.0%
M	70.51	312	5	16.0%	24.0%	52.0%	4.0%	4.0%
M	70.72	222	3	40.0%	22.8%	37.1%	0.0%	0.0%
M	70.72	222	4	17.0%	21.9%	43.9%	9.7%	4.8%
M	70.72	222	5	24.3%	40.5%	24.3%	5.4%	5.4%
MR	71.21	264	3	29.4%	38.2%	29.4%	0.0%	0.0%
MR	71.21	264	4	27.0%	45.9%	18.9%	2.7%	0.0%
MR	71.21	264	5	29.2%	24.3%	41.4%	4.8%	0.0%
M	72.97	407	3	27.0%	28.3%	24.3%	12.1%	8.1%
M	72.97	407	4	27.1%	38.9%	27.1%	3.3%	3.3%
M	72.97	407	5	26.2%	29.5%	29.5%	9.8%	4.9%
M	76.82	220	3	46.8%	34.3%	12.5%	3.1%	0.0%
M	76.82	220	4	27.9%	34.8%	30.2%	4.6%	0.0%
M	76.82	220	5	45.8%	33.3%	12.5%	4.1%	4.1%
MR	81.30	262	3	64.2%	23.8%	7.1%	2.3%	0.0%
M	81.92	271	3	32.5%	32.5%	25.0%	5.0%	5.0%
M	81.92	271	4	25.0%	32.5%	35.0%	2.5%	2.5%
M	81.92	271	5	31.8%	22.7%	20.4%	9.0%	13.6%
MR	82.08	547	3	37.6%	32.9%	21.1%	2.3%	1.1%
MR	82.08	547	4	67.8%	20.6%	4.5%	0.0%	0.0%
MR	82.08	547	5	52.0%	29.3%	14.6%	1.3%	0.0%

Middle School/Junior High Mathematics

Table A.5 Middle School/Junior High Mathematics Standard of Excellence (SOE) Data

Middle/junior high mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
School SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	0.73	546	6	65.8%	22.3%	9.4%	2.3%	0.0%
MR	0.77	519	6	50.0%	20.8%	22.2%	6.9%	0.0%
MR	1.13	375	6	29.5%	34.0%	18.1%	11.3%	6.8%
MR	2.06	578	6	45.4%	25.9%	20.7%	2.5%	3.8%
MR	2.36	594	6	25.2%	38.1%	24.2%	8.2%	4.1%
MR	2.36	594	7	34.8%	34.3%	19.4%	8.2%	2.5%
MR	2.36	594	8	42.3%	31.9%	17.6%	4.7%	2.3%
MR	2.50	320	6	45.0%	27.5%	20.0%	5.0%	2.5%
MR	2.69	521	6	42.8%	32.9%	20.3%	2.7%	0.5%
MR	2.69	521	7	30.5%	32.3%	24.1%	7.6%	2.3%
MR	2.69	521	8	33.1%	35.9%	22.4%	7.3%	1.1%
MR	2.87	349	6	52.8%	30.1%	15.0%	1.8%	0.0%
MR	3.06	556	6	31.9%	34.0%	24.3%	4.6%	2.1%
MR	3.06	556	7	27.3%	32.2%	25.5%	10.7%	3.5%
MR	3.06	556	8	40.1%	27.1%	24.2%	5.6%	0.0%
MR	3.09	453	6	40.5%	28.3%	22.9%	5.4%	2.7%
MR	3.13	416	6	58.3%	31.6%	10.0%	0.0%	0.0%
MR	3.26	675	6	72.9%	12.9%	12.9%	0.0%	1.1%
MR	3.33	540	6	39.5%	30.7%	25.2%	2.7%	1.0%
MR	3.33	540	7	23.8%	27.9%	29.5%	13.9%	3.6%
MR	3.33	540	8	38.6%	34.6%	17.0%	6.2%	3.4%
MR	3.90	641	6	44.3%	34.0%	18.3%	2.1%	0.0%
MR	3.90	641	7	23.0%	31.3%	26.3%	10.9%	6.0%
MR	3.90	641	8	39.7%	31.5%	21.2%	4.2%	1.7%
MR	4.08	711	6	37.1%	28.3%	24.0%	4.8%	5.2%
MR	4.08	711	7	30.5%	28.8%	27.6%	8.7%	3.7%
MR	4.08	711	8	21.9%	24.7%	27.4%	15.5%	9.9%
MR	4.72	508	6	4.0%	30.0%	28.5%	0.0%	1.4%
MR	4.84	475	6	62.5%	19.4%	15.2%	1.3%	1.3%
MR	4.92	528	6	42.4%	26.0%	17.8%	10.9%	2.7%
MR	5.02	757	6	36.4%	43.2%	14.8%	2.7%	1.3%
MR	5.04	595	6	35.2%	33.1%	26.3%	2.1%	1.5%
MR	5.04	595	7	33.6%	33.1%	23.5%	6.4%	2.1%
MR	5.04	595	8	40.5%	37.2%	14.6%	4.7%	1.8%
MR	5.08	610	6	38.2%	30.8%	24.6%	3.7%	2.4%
MR	5.31	339	6	36.6%	38.3%	16.6%	3.3%	5.0%
MR	5.84	308	6	48.9%	28.5%	20.4%	2.0%	0.0%
MR	6.09	345	6	27.6%	34.0%	23.4%	8.5%	6.3%

Middle/junior high mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
School SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	6.13	408	6	52.4%	29.5%	14.7%	1.6%	1.6%
MR	6.70	448	6	59.5%	25.5%	12.7%	2.1%	0.0%
MR	6.84	380	6	53.1%	31.2%	9.3%	3.1%	1.5%
MR	6.86	787	7	27.7%	26.1%	30.4%	11.7%	2.7%
MR	6.86	787	8	26.0%	34.5%	22.7%	11.3%	4.8%
MR	7.04	611	6	25.1%	37.2%	26.4%	8.5%	2.2%
MR	7.04	611	7	23.8%	27.4%	31.9%	11.2%	4.9%
MR	7.04	611	8	27.6%	36.1%	23.3%	9.2%	2.4%
MR	7.80	346	6	30.7%	30.7%	24.0%	6.7%	6.7%
MR	7.80	346	7	35.2%	29.4%	21.0%	9.2%	1.6%
MR	7.80	346	8	18.0%	32.3%	24.8%	11.2%	12.0%
MR	8.20	439	6	40.6%	30.5%	20.3%	3.3%	5.0%
MR	8.50	494	6	25.0%	34.3%	18.7%	12.5%	7.8%
MR	9.01	533	7	40.8%	32.0%	18.3%	5.7%	2.6%
MR	9.01	533	8	28.1%	36.0%	21.4%	8.6%	3.7%
MR	10.02	649	6	39.5%	27.1%	19.7%	6.1%	7.4%
MR	10.33	571	6	29.4%	24.7%	32.9%	5.8%	4.7%
MR	10.45	507	6	23.1%	23.8%	33.1%	11.9%	7.9%
MR	10.45	507	7	23.8%	25.0%	30.2%	13.3%	6.9%
MR	10.45	507	8	43.5%	24.1%	18.8%	8.8%	4.1%
MR	10.56	606	7	40.8%	31.9%	16.3%	6.8%	3.4%
MR	10.56	606	8	29.5%	26.2%	20.5%	11.9%	11.2%
MR	10.70	271	6	54.5%	30.3%	15.1%	0.0%	0.0%
M	11.00	291	6	38.7%	28.5%	18.3%	12.2%	2.0%
MR	11.34	291	6	25.0%	37.5%	18.7%	12.5%	6.2%
MR	11.35	828	7	32.7%	29.2%	23.5%	9.7%	4.4%
MR	11.35	828	8	25.5%	30.7%	23.2%	14.9%	4.6%
MR	11.68	394	6	54.8%	29.0%	11.2%	4.8%	0.0%
MR	11.80	745	7	27.7%	32.8%	19.6%	13.1%	6.1%
MR	11.80	745	8	26.6%	35.5%	23.9%	7.7%	5.4%
MR	12.06	481	6	46.8%	31.2%	18.7%	3.1%	0.0%
MR	12.08	298	6	55.7%	29.8%	11.5%	2.8%	0.0%
MR	12.08	298	7	50.9%	24.5%	16.3%	4.5%	0.9%
MR	12.08	298	8	35.2%	23.5%	25.8%	10.5%	3.5%
MR	12.38	404	6	52.3%	28.5%	12.6%	3.1%	3.1%
MR	12.50	648	6	44.3%	25.7%	25.7%	2.0%	2.0%
MR	12.73	330	6	48.7%	20.5%	25.6%	5.1%	0.0%
MR	12.73	330	7	35.8%	20.5%	33.3%	10.2%	0.0%
MR	12.73	330	8	41.8%	44.1%	11.6%	2.3%	0.0%
MR	13.15	365	7	56.5%	27.6%	14.4%	0.0%	1.3%
MR	13.15	365	8	22.5%	29.0%	38.7%	6.4%	3.2%
MR	13.67	395	6	26.6%	33.3%	26.6%	6.6%	6.6%
MR	13.96	394	6	21.5%	36.7%	31.6%	7.5%	2.5%

