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Minnesota Education Yearbook

The status of preK–12 education in Minnesota
prepared by the Office of Educational Accountability

UNIVERSITY OF MINNESOTA

2003 Minnesota Education Yearbook

Executive Summary

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CHAPTER 1:

INTRODUCTION

In the area of educational accountability, academic year 2002–03 has been marked by a frantic effort to replace Minnesota’s educational standards in reading and mathematics, to revise its statewide testing, and to overhaul the state’s system of evaluating schools and districts. These efforts have been prompted by our Governor’s campaign pledge to repeal the Minnesota Profile of Learning and replace it with rigorous educational standards. The effort has also been prompted by the federal No Child Left Behind (NCLB) Act, which lays out various provisions concerning educational standards, assessment, and school accountability that must be met by states, local districts, and local schools as a condition of receiving federal funds.

According to the No Child Left Behind Act, by 2005–06, all students must take annual reading and mathematics tests in grades 3–8 and one time in grades 9–12. By 2007–08, students at selected grades must also take annual science tests. NCLB requires that states set academic content standards in the core academic areas. States must also set student proficiency levels in reading and mathematics. Here “proficiency level” means a minimum score that students must obtain on a statewide assessment in order to be considered academically proficient. The goal is to have all students reading and doing mathematics at or above the proficient level by 2013–14.

Between now and 2013–14, schools in districts receiving Title I funding, each school as a whole, and all students in key subgroups (defined by ethnicity, poverty level, language status, and special education status) must be making adequate yearly progress toward the ultimate 100% proficiency goal. Whether or not students are making adequate yearly progress depends on whether they are meeting their state’s academic performance expectations, which have been set according to the requirements of the No Child Left Behind Act. Just as the No Child Left Behind Act has shaped Minnesota’s efforts in the areas of standards, assessments, and school accountability, Minnesota’s efforts have shaped this report.

Chapter 2 first briefly summarizes the key components of NCLB, and describes the steps that Minnesota has taken to revise its standards and to satisfy provisions of the No Child Left Behind Act. The chapter also describes passed legislation that goes beyond what is required federally. Next, the chapter summarizes Minnesota’s school report card system. Finally, it describes steps taken by other states in response to NCLB and the performance of schools in those other states with respect to their new state expectations.

Chapter 3 covers enrollment, finance, and teacher characteristics in

Minnesota schools. Here we begin by tracking decade-long trends in enrollment that have implications for the funding and staffing of schools. The finance section describes monetary resources and their distribution over various expenditure and revenue categories. The chapter describes teachers, their experience, salaries, and level of preparation. Particular attention is paid to teacher qualifications. Chapter 3 also compares Minnesota's expenditures and teacher salaries to those of other states.

Chapter 4 looks at high school coursework, student attendance, and high school graduation rates. In its first section, the chapter considers data on students' high school coursework from two sources: the *ACT* college admissions test program, and the mathematics coursework survey that accompanied the statewide 11th grade test in mathematics. Coursework results are used to explore the question of whether the new high school graduation course requirements can be expected to improve student achievement and close achievement gaps among Minnesota's major ethnic groups.

In the attendance section of Chapter 4, the attendance rates of elementary school students are analyzed relative to the state's goal of having a 90% attendance rate in every school by 2013–14. Graduation rates are reported using the new method of computation that was adopted in order to meet NCLB requirements and are evaluated against the state's goal of reaching an 80% graduation rate in every high school by 2013–14. Chapter 4 argues that schools and student subgroups may need to first meet the state's attendance targets in the high school grades if they are later expected to meet the state's high school graduation target.

Chapter 5 contains data on student achievement. It begins with reading and writing data from the 2002 *National Assessment of Educational Progress* (*NAEP*) results on Minnesota students. Generally, the *NAEP* reading data are used to confirm (or disconfirm) trends seen in reading data from Minnesota's statewide testing program over the last several years. If scores on the *NAEP* reading tests keep rising for Minnesota students, it suggests that improvements in student achievement on Minnesota's statewide reading tests are not narrowly limited to the specific content of Minnesota's tests. It also suggests that teachers have improved their instruction of reading overall, not just their teaching of the specific content on Minnesota's tests. Next, the chapter reports data from the 2002–03 statewide achievement tests. Trends over time are discussed. Results are viewed in light of the new state proficiency expectations. Finally, trends in scores for Minnesota students on the *ACT* test are reported.

Chapter 6 summarizes our major recommendations and conclusions from the previous chapters. Given the significant changes in standards, high school graduation coursework requirements, student assessment, and school evaluation policies adopted by the new administration and the legislature in 2003, Chapter 6 focuses on the implications of the new data for the implementation of Minnesota's new policies.

Sources and Limitations

As with past *Yearbooks*, we have drawn heavily on an earlier report entitled *The Minnesota Educational Accountability and Reporting System: Feasibility and Design Study* (Bruininks et al., 1996) in selecting the variables to be included in this report. The selection of variables also follows reporting guidelines in Minnesota statute (2003 1st Special Session, Chapter 9).

To assemble data on the various indicators, we have drawn from a variety of sources. We are indebted to those who gathered the data, but we are also bound by the limits of the data. For instance, while previous *Yearbooks* have reported comparisons between Minnesota students and students from other countries, no new international comparisons were available this year. Therefore, none are reported in this *Yearbook*. The nature of the available data limits the kinds of questions we can address and the analyses we can perform.

Two of our achievement data sets are national: the data on college-bound students taking the *ACT* (formerly the *American College Test*) and the data from the *National Assessment of Educational Progress* studies of 4th grade reading and writing. These studies have the advantage of permitting comparisons of Minnesota students with students from around the country. We have also drawn from two other national data sets on teacher salaries and per pupil expenditures. That is, we have included data from the American Federation of Teachers' (AFT) study of salaries nationwide, and from *Education Week's* comparison of per pupil expenditures in Minnesota with those from other states.

Most of our data come from Minnesota statewide reporting, rather than national sources. Much of the data comes from the Minnesota Department of Education¹ (MDE), and is reported to MDE either by schools and districts around the state or by the statewide testing contractors. The MDE is the source for our data on statewide testing, attendance, graduation and dropout rates, teacher characteristics, and school district finances.

Tables in this report represent our analyses of the data sets. Many of the figures are simple graphical representations designed to highlight selected data in those tables. However, some of the graphs were not taken from our own data. For instance, the decade-long trends in *ACT* scores were taken from a series of annual reports by ACT, Inc. In such cases, the source is indicated under the graph.

In Chapters 3–5, the figures and text highlight what we consider to be the most important findings in the data. More detail can be found in tables in these chapters or in Appendix B (pp. 105–130). Readers who do not find the answer to their question in the text or figures may find the answer in the tables, or in the cited references. Undoubtedly, readers will think of additional questions that, for reasons of space, we do not address in this report.

NCLB has prompted Minnesota to change the way it measures or computes

¹ The Minnesota Department of Education was formerly the Minnesota Department of Children, Families & Learning.

some indicators (e.g., graduation rate) as compared to previous years. This raises a serious question when tracking trends over time. In displaying the trend, should the indicator be shown as it is currently computed, or as previously computed? Where possible, we have re-computed the indicator for prior years using the current year's method of computation. Where it was not possible to re-compute the indicator for prior years, we have displayed the trend using the method of computation from the prior years. With one exception, where trends over time are shown, the indicator has been computed the same way for all years shown. A footnote under the table or figure indicates whether the data are shown as currently computed or as computed in prior years. The exception is in the enrollment trends for special education and limited English proficiency (LEP) students, where the method of counting changed in 1998 and we have been unable to re-compute the enrollments in a comparable way for years before and after 1998.

This is the sixth *Minnesota Education Yearbook*. Much of the reporting is similar to prior years, particularly where the goal is to track trends across time. Minnesota's accountability and reporting system is evolving. The changes in this *Yearbook* represent a next step in the evolution of reporting at the statewide level. Because educational improvement is a continuing process, the monitoring of education results must be an ongoing effort, designed to tell us whether our educational reforms are succeeding and how they can be further improved.

CHAPTER 2: FEDERAL AND STATE ACCOUNTABILITY AND ASSESSMENT

Educational accountability was brought into the spotlight with the signing of the No Child Left Behind (NCLB) Act in January 2002. Since that time, states have been working to get their accountability and assessment systems in place and in compliance with federal requirements. When last year's *Yearbook* was being written, states were still developing their plans for submission. On June 10, 2003 President Bush announced that all fifty states had accountability plans that had been approved to meet the guidelines contained in the Act. However, two months later there were still only five states with plans that had "full approval" (*Education Daily*, Aug 19, 2003). While the Administration has approved all state accountability plans, in most cases plans were approved contingent on changes yet to be made. Therefore, as this is being written, the majority of states have not yet fully met federal NCLB requirements and it is unclear how, when, or whether they will.

The legislation covers an array of issues, which can be categorized into the following areas: (1) standards and assessments; (2) adequate yearly progress; (3) school safety; and (4) teacher quality and licensure. These four areas are briefly discussed below.

Standards and Assessments. The first step in an educational accountability system is setting education standards. According to federal legislation, by 2002–03, every state must have adopted an accountability system in which all schools in districts accepting Title I funds have standards in reading/language arts and mathematics. Science standards must be in place by 2005. The standards must be the same for all students, and must identify what students should know and be able to do.

In order to determine whether students are meeting standards, their academic achievement must be assessed. Beginning in the year 2002–03, states were to administer tests in reading/language arts and mathematics at least once in each of the following three grade spans: grades 3–5, grades 6–9, and grades 10–12. Beginning in 2005–06, tests in reading/language arts and mathematics must be administered every year in grades 3–8 and once in grades 9–12. Starting in 2007, science achievement must be tested at least once in each of the following grade spans: 3–5, 6–9, and 10–12.