Middle/junior high mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
School SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
M	14.36	404	6	25.0%	37.5%	25.0%	12.5%	0.0%
MR	14.37	661	7	35.0%	31.7%	17.0%	7.1%	5.6%
MR	14.37	661	8	27.0%	27.9%	24.2%	12.1%	7.1%
MR	14.58	192	6	62.9%	14.8%	14.8%	3.7%	0.0%
MR	15.24	361	6	47.0%	15.6%	21.5%	7.8%	7.8%
MR	15.65	345	6	26.0%	32.6%	21.7%	17.3%	2.1%
MR	15.65	345	7	30.2%	18.6%	16.2%	25.5%	9.3%
MR	15.65	345	8	16.6%	30.9%	21.4%	16.6%	9.5%
MR	15.77	222	6	30.0%	45.0%	17.5%	7.5%	0.0%
MR	16.03	287	6	28.2%	45.6%	21.7%	2.1%	2.1%
MR	16.76	179	7	34.2%	31.4%	20.0%	14.2%	0.0%
MR	16.76	179	8	26.0%	30.4%	26.0%	13.0%	4.3%
MR	17.00	406	6	35.5%	35.5%	16.1%	7.3%	5.3%
MR	17.00	406	7	25.9%	35.5%	26.6%	6.6%	4.4%
MR	17.00	406	8	17.1%	31.3%	23.8%	19.4%	7.4%
MR	17.09	474	6	31.0%	25.6%	28.3%	9.4%	4.0%
MR	17.19	477	6	39.1%	33.3%	17.3%	7.2%	2.8%
MR	17.22	302	6	59.4%	24.3%	10.8%	2.7%	0.0%
MR	17.29	347	6	34.9%	33.1%	19.5%	7.6%	4.1%
MR	18.79	660	7	28.8%	25.1%	20.1%	16.0%	9.0%
MR	18.79	660	8	19.1%	33.7%	24.8%	14.2%	8.0%
MR	18.80	351	6	27.9%	26.8%	27.9%	10.7%	5.9%
MR	18.87	604	6	49.4%	25.8%	11.2%	4.4%	5.6%
MR	19.32	207	6	32.6%	26.9%	32.6%	5.7%	0.0%
MR	19.32	207	7	26.7%	32.5%	26.7%	10.4%	3.4%
MR	19.32	207	8	18.5%	28.5%	30.0%	8.5%	14.2%
MR	19.67	839	7	22.4%	29.6%	29.6%	13.2%	4.5%
MR	19.67	839	8	31.2%	34.5%	21.6%	9.1%	2.3%
M	20.92	325	6	21.9%	21.9%	51.2%	2.4%	2.4%
M	20.92	325	7	26.1%	28.5%	30.9%	9.5%	4.7%
M	20.92	325	8	26.9%	26.9%	25.0%	15.3%	5.7%
MR	21.11	199	6	40.7%	33.3%	22.2%	0.0%	3.7%
MR	21.11	199	7	25.0%	42.8%	21.4%	7.1%	0.0%
MR	21.11	199	8	35.2%	26.4%	35.2%	0.0%	0.0%
MR	21.91	178	6	21.7%	34.7%	30.4%	4.3%	8.6%
MR	21.91	178	7	47.6%	14.2%	19.0%	4.7%	0.0%
MR	21.91	178	8	24.1%	20.6%	34.4%	13.7%	3.4%
MR	21.93	529	7	28.9%	30.0%	23.5%	9.7%	5.0%
MR	21.93	529	8	25.2%	30.5%	19.2%	9.4%	12.8%
MR	22.02	336	6	21.3%	32.7%	37.7%	4.9%	3.2%
MR	22.03	177	6	53.9%	23.8%	19.0%	3.1%	0.0%
MR	22.03	177	7	21.5%	30.7%	26.1%	9.2%	10.7%
MR	22.03	177	8	15.6%	25.4%	29.4%	15.6%	11.7%

Middle/junior high mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
School SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	22.13	244	6	48.9%	20.4%	16.3%	8.1%	4.0%
MR	22.71	251	6	23.9%	26.7%	38.0%	7.0%	4.2%
MR	22.71	251	7	34.4%	34.4%	26.2%	4.9%	0.0%
MR	22.71	251	8	20.6%	48.2%	22.4%	8.6%	0.0%
MR	23.16	354	7	26.3%	35.0%	22.8%	10.5%	5.2%
MR	23.16	354	8	50.0%	28.3%	15.0%	5.0%	1.6%
MR	23.43	286	6	43.3%	20.0%	26.6%	6.6%	3.3%
MR	23.53	170	6	23.0%	38.4%	34.6%	3.8%	0.0%
MR	23.53	170	7	51.0%	26.5%	14.2%	8.1%	0.0%
MR	23.53	170	8	35.5%	25.4%	25.4%	6.7%	6.7%
MR	23.69	574	6	37.9%	31.7%	20.2%	7.6%	2.4%
MR	24.12	170	7	16.6%	45.8%	25.0%	8.3%	4.1%
MR	24.12	170	8	20.0%	30.0%	36.6%	13.3%	0.0%
MR	24.19	401	6	62.9%	22.2%	9.2%	3.7%	1.8%
MR	24.35	193	6	30.3%	37.0%	22.4%	7.8%	2.2%
MR	24.93	377	7	27.7%	33.3%	31.4%	5.5%	0.0%
MR	24.93	377	8	20.9%	30.6%	27.4%	16.1%	4.8%
MR	25.29	170	7	38.0%	28.5%	23.8%	9.5%	0.0%
MR	25.29	170	8	29.6%	48.1%	11.1%	11.1%	0.0%
MR	25.36	351	6	37.7%	33.9%	18.8%	0.0%	7.5%
MR	26.07	349	6	37.5%	33.3%	27.0%	2.0%	0.0%
MR	26.40	481	6	25.0%	27.3%	27.3%	12.7%	6.3%
MR	26.40	481	7	24.2%	27.2%	26.6%	13.3%	6.6%
MR	26.40	481	8	34.0%	22.4%	19.7%	14.9%	6.1%
MR	26.76	304	6	43.7%	37.5%	6.2%	9.3%	9.3%
MR	26.76	304	7	7.1%	23.8%	38.0%	21.4%	9.5%
MR	26.76	304	8	11.7%	26.4%	23.5%	23.5%	14.7%
MR	26.84	190	6	2.9%	29.4%	50.0%	14.7%	0.0%
MR	27.74	310	6	21.4%	28.5%	38.0%	4.7%	7.1%
M	27.84	485	6	33.8%	26.4%	25.0%	11.7%	1.4%
MR	27.86	280	6	27.5%	37.9%	27.5%	6.8%	0.0%
MR	27.86	280	7	36.6%	6.6%	33.3%	6.6%	16.6%
MR	27.86	280	8	19.4%	36.1%	27.7%	8.3%	8.3%
MR	28.52	526	6	36.1%	29.1%	26.3%	4.1%	4.1%
MR	28.85	156	6	19.2%	40.3%	19.2%	13.4%	5.7%
MR	28.85	156	7	32.6%	28.5%	26.5%	8.1%	4.0%
MR	28.85	156	8	25.0%	31.2%	25.0%	14.5%	4.1%
MR	29.02	379	6	41.0%	25.6%	33.3%	0.0%	0.0%
MR	29.02	379	7	16.6%	27.0%	39.5%	8.3%	8.3%
MR	29.02	379	8	12.2%	28.5%	30.6%	18.3%	10.2%
MR	29.04	303	6	15.6%	21.8%	30.2%	18.7%	13.5%
MR	29.04	303	7	45.9%	36.7%	14.2%	2.0%	0.0%
MR	29.04	303	8	22.4%	32.7%	30.1%	11.2%	1.7%

Middle/junior high mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
School SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	29.33	150	6	8.8%	32.3%	41.1%	8.8%	8.8%
MR	29.33	150	7	33.3%	40.0%	20.0%	3.3%	3.3%
MR	29.33	150	8	26.4%	44.1%	14.7%	11.7%	2.9%
MR	29.71	175	6	36.8%	42.1%	15.7%	5.2%	0.0%
MR	29.79	235	7	27.8%	40.1%	19.6%	9.0%	3.2%
MR	29.79	235	8	26.6%	20.8%	25.8%	18.3%	8.3%
M	30.00	200	6	18.5%	25.9%	37.0%	11.1%	3.7%
MR	30.21	331	6	24.3%	24.3%	26.8%	19.5%	4.8%
MR	30.25	162	6	30.0%	30.0%	40.0%	0.0%	0.0%
MR	30.25	162	8	10.0%	20.0%	50.0%	20.0%	0.0%
MR	30.41	411	6	16.9%	35.8%	32.0%	13.2%	1.8%
MR	30.41	411	7	27.2%	34.0%	27.2%	4.5%	4.5%
MR	30.41	411	8	35.0%	28.0%	21.0%	7.0%	8.7%
M	30.42	401	6	41.8%	21.8%	25.4%	5.4%	5.4%
M	30.61	379	6	36.7%	18.3%	36.7%	6.1%	2.0%
MR	30.64	235	6	44.0%	34.6%	18.6%	0.0%	0.0%
MR	30.64	235	7	29.6%	32.0%	25.9%	9.8%	2.4%
MR	30.64	235	8	20.0%	32.5%	22.5%	20.0%	3.7%
MR	31.59	459	6	40.4%	29.7%	22.6%	5.3%	1.1%
MR	31.59	459	7	25.6%	31.9%	21.5%	13.8%	6.9%
MR	31.59	459	8	35.1%	44.1%	13.7%	4.1%	2.0%
MR	32.06	340	6	28.5%	25.0%	39.2%	5.3%	1.7%
MR	32.41	324	6	13.9%	20.9%	34.8%	20.9%	9.3%
MR	32.75	403	6	37.5%	30.3%	28.5%	3.5%	0.0%
MR	33.51	194	6	27.5%	17.2%	41.3%	6.8%	6.8%
MR	34.62	260	6	37.1%	37.1%	17.1%	8.5%	0.0%
MR	35.71	182	6	10.5%	36.8%	31.5%	21.0%	0.0%
MR	35.71	182	7	36.3%	36.3%	9.0%	4.5%	4.5%
MR	35.71	182	8	42.3%	30.7%	15.3%	0.0%	11.5%
MR	36.25	160	7	12.5%	29.1%	41.6%	8.3%	8.3%
MR	36.25	160	8	40.7%	29.6%	22.2%	7.4%	0.0%
M	36.34	388	6	22.0%	20.3%	38.9%	13.5%	5.0%
MR	36.96	276	6	50.8%	32.2%	5.0%	0.0%	5.0%
MR	36.96	276	7	13.3%	26.6%	33.3%	13.3%	8.3%
MR	36.96	276	8	15.0%	21.6%	40.0%	16.6%	5.0%
MR	37.81	365	7	36.7%	33.5%	23.4%	4.6%	1.5%
MR	37.81	365	8	18.3%	27.5%	32.1%	12.8%	7.3%
MR	37.87	169	7	40.0%	36.6%	16.6%	6.6%	0.0%
MR	37.87	169	8	17.3%	17.3%	43.4%	8.6%	13.0%
MR	38.02	363	6	39.5%	41.6%	16.6%	2.0%	0.0%
MR	38.29	525	6	16.2%	28.2%	32.9%	14.1%	7.8%
MR	38.29	525	7	31.2%	28.9%	25.4%	7.5%	5.7%
MR	38.29	525	8	29.2%	34.7%	25.0%	8.5%	1.2%

Middle/junior high mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
School SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	38.32	274	6	31.1%	23.3%	30.0%	7.7%	4.4%
MR	38.32	274	7	36.0%	34.8%	12.7%	8.1%	3.4%
MR	38.32	274	8	31.3%	29.4%	24.5%	8.8%	4.9%
MR	38.35	206	6	17.7%	24.4%	31.1%	20.0%	6.6%
MR	38.35	206	7	31.4%	29.6%	31.4%	5.5%	1.8%
MR	38.35	206	8	28.8%	36.5%	23.0%	5.7%	1.9%
MR	38.64	339	6	40.5%	48.6%	5.4%	5.4%	0.0%
MR	39.42	378	6	32.8%	35.6%	23.2%	4.1%	4.1%
MR	39.92	496	6	1.6%	16.3%	36.0%	19.6%	26.2%
MR	39.92	496	7	30.0%	22.0%	22.0%	14.0%	8.0%
MR	39.92	496	8	22.5%	27.4%	30.6%	12.9%	6.4%
MR	39.93	278	6	23.6%	31.5%	34.2%	10.5%	0.0%
MR	41.81	354	6	36.0%	36.0%	20.0%	8.0%	0.0%
M	42.35	174	6	35.4%	29.0%	32.2%	3.2%	0.0%
MR	42.35	340	6	23.0%	38.4%	23.0%	9.6%	5.7%
MR	43.19	433	6	38.3%	30.0%	25.0%	5.8%	0.8%
MR	43.19	433	7	26.0%	35.5%	23.1%	13.0%	2.1%
MR	43.19	433	8	28.3%	24.4%	21.2%	17.3%	7.8%
MR	43.65	323	6	17.6%	20.5%	32.3%	17.6%	11.7%
MR	43.65	323	7	22.2%	25.0%	27.7%	22.2%	2.7%
MR	43.65	323	8	23.5%	23.5%	29.4%	14.7%	8.8%
M	43.65	417	6	41.6%	35.0%	16.6%	3.3%	3.3%
MR	44.00	150	6	26.6%	26.6%	40.0%	6.6%	0.0%
MR	44.53	265	6	36.6%	32.3%	25.3%	4.2%	1.4%
MR	44.53	265	7	32.3%	29.5%	28.1%	4.2%	5.6%
MR	44.53	265	8	47.5%	19.6%	19.6%	8.1%	3.2%
M	45.22	502	6	43.6%	33.8%	15.4%	7.0%	0.0%
MR	45.37	205	6	53.3%	10.0%	30.0%	3.3%	3.3%
M	46.06	434	6	33.3%	41.6%	18.3%	3.3%	1.6%
MR	46.72	351	6	22.2%	22.2%	38.8%	11.1%	5.5%
MR	46.72	351	7	26.0%	32.6%	28.2%	10.8%	2.1%
MR	46.72	351	8	30.7%	38.4%	17.9%	2.5%	7.6%
MR	47.60	208	6	7.6%	23.0%	26.9%	34.6%	3.8%
M	48.80	166	6	29.6%	22.2%	37.0%	7.4%	0.0%
MR	49.08	163	6	47.0%	11.7%	17.6%	11.7%	11.7%
MR	49.08	163	7	13.3%	6.6%	33.3%	26.6%	20.0%
MR	49.08	163	8	6.6%	20.0%	60.0%	13.3%	0.0%
MR	49.67	300	6	48.4%	30.3%	9.0%	9.0%	3.0%
MR	49.77	217	6	50.0%	11.5%	30.7%	7.6%	0.0%
M	49.85	335	6	11.9%	28.5%	35.7%	21.4%	2.3%
MR	50.60	334	6	45.4%	31.8%	22.7%	0.0%	0.0%
MR	51.84	299	6	2.3%	34.8%	51.1%	11.6%	0.0%
MR	53.63	289	6	12.0%	40.0%	32.0%	4.0%	8.0%