Adequate Yearly Progress. The primary component of adequate yearly progress (AYP) is for states to implement a process for identifying schools that have neither reached a state-established achievement level, nor made adequate yearly progress toward that level.

Beginning in 2002, each state was expected to have implemented a

single statewide accountability system, based on academic standards and assessments. States must use the assessments to set three academic performance levels or standards: basic, proficient, and advanced. States may set additional levels if they wish. The determination of whether a school is making AYP is based on the percentage of students meeting or exceeding proficiency standards. Each year, test results and other information about schools must be published in an annual report card and made available to parents and the community prior to the beginning of the following school year.

States are also expected to set a starting level for determining adequate yearly progress (AYP) of schools. This is the percentage of students at the proficient level in the school at the 20th percentile of all schools. Using this as a starting level, districts and schools, and subgroups within the school, must exceed this figure every year or they will be considered as “not having made adequate progress” toward the 100% proficiency benchmark. The percentage of students in the school who need to be proficient increases from the starting point to 100% proficiency over the twelve years from 2001–02 to 2013–14.

If a school fails to meet the state achievement target for two consecutive years it will be identified as in need of improvement. Although states have various labels for schools identified as not making adequate yearly progress toward the state’s achievement level (e.g., Schools in Need of Improvement, Schools under Review) each state must submit the names of the identified schools to the U.S. Department of Education, where they are assembled into the USDE’s list of schools not making adequate yearly progress.

School Safety. Another provision in the No Child Left Behind Act addresses school safety and violence. According to the legislation, states receiving any funds under the Act must establish and implement a statewide policy requiring that all students will have the opportunity to attend a “safe” public elementary or secondary school within the local education agency, including a public charter school. If a student attends an unsafe public elementary or secondary school, as determined by the state in consultation with a representative sample of local educational agencies, or becomes a victim of a violent criminal offense, as determined by state law, while in or on the grounds of a public elementary or secondary school that the student attends, the school is considered unsafe. In this case the student must be provided with the opportunity to attend another school that was not identified as unsafe. States must certify in writing to the Secretary of Education that they are in compliance with this provision as a condition of receiving funds under federal legislation.

Teacher Quality and Licensure. The No Child Left Behind Act also requires stricter licensing and qualification guidelines for teachers across the country in school districts receiving Title I funds (almost every school district in Minnesota). The legislation defines “highly qualified” teachers as those who not only possess full state certification, but also have solid content knowledge of the subjects they teach.

Beginning in fall 2002, all new elementary school teachers were required

to pass tests in subject knowledge and teaching skills in math, reading and writing in order to be in compliance with the legislation. New middle school and high school teachers must pass rigorous subject-matter tests or have the equivalent of an undergraduate major, graduate degree or advanced certification in their respective fields. States must ensure that by the end of the 2005–06 school year, all teachers teaching in core academic subjects (English, reading, language arts, mathematics, science, foreign languages, civics and government, economics, arts, history and geography) are highly qualified (Paige, 2002).

Minnesota's Response

There were two primary factors influencing the course of Minnesota's educational system this past year. The first was the federal No Child Left Behind legislation, which lays out various provisions concerning educational standards, assessment, and school accountability that must be met by states, local districts, and local schools as a condition of receiving federal Title I funds. However, in addition to federal changes and requirements, a new administration in Minnesota brought about substantial changes as well. Governor Pawlenty made a campaign pledge to replace the Profile of Learning and with rigorous educational standards, and in the 2003

Sanctions To Be Imposed On Schools Not Making Adequate Yearly Progress

If a school fails to meet the state AYP target for two consecutive years, it will be identified as "in need of improvement." According to the No Child Left Behind legislation, schools in districts receiving Title I funding face sanctions if they are identified as in need of improvement. Sanctions are imposed according to the length of time a school has been identified. Schools identified for:

Two years: the school must develop a two-year plan for improvement, and school officials will receive help and technical assistance. According to the NCLB Act, all students assigned to an identified school must be given the opportunity to transfer to a non-identified public or charter school in the district. (In Minnesota, this option is already available under the Open Enrollment Law, whether or not a school is identified as needing improvement. However, under the NCLB Act, districts must set aside a percentage of their Title I funds to pay for transportation for students who request transfers to other, unidentified schools.)

Three years: the school will remain in school improvement status, and the district must continue to pay for transportation for students who request transfers to other, unidentified schools. The school must also provide supplemental education services to disadvantaged children who remain at the school. Parents can choose the services their child needs from a list of approved providers.

Four years: the district must implement certain corrective actions to improve the school, such as replacing certain staff or fully implementing a new curriculum, while continuing to offer public school choice and pay for supplemental services.

Five years: the school will be identified for restructuring. The school must develop a plan and make the necessary arrangements to implement significant alternative governance actions, such as state takeover, hiring of a private management contractor, converting to a charter school, or significant staff restructuring.

Legislative Session the legislature agreed by repealing the standards and charging the administration with replacing them. These events played a significant role in shaping legislation and the direction of the education system in Minnesota.

2003 State Legislation Related to NCLB (2003 First Special Session, Chapter 9)

Minnesota had legislation already in place that met some federal guidelines outlined in NCLB, but additional legislation was passed in the 2003 Session to move the state in the direction of full compliance with federal regulations. According to state legislation, the Commissioner must develop language arts, mathematics and science assessments aligned with state academic standards that districts and schools can use to monitor student academic achievement. Annual language arts/reading and mathematics assessments in grades 3 through 8, and one assessment at the high school level, must be in place in 2005–06. By 2007–08, science assessments must be in place in one grade in the 3rd–5th grade span, the 6th–9th grade span, and the 10th–12th grade span.

The Commissioner must also submit proposed standards in science and social studies by February 2004. In developing these standards, the Commissioner must consider advice from stakeholders, including parents, teachers, school board members, and members of the local business community.

Legislation was passed that specifically applies to school districts across the state. School districts must adopt graduation requirements, no later than the 2007–08 school year, that meet or exceed state graduation requirements established in law. However, in districts that implement these standards prior to 2007–08, students who enter the 9th grade in or before the 2003–04 school year must also be given the opportunity to earn a diploma based on the district's existing standards.

With regard to statewide testing, the Commissioner must include state-constructed tests in the comprehensive assessment system for each grade tested. These tests must be developed from and aligned with the state's required academic standards, and administered annually to all students in grades 3–8 and once at the high school level. Reading and mathematics tests must be implemented annually by 2005–06. A state-developed test in a subject other than writing, developed after the 2002–03 school year, must include both multiple choice and constructed response questions.

Legislation was also passed relating to teacher quality and licensure. The Board of Teaching must adopt rules to implement a statewide credential for education paraprofessionals who assist a licensed teacher in providing student instruction. Any paraprofessional holding this credential or working in a local school district after passing a state-approved local assessment is considered to be highly qualified under federal law.

Minnesota Legislation in Addition to NCLB

In addition to meeting federal guidelines for accountability, the Minnesota

legislature passed several provisions revising educational standards and accountability. According to the standards bill passed in the 2003 Special Session, a district must establish its own standards in the following subject areas: (1) health and physical education; (2) vocational and technical education; and (3) world languages. A school district must offer courses in all elective subject areas. These are in addition to the standards that are required in NCLB.

As the Governor had proposed, the Profile of Learning was repealed. However, since federal legislation required that standards be in place this year, the Profile of Learning had to be immediately replaced with new academic standards in the areas of language arts and mathematics. Standards in science, social studies (including history, geography, economics, and government and citizenship), and the arts were also included in the same proposal. According to legislation, the Commissioner must supplement statewide standards with grade-level benchmarks. The benchmarks must implement standards by specifying knowledge and skills that schools must offer and students must achieve to satisfactorily complete a state standard. The state will use a four-year review cycle for standards, beginning in 2006 and reviewing one standard area each year.

Changes were also made regarding graduation requirements and course credits. The 24 graduation standards were replaced with a course credit system for graduation. Students beginning 9th grade in 2004–05 or later must successfully complete the following high school level course credits for graduation: (1) four credits in language arts; (2) three credits of mathematics, encompassing at least algebra, geometry and statistics; (3) three credits in science, including at least one credit in biology; (4) three and one half credits in social studies, including at least one credit in U.S. history, one credit of geography, and .5 credits of economics; and (5) a minimum of eight elective course credits, including at least one credit in the arts. In addition to these standards, students will also have to pass the *Basic Skills Tests* in reading, mathematics, and written expression in order to graduate. The first students to graduate under the new system are those who were enrolled in 7th grade in 2002–03.

School Report Card: Five Star School Determination

In 2003, the Minnesota Department of Education launched the 5 Star School Determination as the new format of the state school report card. The intention of the new system is to recognize high performing schools in addition to the federal focus on schools in need of improvement. Each elementary school will receive a star rating for student achievement in math and reading. Middle schools and high schools will not receive star ratings until 2004, when an academic achievement indicator is available for these schools.

A school's AYP designation under NCLB is decided based on its rating under the 5 Star School Determination. Schools are given a rating, represented as 1–5 stars. Any school with a 3 star rating or better is defined as making adequate yearly progress. Schools with a 2 star rating did not make adequate

yearly progress in the current year, and schools with a 1 star rating failed to make adequate yearly progress for the past two consecutive years.

In addition to academic achievement, several other factors will eventually be reported under the “report card” system: (1) academic achievement (currently in use); (2) academic opportunity; (3) school safety; (4) student participation and graduation rate; (5) staff characteristics; (6) student demographics; (7) open enrollment and parent satisfaction; and (8) provision of a report to taxpayers. All areas will appear on the state report card, but only areas 1–4 will receive a star rating.