Middle/junior high mathematics 2005-06 F/R = free and reduced; MR = math and reading; M = math								
School SOE subject	Student % F/R lunches	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	53.63	289	7	22.2%	33.3%	40.7%	3.7%	0.0%
MR	53.63	289	8	3.4%	34.4%	31.0%	27.5%	3.4%
MR	54.50	309	6	21.8%	15.6%	37.5%	18.7%	6.2%
MR	54.50	309	7	26.3%	31.5%	34.2%	2.6%	5.2%
MR	54.50	309	8	17.5%	30.0%	22.5%	20.0%	10.0%
MR	54.60	163	6	16.6%	33.3%	41.6%	4.1%	4.1%
MR	54.84	331	7	40.0%	33.3%	6.6%	13.3%	6.6%
MR	54.84	331	8	18.7%	31.2%	31.2%	12.5%	6.2%
MR	57.57	304	6	37.8%	37.8%	10.8%	10.8%	2.7%
MR	58.66	179	6	13.0%	26.0%	47.8%	8.6%	4.3%
MR	61.43	433	6	37.5%	27.0%	18.7%	8.3%	8.3%
MR	61.43	433	7	43.4%	32.6%	17.3%	4.3%	2.1%
MR	61.43	433	8	22.7%	34.0%	29.5%	6.8%	4.5%
MR	66.04	371	6	28.5%	32.6%	22.4%	10.2%	2.0%
M	66.79	265	6	22.5%	25.0%	27.5%	15.0%	10.0%
M	70.51	312	6	27.7%	33.3%	27.7%	5.5%	5.5%

Senior High School Mathematics

Table A.6 Senior High Mathematics Standard of Excellence (SOE) Data

Senior high mathematics F/R = free and reduced; MR = math and reading; M = math								
SOE subject	Student % F/R lunch	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	2.18	1377	10	24.4%	19.6%	30.6%	17.0%	8.2%
MR	2.62	1603	10	39.6%	24.6%	22.0%	8.2%	5.2%
MR	2.88	1530	10	26.1%	29.3%	24.6%	10.8%	7.9%
M	3.01	316	10	20.8%	20.8%	23.6%	18.0%	13.8%
MR	3.45	1999	10	25.2%	30.8%	24.6%	10.2%	7.1%
MR	4.08	1374	10	26.8%	21.7%	25.4%	13.4%	12.0%
MR	4.59	458	10	18.5%	23.3%	31.4%	14.5%	12.0%
MR	5.75	1912	10	19.1%	27.0%	26.0%	17.3%	8.6%
MR	5.85	1350	10	30.5%	31.1%	22.8%	9.3%	5.2%
MR	6.14	228	10	35.4%	10.4%	20.8%	20.8%	12.5%
MR	6.35	1402	10	27.0%	33.5%	21.7%	10.4%	6.3%
MR	6.67	720	10	17.6%	19.7%	38.5%	14.9%	7.4%
M	8.02	1771	10	27.0%	29.7%	23.6%	11.2%	7.2%
MR	8.43	1233	10	23.7%	28.6%	24.8%	10.9%	11.2%
MR	9.10	1835	10	29.5%	22.9%	28.4%	10.3%	8.2%
MR	10.12	959	10	17.4%	28.5%	27.2%	18.3%	8.4%
MR	10.85	258	10	33.8%	28.1%	19.7%	9.8%	8.4%
MR	13.15	365	10	23.6%	12.7%	38.1%	12.7%	10.9%
MR	13.47	2042	10	22.8%	20.0%	28.1%	14.9%	12.4%
MR	13.72	452	10	18.0%	22.9%	41.8%	10.6%	5.7%
MR	14.56	261	10	35.8%	20.5%	15.3%	17.9%	10.2%
MR	16.23	1060	10	21.5%	31.2%	27.7%	9.6%	7.9%
MR	16.76	179	10	16.6%	29.1%	29.1%	20.8%	4.1%
MR	17.21	1644	10	24.8%	24.3%	22.5%	11.2%	9.0%
M	18.00	153	10	26.0%	20.0%	20.0%	22.0%	12.0%
MR	18.16	358	10	23.0%	25.6%	26.9%	15.3%	7.6%
MR	19.52	415	10	24.3%	18.4%	23.5%	21.8%	10.0%
MR	19.79	384	10	15.1%	20.9%	34.8%	13.9%	12.7%
MR	20.11	184	10	17.7%	24.4%	24.4%	17.7%	11.1%
MR	20.18	342	10	15.6%	28.9%	28.9%	12.0%	13.2%
M	20.25	237	10	22.8%	38.5%	19.2%	8.7%	10.5%
MR	20.60	267	10	33.3%	21.2%	22.7%	9.0%	10.6%
M	20.74	323	10	21.6%	21.6%	31.0%	12.1%	12.1%
MR	20.89	1738	10	21.0%	19.2%	26.5%	17.0%	13.7%
MR	21.11	199	10	30.7%	23.0%	23.0%	7.6%	15.3%
MR	21.91	178	10	21.7%	17.3%	30.4%	13.0%	13.0%
MR	22.73	176	10	31.2%	34.3%	28.1%	3.1%	3.1%
MR	22.73	176	10	31.2%	34.3%	28.1%	3.1%	3.1%
MR	23.06	386	10	26.4%	24.5%	32.0%	7.5%	7.5%

Senior high mathematics F/R = free and reduced; MR = math and reading; M = math								
SOE subject	Student % F/R lunch	School enrollment ≥ 150	Grade assessed math	Performance level percentage of assessed students				
				Exemplary	Exceeds	Meets	Approach	Warning
MR	23.16	354	10	31.0%	18.9%	15.5%	15.5%	18.9%
MR	23.64	1328	10	16.8%	18.7%	27.5%	18.9%	16.2%
MR	24.12	170	10	28.5%	21.4%	17.8%	21.4%	10.7%
MR	24.93	377	10	25.0%	25.0%	23.3%	15.0%	11.6%
MR	25.29	170	10	18.9%	21.6%	24.3%	21.6%	13.5%
MR	25.71	661	10	21.0%	23.1%	27.2%	12.9%	13.6%
MR	25.87	344	10	24.6%	29.6%	29.6%	6.1%	9.8%
M	26.18	508	10	24.5%	25.4%	19.0%	18.1%	12.7%
MR	28.19	298	10	24.2%	27.2%	19.6%	15.1%	13.6%
MR	29.00	151	10	35.2%	26.4%	29.4%	8.8%	0.0%
M	30.71	241	10	18.8%	26.4%	30.1%	13.2%	5.6%
MR	32.00	151	10	20.4%	25.0%	40.9%	6.8%	6.8%
MR	33.92	325	10	24.0%	17.7%	26.5%	25.3%	6.3%
MR	33.97	209	10	17.3%	32.6%	30.4%	10.8%	6.5%
MR	34.75	305	10	19.2%	22.8%	31.3%	12.0%	14.4%
MR	35.76	344	10	14.6%	31.7%	28.0%	12.1%	12.1%
MR	36.25	160	10	13.7%	24.1%	34.4%	17.2%	10.3%
MR	37.65	170	10	22.2%	22.2%	19.4%	25.0%	11.1%
MR	37.87	169	10	25.0%	25.0%	15.0%	25.0%	10.0%
MR	37.92	269	10	15.0%	5.4%	5.4%	0.0%	1.3%
MR	47.71	568	10	19.2%	19.8%	31.1%	11.2%	12.5%
MR	49.00	172	10	25.4%	25.4%	19.6%	13.7%	13.7%
M	54.07	307	10	21.0%	8.7%	36.8%	17.5%	15.7%

Appendix B - Socioeconomic Status and Performance on the 2006 Kansas Assessments: Comparison of All Students to Economically Disadvantaged Students

Table B.1 Kansas Mathematics Scores 2006 for Economically Disadvantaged Students and for All Students

	Math state-wide performance level percentages					
Grade and student group	Exemplary	Exceeds standard	Meets standard	Approaches standard	Academic warning	Not tested
Grade 3						
All students	27.1	25.0	28.8	9.1	8.7	1.2
Econ. disadv.	17.9	22.2	32.3	12.1	13.9	1.4
Grade 4						
All students	24.2	24.7	31.8	8.6	9.4	1.0
Econ. disadv.	14.1	21.1	35.6	12.2	15.5	1.3
Grade 5						
All students	24.0	24.3	30.5	9.7	10.1	1.1
Econ. disadv.	13.8	20.8	34.0	13.1	16.6	1.5
Grade 6						
All students	21.5	24.9	28.0	11.7	12.3	1.3
Econ. disadv.	10.3	19.0	30.9	16.7	21.0	1.7
Grade 7						
All students	18.1	24.7	27.3	16.1	12.1	1.3
Econ. disadv.	8.8	18.1	29.5	21.5	20.0	1.9
Grade 8						
All students	16.2	24.4	26.0	17.5	14.1	1.6
Econ. disadv.	6.9	17.5	27.0	22.4	23.7	2.4
Grade 10						
All students	14.5	18.6	25.3	18.4	19.7	3.2
Econ. disadv.	5.6	11.3	22.7	22.8	32.2	5.1

Note: Econ. disadv. = Economically Disadvantaged Students, qualifying for free or reduced lunches. Percentages were derived from all assessed students in all public schools. From KSDE Report Card 2005-06, State Data (2006).

Table B.2 Kansas Reading Scores 2006 for Economically Disadvantaged Students and for All Students

	Reading state-wide performance level percentages					
Grade and student group	Exemplary	Exceeds standard	Meets standard	Approaches standard	Academic warning	Not tested
Grade 3						
All students	22.7	27.8	28.0	11.8	7.9	1.6
Econ. disadv.	12.9	23.5	31.7	16.4	13.1	2.1
Grade 4						
All students	22.6	27.9	29.0	10.3	8.5	1.4
Econ. disadv.	12.8	22.9	32.8	14.7	14.4	2.1
Grade 5						
All students	29.8	23.0	24.1	11.9	9.5	1.4
Econ. disadv.	17.2	19.7	28.1	16.9	15.8	2.1
Grade 6						
All students	23.9	26.6	27.5	10.9	9.5	1.4
Econ. disadv.	11.7	21.4	31.4	16.1	17.1	1.9
Grade 7						
All students	24.4	29.3	25.5	11.0	7.9	1.6
Econ. disadv.	11.4	24.2	30.4	16.8	14.4	2.5
Grade 8						
All students	23.9	27.5	26.0	11.4	9.3	1.7
Econ. disadv.	11.7	21.5	30.2	16.6	17.0	2.7
Grade 11						
All students	23.9	28.0	25.2	11.3	8.1	3.3
Econ. disadv.	12.1	20.8	28.7	17.1	15.8	5.3

Note: Econ. disadv. = Economically Disadvantaged Students, qualifying for free or reduced lunches. Percentages were derived from all assessed students in all public schools. From KSDE Report Card 2005-06, State Data (2006).

Appendix C - 2006 Standard of Excellence Performance Levels Formula and Expected Percentages for Categories of Achievement

Note (applies to entire Appendix C). The KSDE requirements for the grade level SOE awards and the building SOE awards are shown in Tables C.1, C.2, C.3, and C.4 and explained in the text of Appendix C. The explanatory text and the order of presentation are verbatim from the KSDE. From personal correspondence with Ms. Kris Shaw, Reading Specialist, KSDE, e-mail 6/21/07; text and tables provided as an e-mail attachment by the KSDE Assessment Department, Assessment Education Program Consultant David Bowman. Permission to copy: Verified with Dr. Scott Smith, Assistant Director, KSDE Standards and Assessment Services, telephone 785-296-4351 (personal communication May 2, 2008). "The Kansas Department of Education will provide links and data resources targeted at users looking for specific informational documents. The purpose is to gather all these resources for easy reference and access by all interested parties." KSDE Data and Reporting Portal http://www.ksde.org/Default.aspx?tabid=83

Table C.1 Reading Grade Level Performance Levels for 2006 Standard of Excellence.

Reading grade levels	Minimum percentage of students required in *Exemplary*	Maximum percentage of students allowed in *Academic Warning*
3,4,5,6	At least 25% of students in *Exemplary*	Not more than 5% of students in *Academic Warning*
7 and 8	At least 20% of students in *Exemplary*	Not more than 10% of students in *Academic Warning*
High School	At least 15% of students in *Exemplary*	Not more than 10% of students in *Academic Warning*

In addition, the following are expected percentage values for (1) Exceeds Standard and above, (2) Meets Standard and above, and (3) Approaches Standard and above for a school of excellence in reading.

Table C.2 School-wide Reading Performance Levels, in addition to Grade Level Performance Levels for 2006 Standard of Excellence School

	Expected percentage of students classified as		
Reading grade levels	*Exceeds Standard* and above	*Meets Standard* and above	*Approaches Standard* and above
3,4,5,6	60%	80%	95%
7 and 8	55%	75%	90%
High school	50%	70%	90%

A weighting formula is applied to the actual percentage distribution of scores in a building to determine whether the building did better, worse, or the same as the percentage distribution which is expected for a Building of Excellence. This weighting formula allows the school to meet the Standard of Excellence with data configured in several different ways, rather than having to meet the exact percentages listed in the (1) *Exceeds Standard* and above, (2) *Meets Standard* and above, and (3) *Approaches Standard* and above categories. The percentages listed above in the *Exemplary* and *Academic Warning* categories, however, are requirements. When enrollment is below 20 and 5% of students are allowed in the *Academic Warning* category, buildings will be allowed one student in that category. When enrollment is below 10 and 10% of students are allowed in the *Academic Warning* category, buildings will be allowed one student in that category. When enrollment is below 7 and 15% of students are allowed in the *Academic Warning* category, buildings will be allowed one student in that category.

Table C.3 Mathematics Grade Level Performance Levels for 2006 Standard of Excellence

Math grade levels	Minimum percentage of students required in *Exemplary*	Maximum percentage of students allowed in *Academic Warning*
3, 4, 5, 6	At least 25% of students in *Exemplary*	Not more than 5 % of students in *Academic Warning*
7 and 8	At least 25% of students in *Exemplary*	Not more than 10% of students in *Academic Warning*
High school	At least 15% of students in *Exemplary*	Not more than 15% of students in *Academic Warning*

Table C.4 Mathematics School-wide Performance Levels, in addition to Grade Level Performance Levels for 2006 Standard of Excellence School

	Expected percentage of students classified as		
Math grade levels	*Exceeds standard* and above	*Meets standard and above*	*Approaches standard and above*
3, 4, 5, 6	60%	80%	95%
7 and 8	60%	80%	90%
High School	40%	70%	85%

Note: As mentioned above, a weighting formula will be applied to the actual percentage distribution of scores in a building to determine whether the building did better, worse, or the same as the percentage distribution which is expected for a building of excellence. The "building index" that is generated by this weighting formula was figured for the school. If the building meets the Standard of Excellence, this was reported along with other building results by the Center for Educational Testing and Evaluation.

The Model

- At least a certain percentage of students is required in the *Exemplary* performance level. This value is the "expected" percentage of students when computing the index score.

- No more than a certain percentage of students is allowed in the *Academic Warning* performance level.

- Compare the "expected" cumulative percentage criterion values for the performance levels in the tables above with the actual cumulative percentage of students in the building .

- Building Index determines how the building distribution compares to the "expected" distribution

Example: Grade 7 Mathematics:

1. At least 25% of students in *Exemplary*.
2. No more than 10% of students in *Academic Warning*.
3. Expected Distribution for a School of Excellence:

   Exceeds Standard and above -- 60%
   Meets Standard and above -- 80%
   Academic Warning and above -- 90%

The Equation

Index = (4 x (percentage of students in Exemplary minus expected percentage of students in *Exemplary*)) PLUS

(3 x (percentage of students in *Exceeds Standard* and above minus expected percentage of students in *Exceeds Standard* and above)) PLUS

(2 x (percentage of students in *Meets Standard* and above minus expected percentage of students in *Meets Standard* and above)) PLUS

(1 x (percentage of students in *Approaches Standard* and above minus expected percentage of students in *Approaches Standard* and above)

Interpretation of Index Score

The building can meet the Standard of Excellence in several different ways. They MUST, however, have ...