Definitions of each area are as follows:

- **Academic achievement** refers to AYP ratings and changes in school performance from year to year on statewide tests.
- **Academic opportunity** refers to the wide variety of opportunities available to students (e.g., gifted and talented services, advanced placement, International Baccalaureate courses, etc.) that support high levels of academic achievement.
- **School safety** is determined by the number of serious incidents and disciplinary responses of the school, and whether or not the school is designated as persistently dangerous, as defined in the NCLB Act.
- **Student participation** is defined as the percentage of students in attendance, participating in school assessments, and reaching graduation.
- **Staff characteristics** includes information about school staff, including qualifications and average salaries.
- **Open enrollment** and **parent satisfaction** reports on the percentage of students transferring in and out of the district and results of parent satisfaction surveys.
- The **report to taxpayers** includes a breakdown of revenues and spending at the district level, along with the current debt level.

To see current school report cards, go to the Minnesota Department of Education web site at <http://www.education.state.mn.us>, click on the schools and districts tab at the top of the page, and follow menu directions to navigate to the report cards.

Adequate Yearly Progress

One of the most controversial aspects of the NCLB Act is the Adequate Yearly Progress (AYP) requirements. According to the federal legislation, states must issue a list of schools failing to make adequate yearly progress based on federal guidelines. The list of schools not meeting the standards published this year in Minnesota was long, but it did not include as many schools as originally anticipated or as many schools as most other states. One hundred and eighty-nine schools were identified as not meeting AYP standards based on the criteria detailed below. This is approximately 7% of Minnesota schools.

It is worth noting that a major determinant in whether or not a school was

identified was the number of students in each subgroup reported. If a school had less than some minimum number of students in a key subgroup, the school would not be evaluated on the performance of that subgroup, and therefore would be treated as having met the criterion for that subgroup. Schools with a small student population were less likely to be identified for any given subgroup because their subgroup numbers were too small. Although the AYP list itself is not new to Minnesota, this is the first year that the identification of schools failing to make AYP had to follow NCLB guidelines to determine which schools are labeled as “underperforming” under the No Child Left Behind Act. It is also the first year in which non-Title I schools were included in the AYP calculations.

AYP Criteria

Academic participation—NCLB requires schools and districts to maintain a 95% participation rate in reading and mathematics assessments for students overall and for the following subgroups: LEP, special education, free and reduced-price lunch, White, Black, Asian/Pacific Islander, American Indian, and Hispanic. Each subgroup must have at least 40 students enrolled in the tested grades (3rd and 5th grades combined) in order to have the 95% participation requirement apply. Schools with less than 40 enrolled students in grades three and five combined were not evaluated on participation.

Academic proficiency—To make AYP for academic proficiency, a school’s proficiency index must meet or exceed a target set by the Minnesota Department of Education in accordance with federal guidelines. The index, which ranges from 0 to 100, is computed from student scores on the statewide examinations in reading and mathematics. Schools are expected to have 100% of students proficient by 2013–14. Each subgroup must contain at least 20 students enrolled in the tested grades, except in the case of special education, for which there must be at least 40 students.

Attendance—To make AYP for attendance, elementary schools, middle schools, and districts overall must have an average daily attendance rate of 90% or show acceptable growth towards 90%. Attendance is only calculated for all students, not subgroups.

Graduation rate—To make AYP for graduation, high schools and districts must have an average graduation rate of 80% or show acceptable growth towards 80%. Graduation rate is only calculated for all students, not subgroups.

Other States’ Responses

All states are required to comply with the federal legislation contained in NCLB or risk losing federal Title I funding. The extent to which their existing system must be altered in order to be in full compliance varies from one state to another. States also vary in the methods used to satisfy the guidelines. While some states work hard to make the necessary changes, others seem to be doing things in their own time with less of a sense of urgency. This could be a result of state plans being approved prematurely without many key components in place.

Federal officials approved plans in states that are still in the process of getting their plan revised and accepted by state legislatures or state boards of education. For example, Missouri's plan was approved even though the work group created to examine how to align state regulations with federal requirements will not convene until January of 2004 (Olson, 2003). California claims that due to the complexity of their system it will take up to two years for their state regulations to align with federal regulations. Yet the state plan has been "approved." It is therefore not surprising to see that some states are in no hurry to fully comply with NCLB.

As stated earlier, whether or not states will actually achieve full compliance is yet to be seen. However, even if all states fully comply with the legislation there will not be a universal system that will allow for state-to-state comparisons. Since several of the components of NCLB allow states to determine and set their own standards, substantial inconsistencies across states currently exist and are likely to continue to exist.

One of the most obvious discrepancies can be found in the area of academic proficiency. What is considered "academically proficient" is different from one state to another. That is, an achievement test score could be considered academically proficient in one state, but not in another. In addition, a school considered "in need of improvement" in one state might be considered a top notch school in another state, because those states have set their AYP standards according to different benchmarks. In other words, when states report the percentage of students scoring at academically proficient levels, these results cannot be directly compared since the definition of academically proficient is not the same across the country.

Even within states, discrepancies can exist in the amount of academic progress a student must make from grade to grade. This is a result of grade levels working independently from each other. For example, if what is expected in grade 3 is determined with little or no consideration of grade 2 or grade 4 expectations, the state could unintentionally be requiring grade level work at grade 3, but above grade level work in grade 4. Such inconsistencies could arise if, for example, the state has not done an adequately thorough analysis of the work required for a given grade level (*District Administration*, August 2003).

Another inconsistency is that while states are, on one hand, praising schools for academic growth based on state standards, they are simultaneously identifying the same schools as not making adequate yearly progress under the federal NCLB standard. One example of this occurred in Florida where, just hours after Governor Jeb Bush praised an elementary school for outstanding academic achievement despite high student poverty and low English proficiency, the state identified the school as failing to make adequate yearly progress under the NCLB guidelines (*The Miami Herald*, June 19, 2003). Incidents like this leave teachers and parents frustrated and bewildered about educational expectations.

At the other end of the spectrum, there are some states where schools that meet the federal requirements will still be labeled as not meeting AYP

goals if they do not also meet higher state requirements. These states have developed standards above and beyond those mandated in NCLB, which could significantly increase the number of schools identified as in need of improvement.

Conclusions

It is difficult to determine what will be the outcome of the No Child Left Behind Act of 2002. The Bush Administration has approved all state plans contingent on numerous anticipated changes. However, as outcomes and results surface, the changes states actually decide to implement may vary. In several states, the majority of schools are being labeled as not making adequate yearly progress with the current standards in place. Although only 7% of Minnesota schools were identified as in need of improvement, there are reasons to be concerned about the federal standards and the impact they will have on schools and students.

One major concern is the inconsistencies that exist in the system. Comparisons cannot be made from one state to another because states are allowed to set their own standards for adequate yearly progress. For example, what is considered academically proficient in one state may not be in another state. Discrepancies may even exist in the amount of progress required of students from one grade to the next. Therefore, even if all states do come into full compliance with the law as it stands, there is still no way in which states can be compared to each other based on outcomes reported.

Mixed messages are also being sent when a school is being commended by its state education agency for its students' performance, and then identified as not making adequate yearly progress according to federal guidelines. To avoid confusion, it would be in the best interest of states to require the same standards locally as they require of students and schools under NCLB.

It is also worth noting that in future years, the required proficiency index will rise until it reaches 100 in 2013–14, when all students must be scoring at or above the proficient level. As academic expectations increase, more and more schools will be identified as not making adequate yearly progress. The No Child Left Behind Act requires a student at an identified school to be given the opportunity to transfer to a non-identified school, but if more and more schools are identified as in need of improvement, the number of schools available to which students at identified schools can transfer will also significantly diminish. In the end, parents and students may have very few choices.

Schools with fewer than the required number of students for reporting purposes will certainly benefit when it comes time to identify schools, because they will be considered to have met the requirements by default, due to their student population. On the other hand, schools with large populations of students overall, and more specifically large populations of minority, LEP, special education, low income, or high mobility students will be more likely to be identified under the NCLB guidelines. Although we have yet to see the consequences, it is possible that this will encourage a shift in how schools and districts are configured.

CHAPTER 3: EDUCATIONAL INPUTS AND PROCESSES

This chapter describes major inputs into the educational system: students, teachers, and finances. It begins by describing the changes in enrollment, including shifts in the distribution of students across schools in the various regions of the state, and changes in student population makeup. It then describes the expenditure and sources of school revenues. Finally, the chapter provides a profile of Minnesota's teachers. Throughout, we discuss projected finance and teacher staffing needs in light of enrollment shifts.

Enrollment

Table 3.1 shows overall student enrollment in Minnesota schools for academic year 2002–03. Across the top, enrollment is broken down by student gender and ethnicity. Down the left side of the table, enrollments are broken down by region and strata,² along with school characteristics associated with student outcomes: the percentage of students in the school who are eligible for free or reduced-price lunch (poverty concentration), the percentage of students whose English language proficiency is limited (limited English proficiency [LEP] concentration), the percentage of students who

NOTES

² The “Region” indicator groups a school or district according to its location within the state; “Strata” has to do with the location and size of a given district. In Table 3.1, the Outstate region includes districts of all sizes, whereas the Outstate 2000+ strata contains districts with enrollments larger than 2000 students. The Outstate 2000- strata includes districts with enrollments less than 2000.