1. At least the required percentage in *Exemplary*.
2. No more than the allowed percentage in *Academic Warning*.

3. Have a building index greater than or equal to 0.

•If Index is 0, then building has just exactly met this part of the requirement for the Standard of Excellence.

•If Index is <0, then building did not meet this part of the requirement for the Standard of Excellence.

•If Index is >0, then building met and exceeded this part of the requirement for the Standard of Excellence.

Building-Level Standard of Excellence

For the grade level SOE designation:

1. The 2000-2005 reading criteria for grade 5 will be applied to grades 3 – 6, the grade 8 criteria will be applied to grades 7 and 8 and the grade 11 criteria will be applied to grade 11.

2. The 2000-2005 mathematics criteria for grade 4 will be applied to grades 3 – 6, the grade 7 criteria will be applied to grades 7 and 8 and the grade 10 criteria will be applied to grade 10.

For the overall school SOE designation:

1. The individual index scores for tested grade levels in the building must sum to be equal to or greater than zero. As the expected percentages in categories as the criteria for SOE changes across elementary, middle and high school grades, using the grade level index scores and then summing them will give appropriate weight to each grade level in the overall index.

2. The percentage of students in the bottom (academic warning) and top (exemplary) performance categories when aggregated across all tested grade levels in the building must meet the maximum and minimum percentage values, respectively, using the 2000-2005 criteria for the highest grade tested in the building. This latter condition applies the least stringent criteria for the maximum percentage of students in the "academic warning" category and for the minimum percentage of students in the "exemplary' category needed to attain the Standard of Excellence designation.

Appendix D - Income Eligibility Guidelines for Free or Reduced Lunches 2005-06

DEPARTMENT OF AGRICULTURE

Food and Nutrition Service: Child Nutrition Programs—Income Eligibility Guidelines

AGENCY: Food and Nutrition Service, USDA.

ACTION: Notice

SUMMARY: This Notice announces the Department's annual adjustments to the Income Eligibility Guidelines to be used in determining eligibility for free and reduced price meals or free milk for the period from July 1, 2005 through June 30, 2006. These guidelines are used by schools, institutions, and facilities participating in the National School Lunch Program (and Commodity School Program), School Breakfast Program, Special Milk Program for Children . . . . The annual adjustments are required by section 9 of the Richard B. Russell National School Lunch Act. The guidelines are intended to direct benefits to those children most in need and are revised annually to account for changes in the Consumer Price Index. EFFECTIVE DATE: July 1, 2005 . . .

The INCOME ELIGIBILITY GUIDELINES:

The following are the Income Eligibility Guidelines to be effective from July 1, 2005 through June 30, 2006. The Department's guidelines for free meals and milk and reduced price meals were obtained by multiplying the year 2005 Federal income poverty guidelines by 1.30 and 1.85, respectively, and rounding the result upward to the next whole dollar (Income Eligibility Guidelines, March 18, 2005, pp. 13160, 13161).

INCOME ELIGIBILITY GUIDELINES

Effective from July 1, 2005 to June 30, 2006

HOUSEHOLD SIZE	FEDERAL POVERTY GUIDELINES	REDUCED PRICE MEALS - 185 %				FREE MEALS - 130 %			
	ANNUAL	ANNUAL	MONTHLY	TWICE PER MONTH	EVERY TWO WEEKS	WEEKLY	ANNUAL	MONTHLY	TWICE PER MONTH	EVERY TWO WEEKS	WEEKLY
48 CONTIGUOUS STATES, DISTRICT OF COLUMBIA, GUAM, AND TERRITORIES											
1	9,570	17,705	1,476	738	681	341	12,441	1,037	519	479	240
2	12,830	23,736	1,978	989	913	457	16,679	1,390	695	642	321
3	16,090	29,767	2,481	1,241	1,145	573	20,917	1,744	872	805	403
4	19,350	35,798	2,984	1,492	1,377	689	25,155	2,097	1,049	968	484
5	22,610	41,829	3,486	1,743	1,609	805	29,393	2,450	1,225	1,131	566
6	25,870	47,860	3,989	1,995	1,841	921	33,631	2,803	1,402	1,294	647
7	29,130	53,891	4,491	2,246	2,073	1,037	37,869	3,156	1,578	1,457	729
8	32,390	59,922	4,994	2,497	2,305	1,153	42,107	3,509	1,755	1,620	810
For each add'l family member, add	3,260	6,031	503	252	232	116	4,238	354	177	163	82
ALASKA											
1	11,950	22,108	1,843	922	851	426	15,535	1,295	648	598	299
2	16,030	29,656	2,472	1,236	1,141	571	20,839	1,737	869	802	401
3	20,110	37,204	3,101	1,551	1,431	716	26,143	2,179	1,090	1,006	503
4	24,190	44,752	3,730	1,865	1,722	861	31,447	2,621	1,311	1,210	605
5	28,270	52,300	4,359	2,180	2,012	1,006	36,751	3,063	1,532	1,414	707
6	32,350	59,848	4,988	2,494	2,302	1,151	42,055	3,505	1,753	1,618	809
7	36,430	67,396	5,617	2,809	2,593	1,297	47,359	3,947	1,974	1,822	911
8	40,510	74,944	6,246	3,123	2,883	1,442	52,663	4,389	2,195	2,026	1,013
For each add'l family member, add	4,080	7,548	629	315	291	146	5,304	442	221	204	102
HAWAII											
1	11,010	20,369	1,698	849	784	392	14,313	1,193	597	551	276
2	14,760	27,306	2,276	1,138	1,051	526	19,188	1,599	800	738	369
3	18,510	34,244	2,854	1,427	1,318	659	24,063	2,006	1,003	926	463
4	22,260	41,181	3,432	1,716	1,584	792	28,938	2,412	1,206	1,113	557
5	26,010	48,119	4,010	2,005	1,851	926	33,813	2,818	1,409	1,301	651
6	29,760	55,056	4,588	2,294	2,118	1,059	38,688	3,224	1,612	1,488	744
7	33,510	61,994	5,167	2,584	2,385	1,193	43,563	3,631	1,816	1,676	838
8	37,260	68,931	5,745	2,873	2,652	1,326	48,438	4,037	2,019	1,863	932
For each add'l family member, add	3,750	6,938	579	290	267	134	4,875	407	204	188	94

Appendix E - Reading Performance Level Descriptors Guidelines for the 2005-2006 Kansas Assessments