Table 3.1 Overall Student Enrollment in Minnesota Schools, by Gender, Ethnicity, Region, Strata, and School Characteristics: 2002–03

		Total Students	Male	Female	American Indian	Asian/Pacific Islander	Hispanic	Black	White
TOTAL		836,854	430,132	406,722	17,236	44,563	34,887	61,689	678,479
REGION	Metro Area	435,736	223,840	211,896	5,722	37,101	21,226	52,180	319,507
	Outstate	386,894	198,916	187,978	10,765	5,884	12,856	6,134	351,255
STRATA	Mpls/St. Paul	88,964	45,775	43,189	2,685	19,364	10,553	31,122	25,240
	TC Suburbs	346,772	178,065	168,707	3,037	17,737	10,673	21,058	294,267
	Outstate 2000+	192,291	98,770	93,521	3,797	4,267	6,949	4,833	172,445
	Outstate 2000-	194,603	100,146	94,457	6,968	1,617	5,907	1,301	178,810
CHARTER		12,131	6,299	5,832	556	1,473	752	3,367	5,983
ALC		11,324	6,072	5,252	632	608	1,122	2,159	6,803
POVERTY	0–19%	382,770	196,031	186,739	2,577	12,985	7,489	10,770	348,949
	20–29%	166,748	85,704	81,044	2,502	5,064	5,924	7,044	146,214
	30–49%	176,464	90,508	85,956	4,556	7,081	10,071	11,036	143,720
	50–100%	110,872	57,889	52,983	7,601	19,433	11,403	32,839	39,596
LEP	0%	218,880	113,526	105,354	9,416	2,499	2,737	5,971	198,257
	1–9%	466,335	238,701	227,634	4,769	16,590	14,276	18,378	412,322
	10–100%	151,639	77,905	73,734	3,051	25,474	17,874	37,340	67,900
SPECIAL ED	0–9%	287,212	146,467	140,745	3,362	15,703	11,487	19,458	237,202
	10–19%	526,436	270,148	256,288	12,038	27,951	22,371	39,381	424,695
	20–100%	23,206	13,517	9,689	1,836	909	1,029	2,850	16,582
MOBILITY	0–9%	138,669	70,767	67,902	984	4,308	2,740	3,433	127,204
	10–19%	456,337	233,599	222,738	5,634	18,175	13,819	16,527	402,182
	20–100%	227,820	117,931	109,889	9,949	21,558	17,808	40,145	138,360

have Individual Education Plans, or IEPs (special education concentration), and the percentage of students who have changed schools more than one time per year (mobility).

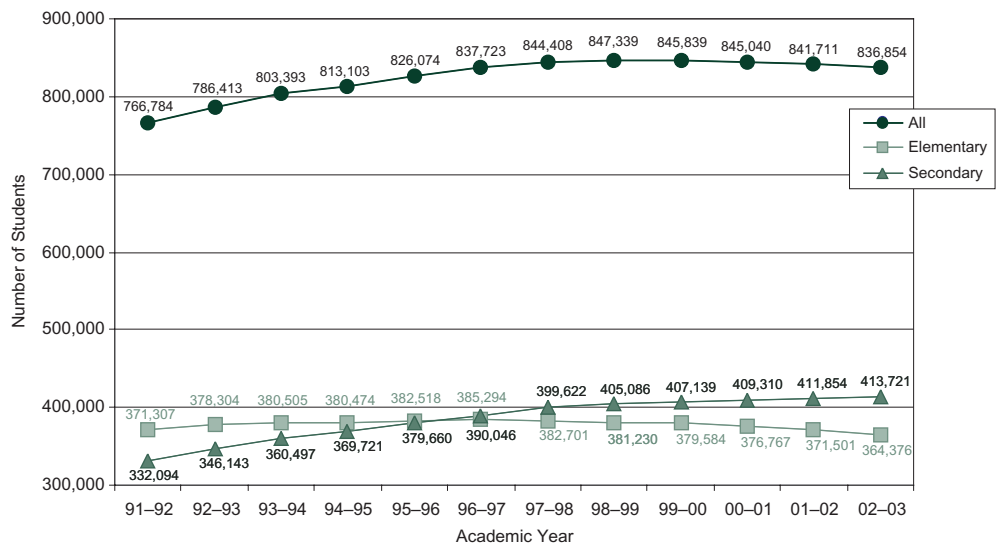
Table 3.2 Enrollment Trends from Academic Year 1991 to Academic Year 2002: October 1 Headcount

	Year											
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total K–12	766,784	786,413	803,393	813,103	826,074	837,723	844,408	847,339	845,839	845,040	841,711	836,854
Pre-K	5,533	6,394	6,656	8,060	8,340	8,902	8,945	9,116	9,234	9,300	9,671	10,037
Kindergarten	63,383	61,966	62,391	62,908	63,896	62,383	62,085	61,023	59,116	58,963	58,356	58,757
Elementary	371,307	378,304	380,505	380,474	382,518	385,294	382,701	381,230	379,584	376,767	371,501	364,376
Secondary	332,094	346,143	360,497	369,721	379,660	390,046	399,622	405,086	407,139	409,310	411,854	413,721
Mpls/St. Paul	75,598	79,526	82,805	84,907	88,197	90,749	93,313	93,612	93,018	93,042	91,364	88,964
Suburban	292,116	302,567	311,586	316,915	324,447	332,099	336,995	343,081	347,777	343,950	346,638	346,772
Outstate MN	399,070	404,320	409,002	411,281	413,430	414,875	414,100	410,646	405,044	396,705	391,421	386,894
LEP	14,199	14,769	18,556	21,616	24,759	27,953	26,936	31,576	35,810	44,360	47,961	51,275
Special Ed	92,238	99,193	95,501	101,891	106,525	110,979	93,362	96,322	98,089	99,741	100,630	101,923
F/R Lunch	178,625	186,590	197,669	200,524	208,708	212,352	222,284	223,352	220,040	217,791	223,738	230,222

Note: The special education enrollment count for 1990–91 was unavailable. The method of counting special education and limited English proficiency students changed in 1998, resulting in an apparent drop in special education/LEP enrollments that year. Low income = F/R Lunch.

Table 3.2 shows enrollment trends for grades K–12 from academic year 1991–92 to 2002–03. Table 3.2 also shows those enrollments broken down by grade level (Kindergarten, elementary, secondary), region of the state, and student characteristics (limited English proficiency (LEP), special education, and poverty status). Overall enrollment has continued to decline modestly since 1998–99. The decline in 2002–03 was 4,857 students (less than 1%). An increase of 1,867 secondary students was offset by the decline of 6,724 students in Kindergarten and elementary grades. As illustrated in Figure 3.1, although secondary school enrollment has increased each year from 1990–91 to 2002–03, elementary school enrollment has continued to decrease by larger numbers since 1996–97, causing overall enrollment to decrease. While

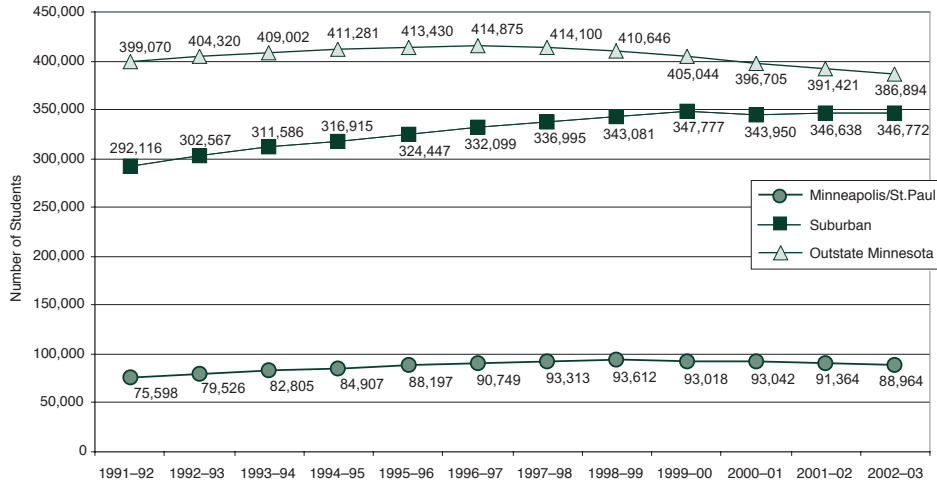
Figure 3.1 Statewide Enrollment: Elementary, Secondary, and Total K–12: 1992–03 (October 1 Headcount)



the overall enrollment decline is less than 1%, not all districts would have been equally affected, and the decline may have had a serious financial impact on districts in which the decline was most heavily concentrated.

Figure 3.2 and Table 3.2 show enrollment trends in Minneapolis/St. Paul, suburban areas, and outstate Minnesota. Enrollment in suburban schools remained virtually constant, while schools in Minneapolis, St. Paul, and outstate Minnesota are experiencing slight decreases in enrollment.

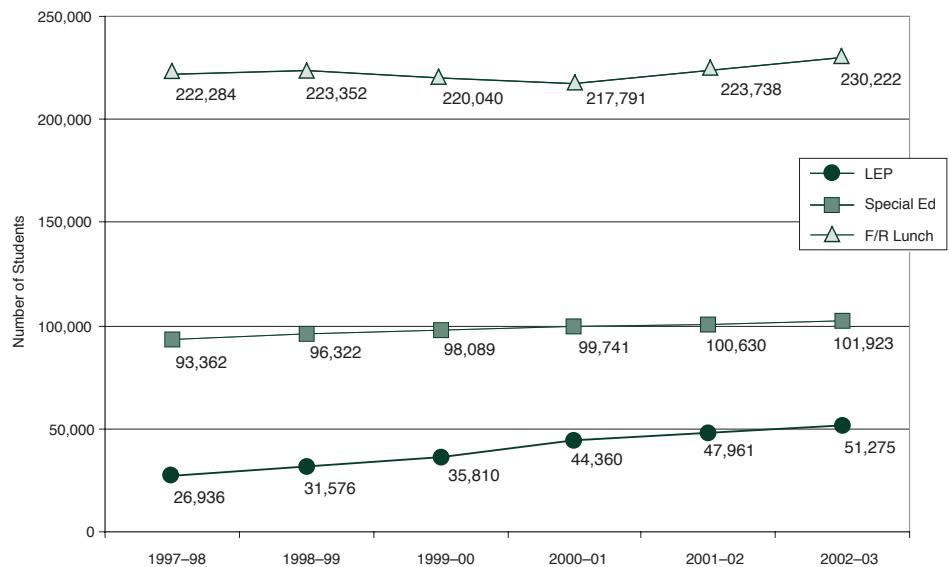
Figure 3.2. K–12 Enrollment in Minneapolis/St. Paul, Suburban, and Outstate Minnesota Schools: 1992–03 (October 1 Headcount)



Note: the enrollment figures represented here do not include charter school enrollments.

Figure 3.3 compares the number of students statewide in limited English proficiency (LEP) programs, the number of students in special education, and the number of students eligible for free or reduced-price lunch, for academic years 1997–98 to 2002–03. The number of students with limited English proficiency has increased by 3,314 students (almost 7%) since 2001–02, and is almost double the enrollment for 1997–98 (26,936). The steady decline in overall enrollment continues to be accompanied by increasing numbers of students who need LEP services. Minnesota has recently changed state funding of LEP services, so a student will no longer receive state funding of LEP services for more than five years. If, as a result of this funding change, schools can no longer serve as many students in LEP programs, then the change in funding policy may slow the increase in the number of students receiving state-funded LEP services, although schools may continue to provide LEP services beyond five years without the state funding.

Figure 3.3 Statewide K–12 Students Enrolled in LEP Programs, Special Education, and Free/Reduced-Price Lunch: 1998–03

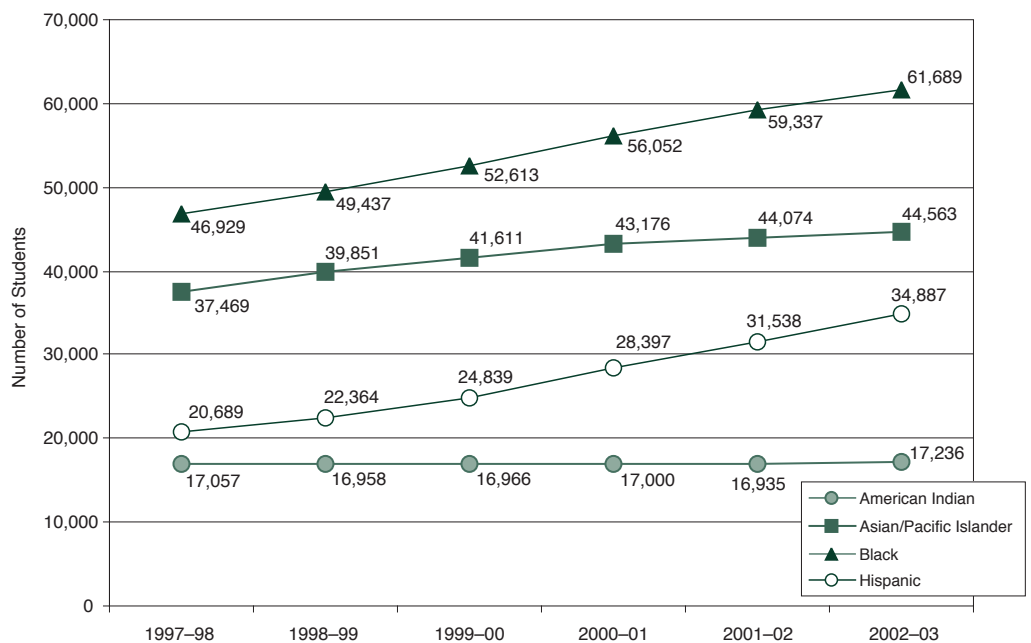


Despite modest overall enrollment declines, the number of students receiving special education services has also continued growing over the last five years (see Table 3.2, p. 16, and Figure 3.3, p. 17). Enrollment in special education programs has increased by 1,293 students (about 1%) since last year, and by 8,561 students since 1997–98 (approximately 9%).

The number of low income students in 2003 was the highest of any year in more than a decade. As illustrated in Figure 3.3, the number low income students (those eligible for free or reduced-price lunch) has increased by 6,484 students (almost 3%) since last year. These increases are consistent with the declining economic situation in the state.

Figure 3.4 shows the changes over the past six years in minority student enrollments. Overall, minority enrollments have increased steadily since 1997–98, with the exception of American Indian students, whose enrollment has remained relatively constant. In the past year, the largest increases were in the number of Black (2,352) and Hispanic (3,349) students enrolled, and the smallest increases were in the number of Asian (489) and American Indian (301) students enrolled.

Figure 3.4 Statewide K–12 Minority Enrollment: 1998–03



The data in Table 3.3 (p. 19) suggest that the modest enrollment decline will continue. The number of students in the high school grades is larger than the number of students in the elementary grades. In other words, more students will be exiting from high school than have been entering the lower grades. Unless there is an increase in the number of students entering kindergarten and first grade, the modest enrollment decline can be expected to continue.

Emerging demographic shifts are likely to alter schools' financial and staffing needs, and Minnesota will need to position itself to provide for these changes. As we noted in the *2002 Minnesota Education Yearbook*, declining overall enrollment might seem to predict a decline in the need for education

Table 3.3 2002–03 Enrollment in Grades Pre-K–12, by School Strata

	Number of Students Statewide	Mpls/St.Paul	TC Suburbs	Outstate: 2000+	Outstate: 2000-
Pre-K	10,037	996	4,056	2,450	2,466
Kindergarten	58,757	7,794	23,758	13,139	12,760
Grade 1	57,617	6,453	24,633	12,867	12,451
Grade 2	58,276	6,396	24,891	12,993	12,774
Grade 3	59,644	6,707	25,560	13,161	13,113
Grade 4	61,634	6,787	26,092	13,671	13,969
Grade 5	62,982	7,023	26,362	14,141	14,436
Grade 6	64,223	6,949	26,738	14,689	14,832
Grade 7	67,532	6,784	28,124	15,589	16,111
Grade 8	66,999	6,758	27,542	15,705	16,101
Grade 9	69,177	6,888	27,999	16,515	16,824
Grade 10	68,563	6,332	27,597	16,467	17,076
Grade 11	69,151	6,497	28,097	16,599	16,779
Grade 12	72,299	7,596	29,379	16,755	17,377

funding. However, these declines are occurring primarily among students with less need for services such as special education classes and English as a Second Language (ESL) classes, while the number of students needing those services is increasing. Furthermore, the need for teachers trained to provide these additional services can also be expected to increase. Schools will need more teachers in special education as well as in ESL, even as the need for teachers in other areas may diminish. Given the higher cost of educating students requiring additional services, such as ESL and special education, the cost per pupil can be expected to rise. Any savings to the state from declining enrollments may be at least partially offset by a need to increase funding for special services if the number of students receiving those services continues to grow.

Finance

As shown in Table 3.4 (p. 20), the average operating expenditure per pupil in Minnesota was \$7,655, a 3% increase over the \$7,424 reported for 2000–01 (Davison, et al., 2003). In the most recent year for which data were available from other states (2002), Minnesota’s per pupil expenditure was reported as \$7,987 (adjusted to reflect regional cost differences), which is 6% above the national average of \$7,524. In 2002, Minnesota ranked 20th in adjusted per pupil expenditure among the fifty states (*Education Week*, 2003). It is worth noting that Minnesota’s national ranking in per pupil expenditure has fallen to a level lower than any year since 1997, and that this downward adjustment preceded the very large state deficit with which the Minnesota Legislature struggled in 2003.

Per Pupil Expenditures. Table 3.4 and Figure 3.5 (p. 20) show per pupil operating expenditures for the state as a whole, and for various district

categories. These figures do not include capital expenditures. The “operating expenditures” category (Total PK-12 Op. Exp.) in Table 3.4 includes not only the cost of regular instruction, but also the cost of special education, vocational education, and non-instructional services (e.g., transportation, food services).

Figure 3.5 Distribution of Per Pupil Operating Expenditures: 2001–02

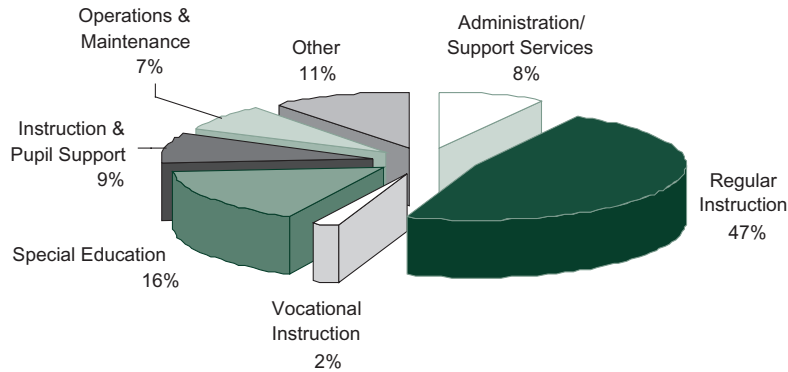


Figure 3.5 shows how expenditures statewide are distributed among the expense categories. As in most states, schools expend the largest proportion of funds (47%) on regular instruction. The second largest expense category is special education, at 16%. Vocational instruction, at only 2%, is the smallest expense category. Together, the three instructional categories (Regular, Special, and Vocational) include most teacher salaries and consume 65% of the educational budget.