Figure E-1 Grade 3 Reading Performance Level Descriptors 2005-06

Academic Warning	Approaches Standard	Meets Standard	Exceeds Standard	Exemplary
When independently reading grade-appropriate narrative and expository text, an unsatisfactory student has ***incomplete*** comprehension: This student is not likely to construct literal meaning that matches the author's intended meaning. This student struggles to recognize • the topic, main idea, and supporting details • vocabulary in context • correct retelling • text features	When independently reading grade-appropriate narrative and expository text, a basic student has ***partial*** comprehension: This student constructs literal meaning that inconsistently and/or inaccurately matches the author's intended meaning. This student is likely to have a limited recognition of • the topic, main idea, and supporting details • vocabulary in context • correct retelling • text features	When independently reading grade-appropriate narrative and expository text, a proficient student has ***satisfactory*** comprehension: This student constructs literal meaning that generally matches the author's intent. This student is likely to recognize • the topic, main idea, and supporting details • vocabulary in context • correct retelling • text features	When independently reading grade-appropriate narrative and expository text, an advanced student has ***full*** comprehension: This student constructs literal meaning that closely matches the author's intended message. The student recognizes • the topic, main idea and supporting details • vocabulary in context • a correct retelling • text features	When independently reading grade-appropriate narrative and expository text, an exemplary student has ***full comprehension, making connections within and outside the text:*** This student constructs literal meaning that accurately matches the author's intent. The student understands • the topic, main idea and supporting details • vocabulary in context • a correct retelling • text features
This student is not likely to make connections or perceive relationships in order to construct inferential meaning. This student struggles to • draw accurate conclusions • compare and contrast • determine cause and effect	The student makes minimal connections and perceives inaccurate relationships in order to construct inferential meaning. The student inconsistently and/or inaccurately • draws conclusions • compare and contrast • determine cause and effect	This student makes obvious connections and perceives some relationships to construct inferential meaning. This student is likely to • draw conclusions • compare and contrast • determine cause and effect	This student makes connections and perceives complex relationships to construct inferential meaning. The student will • draw conclusions • compare and contrast • link cause and effect • recognize implied main idea	The student makes subtle or complex connections and perceives relationships to construct inferential meaning. The student will • draw conclusions • compare and contrast • link cause and effect • recognize implied main idea
This student is not likely to recognize techniques authors use to communicate their ideas with words. This student struggles with • text structures (problem and solution, sequence) • literary elements of fiction (setting and character)	The student recognizes simple techniques authors use to communicate their ideas with words. The student is likely to have limited awareness of • text structures(problem and solution, sequence) • literary elements of fiction (setting and character)	This student recognizes simple techniques authors use to communicate their ideas with words. This student is likely to have awareness of • text structures (problem and solution, sequence) • literary elements of fiction (setting and character)	This student recognizes techniques authors use to communicate their ideas with words. The student accurately • identifies text structures (problem and solution, sequence) • identifies literary elements of fiction (setting and character)	The student understands complex techniques authors use to communicate their ideas with words. The student accurately • identifies text structures (problem and solution, sequence) • identifies literary elements of fiction (setting and character)

Note. Descriptors for Grades 4, 5, 6, 7, and 8 are also available. From *KSDE Performance Level Descriptors Guidelines*, 2006.

Permission to copy: Verified with Dr. Scott Smith, Assistant Director, KSDE Standards and Assessment Services, telephone 785-296-4351 (personal communication May 2, 2008).

"The Kansas Department of Education will provide links and data resources targeted at users looking for specific informational documents. The purpose is to gather all these resources for easy reference and access by all interested parties." KSDE Data and Reporting Portal http://www.ksde.org/Default.aspx?tabid=83

Figure E-2 High School Reading Performance Level Descriptors 2005-06

Academic Warning	Approaches Standard	Meets Standard	Exceeds Standard	Exemplary
When independently reading grade-appropriate narrative, expository, technical, and persuasive text, an unsatisfactory student has ***incomplete*** comprehension:	When independently reading grade-appropriate narrative, expository, technical, and persuasive text a basic student has ***partial*** comprehension:	When independently reading grade-appropriate narrative, expository, technical, and persuasive text, a proficient student has ***satisfactory*** comprehension:	When independently reading grade-appropriate narrative, expository, technical, and persuasive text, an advanced student has ***full*** comprehension:	When independently reading grade-appropriate narrative, expository, technical, and persuasive text, an exemplary student has ***full comprehension, making connections within and outside the text:***
This student is not likely to construct literal meaning that matches the author's intended meaning. This student struggles to identify • the main idea • vocabulary in context • the essential elements of paraphrasing and summary • the author's purpose • text features	This student constructs literal meaning that inconsistently and/or inaccurately matches the author's intended meaning. This student is likely to have a limited ability to identify • the main idea or supporting details • vocabulary in context • the essential elements of paraphrasing and summary • the author's purpose • text features	This student constructs literal meaning that generally matches the author's intent. This student identifies and is likely to understand • the main ideas, some supporting details, and themes • vocabulary in context • the essential elements of paraphrasing and summary • author's purpose • the purpose of common text features	This student constructs literal meaning that closely matches the author's intended message. The student understands and • identifies the main ideas, supporting details, and themes across content areas • determines meaning of complex vocabulary in context across content areas • paraphrases and summarizes • explains the author's purpose • uses text features	This student constructs literal meaning that accurately matches the author's intent. The student understands and • identifies the main ideas, supporting details, and themes across content areas • determines meaning of complex vocabulary in context across content areas • paraphrases and summarizes • understands the author's purpose • uses complex text features
This student is not likely to make connections or perceive relationships in order to construct inferential meaning. This student struggles to • draw accurate conclusions • compare and contrast • determine cause and effect	The student makes minimal connections and perceives inaccurate relationships in order to construct inferential meaning. The student inconsistently and/or inaccurately • draws conclusions • compares and contrasts • determines cause and effect • identifies implied main idea	This student makes obvious connections and perceives some relationships to construct inferential meaning. This student is likely to • draw conclusions • compare and contrast • explain cause and effect relationships • identify implied main ideas	This student makes connections and perceives complex relationships to construct inferential meaning. The student will • draw conclusions • compare and contrast • explain cause and effect relationships • recognize implied main ideas and themes	The student makes subtle or complex connections and perceives relationships to construct inferential meaning. The student will • draw conclusions • compare and contrast • explain cause and effect relationships • analyze implied main ideas and themes
This student is not likely to recognize techniques authors use to communicate their ideas with words. This student struggles with • text structures • the difference between fact and opinion • persuasive techniques • literary elements of fiction (setting, character, plot) • figurative language • author's style	The student recognizes simple techniques authors use to communicate their ideas with words. The student is likely to have limited awareness of • text structures • the difference between fact and opinion • persuasive techniques • literary elements of fiction (setting, character, plot) • figurative language • author's style	This student recognizes and is likely to understand simple techniques authors use to communicate their ideas with words. This student is likely to • analyze the predominant text structure of the passage • distinguish between fact and opinion • identify persuasive techniques • analyze elements of fiction (setting, character development, plot elements) • identify figurative language • analyze simple elements of author's style	This student analyzes techniques authors use to communicate their ideas with words. The student accurately • analyzes text structures throughout the passage • distinguishes between fact and opinion • recognizes propaganda • analyzes persuasive techniques • analyzes elements of fiction (influence of setting, character types and development, plot elements) • interprets figurative language • analyzes author's style	The student evaluates complex techniques authors use to communicate their ideas with words. The student accurately • evaluates text structures throughout the passage • distinguishes between fact and opinion • recognizes propaganda • evaluates persuasive techniques • analyzes elements of fiction (influence of setting, character types and development, plot elements) • analyzes figurative language • evaluates author's style

Note. From *KSDE Performance Level Descriptors Guidelines*, 2006.

Permission to copy: Verified with Dr. Scott Smith, Assistant Director, KSDE Standards and Assessment Services, telephone 785-296-4351 (personal communication May 2, 2008).

"The Kansas Department of Education will provide links and data resources targeted at users looking for specific informational documents. The purpose is to gather all these resources for easy reference and access by all interested parties." KSDE Data and Reporting Portal http://www.ksde.org/Default.aspx?tabid=83

Appendix F - Mathematics Performance Level Descriptors Guidelines for the 2005-2006 Kansas Assessments