As shown in Table 3.4, districts spend money somewhat differently depending on district characteristics. For instance, metro area and outstate schools

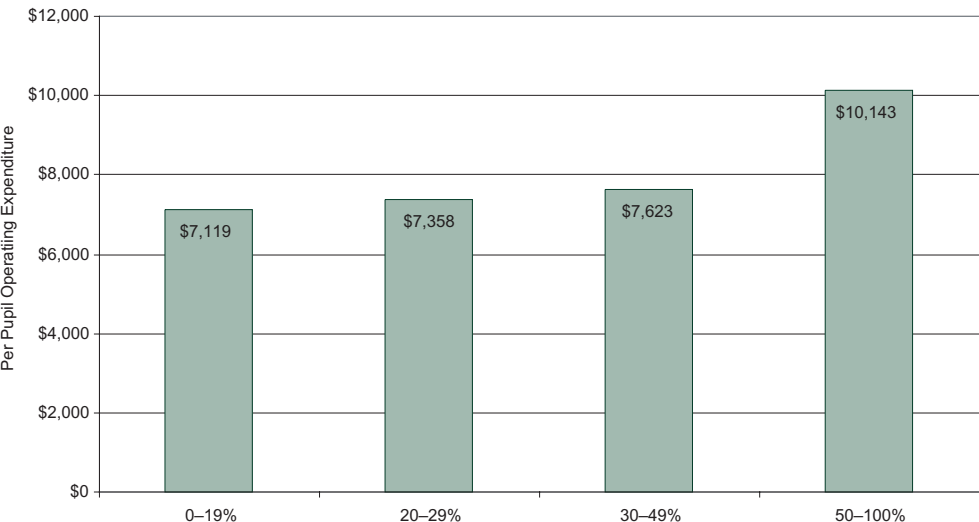
Table 3.4 2001-02 Per Pupil Operating Expenditures, by District Category

		Total PK–12 Op. Exp.	Admin/ Support Service	Regular Instruction	Vocational Instruction	Special Education	Instructional & Pupil Support	Operations & Maint.	Other
STATE TOTAL		\$7,655	\$623 8%	\$3,615 47%	\$133 2%	\$1,237 16%	\$683 9%	\$559 7%	\$806 11%
REGION	Metro Area	\$8,003	\$627 8%	\$3,764 47%	\$123 2%	\$1,321 17%	\$808 10%	\$548 7%	\$812 10%
	Outstate	\$7,271	\$618 9%	\$3,450 47%	\$144 2%	\$1,143 16%	\$545 7%	\$571 8%	\$799 11%
STRATA	Mpls/St. Paul	\$10,267	\$730 7%	\$4,920 48%	\$80 1%	\$1,672 16%	\$1,174 11%	\$668 7%	\$1,022 10%
	TC Suburbs	\$7,394	\$599 8%	\$3,454 47%	\$134 2%	\$1,227 17%	\$710 10%	\$516 7%	\$756 10%
	Outstate 2000+	\$7,226	\$551 8%	\$3,359 46%	\$140 2%	\$1,252 17%	\$604 8%	\$560 8%	\$760 11%
	Outstate 2000-	\$7,315	\$685 9%	\$3,541 48%	\$148 2%	\$1,035 14%	\$487 7%	\$581 8%	\$839 11%
POVERTY	0–19%	\$7,119	\$579 8%	\$3,360 47%	\$129 2%	\$1,134 16%	\$656 9%	\$515 7%	\$746 10%
	20–29%	\$7,359	\$603 8%	\$3,477 47%	\$136 2%	\$1,219 17%	\$610 8%	\$539 7%	\$776 11%
	30–49%	\$7,623	\$659 9%	\$3,564 47%	\$167 2%	\$1,237 16%	\$539 7%	\$614 8%	\$844 11%
	50–100%	\$10,143	\$767 8%	\$4,841 48%	\$94 1%	\$1,623 16%	\$1,115 11%	\$677 7%	\$1,026 10%
LEP	0%	\$7,452	\$676 9%	\$3,586 48%	\$134 2%	\$1,087 15%	\$522 7%	\$600 8%	\$847 11%
	1–9%	\$7,294	\$593 8%	\$3,421 47%	\$140 2%	\$1,205 17%	\$643 9%	\$529 7%	\$762 10%
	10–100%	\$9,368	\$690 7%	\$4,456 48%	\$99 1%	\$1,520 16%	\$1,014 11%	\$639 7%	\$949 10%
SPECIAL ED	0–9%	\$7,298	\$620 8%	\$3,474 48%	\$143 2%	\$1,111 15%	\$653 9%	\$525 7%	\$771 11%
	10–19%	\$7,756	\$622 8%	\$3,656 47%	\$129 2%	\$1,273 16%	\$693 9%	\$568 7%	\$816 11%
	20–100%	\$9,074	\$973 11%	\$4,048 45%	\$160 2%	\$1,537 17%	\$659 7%	\$725 8%	\$973 11%
MOBILITY	0–9%	\$7,249	\$715 10%	\$3,570 49%	\$110 2%	\$977 13%	\$477 7%	\$597 8%	\$803 11%
	10–19%	\$7,123	\$576 8%	\$3,389 48%	\$141 2%	\$1,122 16%	\$608 9%	\$521 7%	\$766 11%
	20–100%	\$8,632	\$686 8%	\$4,009 46%	\$123 11%	\$1,475 17%	\$847 10%	\$617 7%	\$876 10%

differ somewhat in the amount of money spent on administration and support services or instructional and pupil support, while districts with high concentrations of low income students spend money differently than do districts with few low income students.

Concern has been expressed that, nationally, schools and districts with high concentrations of economically disadvantaged students may be less well funded than other schools and districts. Figure 3.6 shows per pupil expenditure amounts for Minnesota’s high- and low poverty districts. “District poverty level” is indicated by the proportion of low income students (eligible for free or reduced-price lunch). According to these numbers, there is no tendency for higher poverty districts to spend less than other districts, which suggests that Minnesota’s efforts to provide for its economically disadvantaged students have achieved some success. However, low income students more frequently need additional services (ESL instruction, special education, etc.), and there is debate as to whether the funding of schools and districts with high concentrations of low income students is sufficient to cover the costs of those additional services.

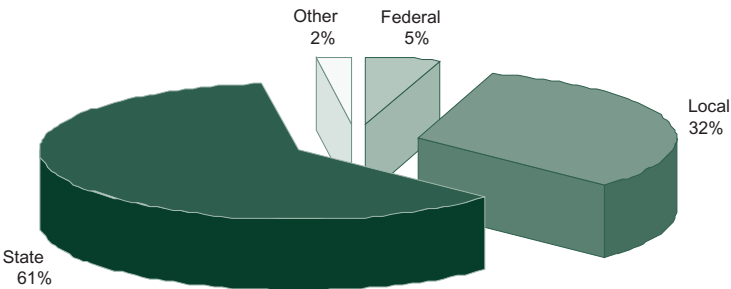
Figure 3.6 Total District Per Pupil Operating Expenditures, by District Poverty Level*: 2001–02



*District Poverty Level = the percentage of the student population that is eligible for free or reduced-price lunch.

Per pupil Revenues. Sixty-one percent of school funding currently comes from state revenues. Local revenues provide 32%, and federal sources account for only 5%. Other sources, such as private donations, various fundraising efforts, and grants, provide an additional 2% (see Figure 3.7). The trend of increases in total education expenditures and the shift away from local districts to the state as the primary source of revenue continues much as it has over the past several decades. However, it is important to note that individual districts vary significantly in the degree to which they depend on local, state, and federal revenues. Figure 3.7 and Table 3.5 (p. 22) show the district per pupil revenues that come from state, local and federal sources. Table 3.6 (p. 22) contains a further breakdown of revenue sources.⁵

Figure 3.7 Percentage of School Funding Received through Federal, State, and Local Sources for Minnesota: 2001–02



NOTES

⁵ The district per pupil revenues in Tables 3.5 and 3.6 exceed the per pupil operating expenditures in Table 3.4 because the operating expenditures exclude capital expenses, whereas the revenues include money for capital expenses.

In Minnesota, the percentage of revenue districts received from local sources ranged from 2%–77% of the total; state revenues vary from 19%–86%; and federal revenues vary from 1%–35% (Minnesota Department of Education, 2003). Shifts in revenue source (e.g., from local to state sources) may affect

Table 3.5 2001-02 Per Pupil Total Revenues, by District Category

		Total Local Revenues	Total State	Total Federal	Other Financing	Total Revenues
STATE TOTAL		\$3,044	\$5,661	\$453	\$218	\$9,375
REGION	Metro Area	\$3,705	\$5,497	\$442	\$225	\$9,868
	Outstate	\$2,311	\$5,842	\$465	\$210	\$8,828
STRATA	Mpls/St. Paul	\$3,466	\$7,384	\$1,074	\$79	\$12,002
	TC Suburbs	\$3,769	\$4,990	\$272	\$265	\$9,295
	Outstate 2000+	\$2,552	\$5,695	\$436	\$209	\$8,891
	Outstate 2000-	\$2,072	\$5,988	\$495	\$210	\$8,766
POVERTY	0–19%	\$3,377	\$5,063	\$252	\$266	\$8,958
	20–29%	\$2,814	\$5,574	\$385	\$216	\$8,989
	30–49%	\$2,330	\$6,069	\$560	\$197	\$9,156
	50–100%	\$3,296	\$7,354	\$1,142	\$85	\$11,876
LEP	0%	\$2,356	\$5,916	\$532	\$194	\$8,998
	1–9%	\$3,140	\$5,313	\$334	\$248	\$9,035
	10–100%	\$3,336	\$6,852	\$869	\$115	\$11,172
SPECIAL ED	0–9%	\$3,408	\$5,131	\$270	\$243	\$9,052
	10–19%	\$2,935	\$5,817	\$503	\$210	\$9,465
	20–100%	\$2,682	\$6,393	\$1,483	\$137	\$10,695
MOBILITY	0–9%	\$2,986	\$5,395	\$329	\$214	\$8,924
	10–19%	\$2,878	\$5,408	\$311	\$247	\$8,843
	20–100%	\$3,337	\$6,136	\$716	\$169	\$10,357

some districts more than others. For instance, a shift that includes a reduction in local property tax revenues may, depending on how it is implemented, have its biggest effect on districts that depend most heavily on local revenue. Likewise, a shift that includes an increase in state funding may, depending on how it is allocated, give an advantage to districts that receive the largest proportions of their budgets from state revenues.

If policymakers contemplate further shifts from local to state revenue sources, they must carefully consider the potential for redistribution of funds across districts that could result from such shifts—and the potential for creating new imbalances in school funding. The stability of state revenue sources also

Table 3.6 2001–02 Per Pupil Revenues, by District Category

		Levy	Tuition & Fees	Other Local Sources	State Aid	Special Ed.	State Grants & Other State Revenues	Federal thru MDE	Federal Thru Other State & Federal Direct	Child Nutrition
STATE TOTAL		\$2,279	\$296	\$469	\$4,568	\$703	\$389	\$275	\$57	\$121
REGION	Metro Area	\$2,912	\$320	\$473	\$4,277	\$775	\$444	\$276	\$47	\$118
	Outstate	\$1,579	\$269	\$464	\$4,890	\$624	\$328	\$273	\$69	\$124
STRATA	Mpls/St. Paul	\$2,856	\$248	\$362	\$5,235	\$974	\$1,175	\$602	\$196	\$276
	TC Suburbs	\$2,927	\$339	\$503	\$4,020	\$722	\$248	\$189	\$7	\$76
	Outstate 2000+	\$1,750	\$287	\$515	\$4,719	\$668	\$308	\$293	\$36	\$106
	Outstate 2000-	\$1,410	\$250	\$413	\$5,061	\$580	\$348	\$253	\$100	\$141
POVERTY	0–19%	\$2,591	\$332	\$454	\$4,193	\$643	\$228	\$174	\$10	\$68
	20–29%	\$2,033	\$267	\$514	\$4,540	\$702	\$332	\$246	\$27	\$112
	30–49%	\$1,549	\$286	\$495	\$5,047	\$681	\$341	\$344	\$59	\$157
	50–100%	\$2,664	\$240	\$392	\$5,290	\$941	\$1,123	\$588	\$281	\$273
LEP	0%	\$1,568	\$253	\$535	\$4,961	\$600	\$355	\$286	\$112	\$134
	1–9%	\$2,372	\$314	\$454	\$4,359	\$686	\$269	\$219	\$24	\$91
	10–100%	\$2,614	\$259	\$463	\$5,046	\$881	\$925	\$497	\$142	\$229
SPECIAL ED	0–9%	\$2,641	\$327	\$439	\$4,182	\$652	\$297	\$174	\$10	\$87
	10–19%	\$2,172	\$286	\$478	\$4,682	\$717	\$417	\$303	\$69	\$131
	20–100%	\$1,978	\$251	\$454	\$5,026	\$968	\$398	\$606	\$680	\$196
MOBILITY	0–9%	\$2,316	\$281	\$390	\$4,546	\$523	\$327	\$202	\$19	\$107
	10–19%	\$2,109	\$281	\$487	\$4,525	\$633	\$250	\$203	\$17	\$91
	20–100%	\$2,564	\$323	\$450	\$4,646	\$853	\$637	\$410	\$132	\$174

needs to be considered. State revenues rise and fall dramatically with the ups and downs of the state economy. The number of students in schools and the needs of those students, however, do not necessarily rise and fall with the economy. Policymakers need to consider whether current state revenue collection procedures provide a sufficiently stable source of revenue to adequately fund schools in both good and bad economic times.

Teacher Characteristics

Table 3.7 profiles Minnesota's 51,629 full-time teachers during the 2001–02 academic year. Approximately 5% (2,437) were new teachers, down from the 2,789 reported for 2000–01. Consistent with enrollment trends reflected in Figures 3.1 and 3.2 (pp. 16–17), the majority of these new teachers were hired in the Metro area, and most new teachers were hired at the secondary level. Given current enrollment trends, we would expect the majority of teachers in the next few years to be hired in the Metro area rather than in outstate schools, and in the secondary, not elementary, grades.

The average reported teacher salary was \$42,636, although there are marked salary variations across regions of the state (see the Strata categories in Table 3.7). This average teacher salary is \$77.00 (less than 1%) higher than the previous year. In comparing teacher salaries across states, the American Federation of Teachers (AFT) found that in 2001–02, the average Minnesota

Table 3.7. 2001–02 Minnesota Teachers Profile: Full-time Teachers

		Number of Teachers	Number of New Teachers	% with BA as Highest Degree	% with MA as Highest Degree	No. of Teaching Variances	Mean Years Experience	Average Salary	Age
TOTAL		51,629	2,437	57	42	3,182	14	\$42,636	41
SCHOOL LEVEL	Elementary	27,645	1,187	57	42	1,965	15	\$43,204	42
	Secondary	23,984	1,250	58	42	1,217	14	\$42,072	41
REGION	Metro Area	24,900	1,412	48	52	1,263	13	\$45,394	41
	Outstate	25,886	909	66	34	1,603	15	\$40,225	42
STRATA	Mpls/St. Paul	5,960	353	52	48	538	12	\$47,490	42
	TC Suburbs	18,940	1,059	46	53	725	13	\$44,734	40
	Outstate: 2000+	11,700	351	54	46	581	15	\$42,659	42
	Outstate: 2000-	14,186	558	76	24	1,022	15	\$38,218	42
POVERTY	0–19%	21,654	1,050	50	50	899	14	\$43,706	41
	20–29%	10,371	413	61	39	395	15	\$41,359	42
	30–49%	11,409	467	66	33	919	15	\$40,997	42
	50–100%	7,931	476	60	39	611	12	\$43,674	41
LEP	0%	15,813	625	67	33	1,282	15	\$40,466	42
	1–9%	26,398	1,251	53	47	1,109	14	\$42,987	41
	10–100%	9,154	530	54	45	433	13	\$45,312	41
SPECIAL ED	0–9%	16,840	871	55	45	940	14	\$43,106	41
	10–19%	32,720	1,425	58	41	1,599	14	\$42,461	41
	20–100%	1,805	110	61	39	285	12	\$41,130	41
PUBLIC SCHOOLS	Non-charter	50,934	2,327	57	43	2,874	14	\$42,747	41
	Charter	695	110	72	25	308	6	\$34,464	36

teacher salary was below the U.S. average. In average teacher salary, Minnesota ranked 21st among the 50 states (Nelson and Drown, 2003).

There are substantial disparities between average teacher salaries paid to teachers in urban vs. rural, and large vs. small outstate schools. For example, the average salary in the metro area schools is approximately \$5,000 more than the average salary in outstate schools. Small outstate schools, with an average salary of \$38,218, pay significantly less than do large outstate schools, where the average salary is \$42,659. In the case of the small outstate schools, the data also show a much smaller percentage of teachers with advanced degrees (24%, compared with 46% of teachers at larger outstate schools); additionally, small outstate schools report much larger numbers of teachers working under a licensure variance (1,022) compared to reported variances at larger outstate schools (581). These advanced degree differences are also to some extent visible in the data for metro area vs. outstate schools: outstate schools report 34% of teachers have advanced degrees, compared with 52% for metro area schools (see Table 3.7). It is important not to assume that these relationships denote cause and effect, i.e., a low proportion of advanced degrees is not necessarily “the” reason for salary differences. However, the correlation may usefully prompt investigation into the reasons for salary differences.

The average teacher age was 41, and the average amount of teacher experience was 14 years. High poverty schools, Twin Cities schools (including suburban and Minneapolis/St. Paul districts), and schools with the largest concentrations of special education and LEP students had teachers with somewhat fewer average years of experience (12 or 13 years).

Charter schools show some of the most marked deviations from the overall trends to be found in Table 3.7. While almost 5% of all teachers in the state are new, 16% of the teachers in charter schools are new. The average salary in charter schools was \$34,464 as compared to \$42,636 for the state overall. And while 6% of the state’s teachers were on licensure variances, 44% of the charter school teachers held licensure variances (a small improvement over the previous year’s 46%). The average number of years of experience in charter schools, 6 years, is less than half that for the state overall (14 years). In part, these figures reflect growth in the number of charter schools and the recency of staff hirings. However, as the sponsors of charter schools review the charters for their schools, they should pay careful attention to the qualifications and experience of the staff, and particularly to the use of licensure variances by the schools in core academic subjects.⁶

NOTES

⁶ The No Child Left Behind Act defines core academic subjects as English, reading, language arts, mathematics, science, foreign languages, civics and government, economics, the arts, history, and geography.

For the state overall, the reported number of teachers on licensure variances roughly doubled in 2000–01 and increased by about 700 in 2001–02. Even if these sharp increases are due to improved reporting rather than to increases in the actual number of variances, it means that Minnesota has more unlicensed teachers on variances than previously thought. Figures 3.8 and 3.9 (p. 25) show the percentage of teachers on licensure variance, by strata and by poverty level. The percentages are highest in urban schools (Minneapolis and St. Paul).