Figure F-1 Grade 3 Math Performance Level Descriptors 2005-06

Academic Warning	Approaches Standard	Meets Standard	Exceeds Standard	Exemplary
The student seldom uses problem-solving techniques and is unable to explain the process he/she uses when solving mathematical problems. A student scoring at the unsatisfactory level is likely to have inaccurate responses at lower cognitive levels and on most areas of emphasis. The student struggles to demonstrate content knowledge and application skills Third grade students will demonstrate knowledge and skills in the following four areas of emphasis: **Number and Computation –** • equivalent representations of whole numbers • whole number comparisons • money combinations • multiplication and division fact families • one-step real-world problems with addition and subtraction **Algebra –** • multiple representations of patterns • generalization of a numerical pattern in words **Geometry –** • pattern block identification • telling time • real-world measurement (length, days in a week) **Data –** • possible outcomes • the statistical measures (minimum and maximum value, range, mode, and median)	The basic student inconsistently uses problem-solving techniques and partially explains the process he/she uses when solving mathematical problems. A student scoring at the basic level is likely to perform at lower cognitive levels and not necessarily on all areas of emphasis. The student demonstrates limited content knowledge and application skills. Third grade students will demonstrate knowledge and skills in the following four areas of emphasis: **Number and Computation –** • equivalent representations of whole numbers • whole number comparisons • money combinations • multiplication and division fact families • one-step real-world problems with addition and subtraction **Algebra –** • multiple representations of patterns • generalization of a numerical pattern in words **Geometry –** • pattern block identification • telling time • real-world measurement (length, days in a week) **Data –** • possible outcomes • the statistical measures (minimum and maximum value, range, mode, and median)	The proficient student uses some problem-solving techniques and explains the process he/she uses when solving mathematical problems. A student scoring at the proficient level is likely to perform at all cognitive levels on many elements of the four areas of emphasis. The student demonstrates sufficient content knowledge and application skills. Third grade students will demonstrate knowledge and skills in the following four areas of emphasis: **Number and Computation –** • equivalent representations of whole numbers • whole number comparisons • money combinations • multiplication and division fact families • one-step real-world problems with addition and subtraction **Algebra –** • multiple representations of patterns • generalization of a numerical pattern in words **Geometry –** • pattern block identification • telling time • real-world measurement (length, days in a week) **Data –** • possible outcomes • the statistical measures (minimum and maximum value, range, mode, and median)	The advanced student effectively uses multiple problem-solving techniques and explains the reasoning process he/she uses when solving mathematical problems. A student scoring at the advanced level is likely to perform accurately at all cognitive levels on most elements of the four areas of emphasis. The student demonstrates effective content knowledge and application skills. Third grade students will demonstrate knowledge and skills in the following four areas of emphasis: **Number and Computation –** • equivalent representations of whole numbers • whole number comparisons • money combinations • multiplication and division fact families • one-step real-world problems with addition and subtraction **Algebra –** • multiple representations of patterns • generalization of a numerical pattern in words **Geometry –** • pattern block identification • telling time • real-world measurement (length, days in a week) **Data –** • possible outcomes • the statistical measures (minimum and maximum value, range, mode, and median)	The exemplary student effectively uses multiple problem-solving techniques and accurately explains the reasoning process he/she uses when solving mathematical problems. A student scoring at the exemplary level is likely to perform consistently and accurately at all cognitive levels on all of the four areas of emphasis. The student demonstrates well-developed content knowledge and application skills. Third grade students will demonstrate knowledge and skills in the following four areas of emphasis: **Number and Computation –** • equivalent representations of whole numbers • whole number comparisons • money combinations • multiplication and division fact families • one-step real-world problems with addition and subtraction **Algebra –** • multiple representations of patterns • generalization of a numerical pattern in words **Geometry –** • pattern block identification • telling time • real-world measurement (length, days in a week) **Data –** • possible outcomes • the statistical measures (minimum and maximum value, range, mode, and median)

Note. Descriptors for Grades 4, 5, 6, 7, and 8 are also available. From *KSDE Performance Level Descriptors Guidelines*, 2006.

Permission to copy: Verified with Dr. Scott Smith, Assistant Director, KSDE Standards and Assessment Services, telephone 785-296-4351 (personal communication May 2, 2008).

"The Kansas Department of Education will provide links and data resources targeted at users looking for specific informational documents. The purpose is to gather all these resources for easy reference and access by all interested parties." KSDE Data and Reporting Portal http://www.ksde.org/Default.aspx?tabid=83

Figure F-2 High School Math Performance Level Descriptors 2005-06

Academic Warning	Approaches Standard	Meets Standard	Exceeds Standard	Exemplary
The unsatisfactory student seldom uses problem-solving techniques and is unable to explain the process he/she uses when solving mathematical problems. A student scoring at the unsatisfactory level is likely to have inaccurate responses at lower cognitive levels and on most areas of emphasis. The student struggles to demonstrate content knowledge and application skills.	The basic student inconsistently uses problem-solving techniques and partially explains the process he/she uses when solving mathematical problems. A student scoring at the basic level is likely to perform at lower cognitive levels and not necessarily on all areas of emphasis. The student demonstrates limited content knowledge and application skills.	The proficient student uses some problem-solving techniques and explains the process he/she uses when solving mathematical problems. A student scoring at the proficient level is likely to perform at all cognitive levels on many elements of the four areas of emphasis. The student demonstrates sufficient content knowledge and application skills.	The advanced student effectively uses multiple problem-solving techniques and explains the reasoning process he/she uses when solving mathematical problems. A student scoring at the advanced level is likely to perform accurately at all cognitive levels on most elements of the four areas of emphasis. The student demonstrates effective content knowledge and application skills.	The exemplary student effectively uses multiple problem solving techniques and accurately explains the reasoning process he/she uses when solving mathematical problems. A student scoring at the exemplary level is likely to perform consistently and accurately at all cognitive levels on all of the four areas of emphasis. The student demonstrates well-developed content knowledge and application skills.
High school students will demonstrate knowledge and skills in the following four areas of emphasis: **Number and Computation –** • properties of real numbers • estimate adjustment • real-world formulas, volume and surface area of rectangular solids and cylinders, and application of percents **Algebra –** • systems of equations • application of linear equations and inequalities • changes in slope and constant of linear equations • real-world meaning of slope and points on/off a line **Geometry –** • application of Pythagorean Theorem • effect of transformations on perimeter, area, and volume • slopes of parallel and perpendicular lines • slope/y-intercept form of a line **Data –** • probability and odds • effect of outliers • line of best fit • data analysis from a data display	High school students will demonstrate knowledge and skills in the following four areas of emphasis: **Number and Computation –** • properties of real numbers • estimate adjustment • real-world formulas, volume and surface area of rectangular solids and cylinders, and application of percents **Algebra –** • systems of equations • application of linear equations and inequalities • changes in slope and constant of linear equations • real-world meaning of slope and points on/off a line **Geometry –** • application of Pythagorean Theorem • effect of transformations on perimeter, area, and volume • slopes of parallel and perpendicular lines • slope/y-intercept form of a line **Data –** • probability and odds • effect of outliers • line of best fit • data analysis from a data display	High school students will demonstrate knowledge and skills in the following four areas of emphasis: **Number and Computation –** • properties of real numbers • estimate adjustment • real-world formulas, volume and surface area of rectangular solids and cylinders, and application of percents **Algebra –** • systems of equations • application of linear equations and inequalities • changes in slope and constant of linear equations • real-world meaning of slope and points on/off a line **Geometry –** • application of Pythagorean Theorem • effect of transformations on perimeter, area, and volume • slopes of parallel and perpendicular lines • slope/y-intercept form of a line **Data –** • probability and odds • effect of outliers • line of best fit • data analysis from a data display	High school students will demonstrate knowledge and skills in the following four areas of emphasis: **Number and Computation –** • properties of real numbers • estimate adjustment • real-world formulas, volume and surface area of rectangular solids and cylinders, and application of percents **Algebra –** • systems of equations • application of linear equations and inequalities • changes in slope and constant of linear equations • real-world meaning of slope and points on/off a line **Geometry –** • application of Pythagorean Theorem • effect of transformations on perimeter, area, and volume • slopes of parallel and perpendicular lines • slope/y-intercept form of a line **Data –** • probability and odds • effect of outliers • line of best fit • data analysis from a data display	High school students will demonstrate knowledge and skills in the following four areas of emphasis: **Number and Computation –** • properties of real numbers • estimate adjustment • real-world formulas, volume and surface area of rectangular solids and cylinder, and application of percents **Algebra –** • systems of equations • application of linear equations and inequalities • changes in slope and constant of linear equations • real-world meaning of slope and points on/off a line **Geometry –** • application of Pythagorean Theorem • effect of transformations on perimeter, area, and volume • slopes of parallel and perpendicular lines • slope/y-intercept form of a line **Data –** • probability and odds • effect of outliers • line of best fit • data analysis from a data display

Note. From *KSDE Performance Level Descriptors Guidelines*, 2006.

Permission to copy: Verified with Dr. Scott Smith, Assistant Director, KSDE Standards and Assessment Services, telephone 785-296-4351 (personal communication May 2, 2008).

"The Kansas Department of Education will provide links and data resources targeted at users looking for specific informational documents. The purpose is to gather all these resources for easy reference and access by all interested parties." KSDE Data and Reporting Portal http://www.ksde.org/Default.aspx?tabid=83