Figure 3.8 Teaching Variances as a Percentage of Full-time Teachers for Minneapolis and St.Paul, the Suburbs, Large Outstate Districts (2000+), and Small Outstate Districts (2000-): 2001–02

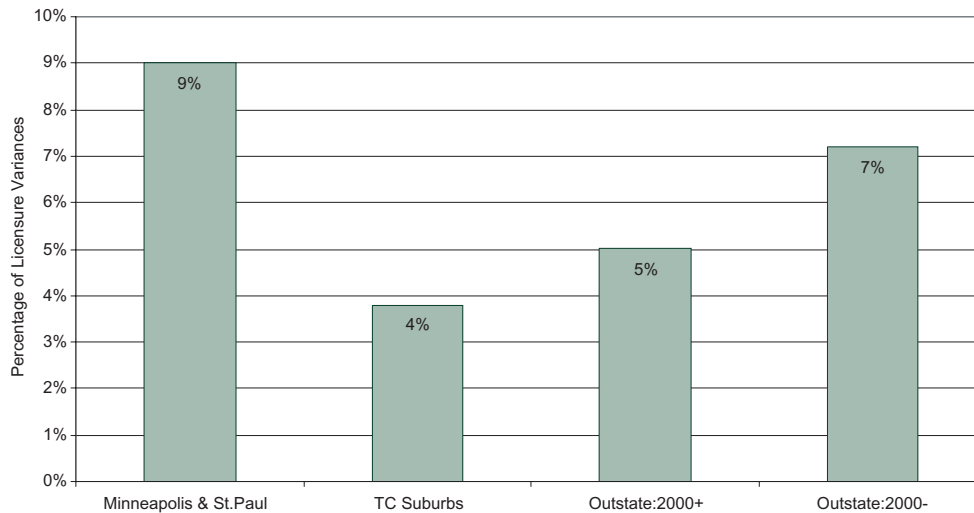
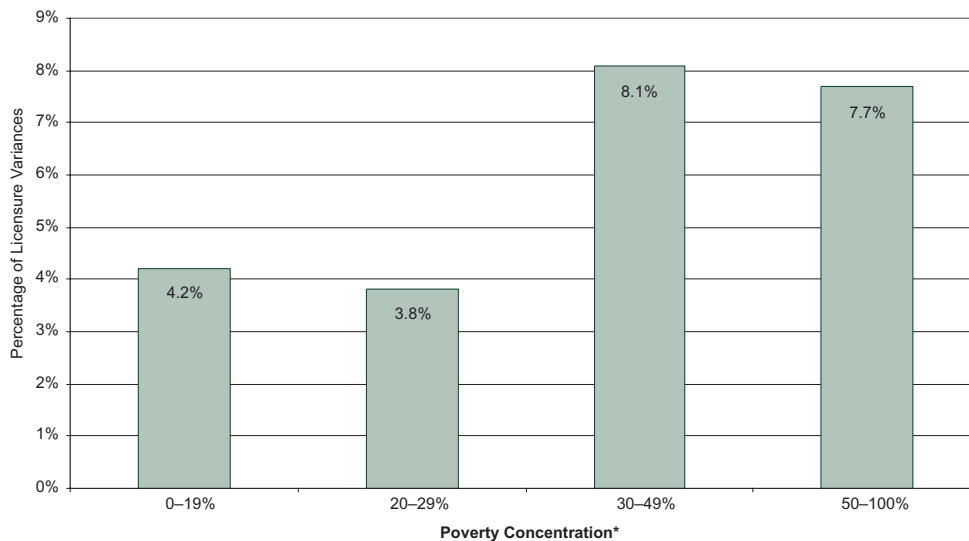


Figure 3.9. Teaching Variances as a Percentage of Full-time Teachers for Schools with Various Concentrations of Poverty: 2001–02



Poverty Concentration = Percentage of students in the school who are eligible for free or reduced-price lunch.

Conclusions

Although they have been noted above, the most striking trends in this Chapter concern enrollment and teacher qualifications. Enrollment has continued to decline, while at the same time, the number of at-risk students needing additional services, such as ESL and special education classes, continues to rise. While one might expect costs to decline somewhat with smaller enrollments, any savings will be at least partially offset by an increasing cost per pupil resulting from the growing number of students requiring additional services. With the growing diversity within the state, this is a trend that will more than likely continue for a number of years.

For the most recent year in which data are available, the increase in per pupil funding was smaller than in prior years. Not surprisingly, the state fell to 20th in per pupil funding compared to other states. It should be noted that

these data came from academic year 2001–02, prior to the 2003 Minnesota legislative session that wrestled with the enormous budget deficit.

The number of teachers reported as having a licensure variance has increased in each of the past three years. Although this may simply represent improved reporting, rather than such a dramatic rise, it is nonetheless important because the No Child Left Behind Act (NCLB) requires full state certification for teachers in core academic subjects. It is unclear how many teachers holding licensure variances are teaching in core academic subjects, but districts will have to ensure full compliance with the teacher qualification provisions of NCLB as those provisions begin to take effect. Charter schools seem to rely particularly heavily on teachers with licensure variances, and while NCLB does not require the same licensure qualifications for charter school teachers that it does for other public schools, we cannot recommend that Minnesota accept a lower standard for some schools than for others.

As the reporting of variances has improved, the schools in Minnesota have begun to show the same pattern as elsewhere in the country. As in much of the nation, there is a greater reliance on teachers with variances in urban schools (Minneapolis/St. Paul), high poverty schools, and schools with larger proportions of special education students.

CHAPTER 4: COURSEWORK, ATTENDANCE, AND GRADUATION

Student coursework, attendance, and graduation rates are important indicators of students' academic effort. They tell us about the amount of time that students have invested in their own education. They also help to mark the progress that students are making to meet standards and requirements.

Attendance rates have recently taken on increased importance. In implementing the No Child Left Behind provisions, Minnesota has adopted attendance rates as one of the indicators used to evaluate school performance in grades 1–8. All elementary schools are expected either to have an attendance rate of 90% or to be improving their attendance rate so that it will reach 90% by 2013–14. The attendance rates reported below will be evaluated against the new 90% benchmark.

High school graduation rates have also taken on increased importance. Minnesota has adopted a new method of calculating graduation rate during implementation of the No Child Left Behind provisions. All high schools are expected to have a graduation rate of 80% or to be improving so that their graduation rate will reach 80% by 2013–14. The graduation rates reported below will be evaluated against the new 80% benchmark. However, because the graduation rate computation is not the same as that used in prior years, the graduation rate figures in this *Yearbook* cannot be compared to those in prior *Yearbooks*.

Educators sometimes view coursework, attendance, and graduation rate as educational inputs—the part of the accountability “measurement” system that tells us what investments of time students are making in education. When used in this way, these indicators help us to understand the effort and time investment of students whose achievement levels are different. For example, looking at the mathematics coursework taken by students who did well on the statewide high school math test can give us information about the kinds of coursework associated with high achievement.

The same indicators (attendance, coursework, and graduation rate) can also be used as educational outputs—measures of how well the education system is working. For instance, attendance can be considered an output—a result of the student having found the school experience rewarding enough that he or she participates regularly. In much the same way, graduation rates can tell us much about how well students are doing at completing the academic curriculum. A high graduation rate implies that students are learning what they need to know in order to finish high school.

Whether viewed as inputs or outputs, attendance, high school graduation, and completion of challenging courses involve elements of persistence and good work habits on the part of students over an extended period of time. Depending on whether the district's high school encompasses grades

9–12 or 10–12, high school completion takes three to four years. Students' completion of challenging coursework and high school graduation also require achievement levels high enough to meet the standards set by teachers. When viewed as outcomes, coursework, attendance, and graduation require a persistent, organized student effort extending from one semester up to four years.

High School Coursework

This section contains data on high school coursework from two sources: the coursework survey administered to students taking the *ACT* college entrance examination and the mathematics coursework survey administered by the Minnesota Department of Education to 11th grade students taking the *MCA* in mathematics.

The *ACT* survey asks about four subject areas: English, mathematics, social science, and natural science. However, it only includes students who took the *ACT* entrance examination. Most of these students would be college-bound, so the results cannot be generalized to all high school students. The survey questions accompanying the 11th grade *MCA* are given to virtually all 11th graders, but the survey only asked about mathematics coursework. The results of this survey can reasonably be generalized to the population of Minnesota high school juniors, but it covers only mathematics coursework.

While there is not complete agreement on the core academic courses to be included in a high school education, many experts recommend four years of English, three years of science, three years of mathematics, and three years of social studies. In the 2003 Special Session, the Minnesota Legislature passed new high school course requirements applicable to students entering 9th grade during or after the 2004–05 academic year. Those requirements are shown below (see box).

New Minnesota High School Course Requirements Applicable to Students who Enter 9th Grade During or After Academic Year 2004-05

- Four credits of language arts
- Three credits of mathematics encompassing at least algebra, geometry, and statistics and probability sufficient to satisfy the academic standard
- Three credits of science, including at least one credit in biology
- Three and one-half credits of social studies including at least one credit of United States history, one credit of geography, 0.5 credits of government and citizenship, 0.5 credits of world history, and 0.5 credits of economics
- A minimum of eight elective course credits, including at least one credit in the arts

A course credit is equivalent to a student's successful completion of an academic year of study or a student's mastery of the applicable subject matter, as determined by the local school district.

—2003 First Special Session, Chapter 9

Table 4.1 High School Course Recommendations of ACT, Inc., and *A Nation at Risk*; High School Course Preparation Requirements for Freshman Admissions at the Minnesota State Colleges and Universities (MnSCU) and the University of Minnesota

Content Area	ACT, Inc.	<i>A Nation at Risk</i>	MnSCU	U of M
English	4 years or more (1 year each of credit for English 9, 10, 11, and 12)	4 years	4 years, including composition and literature	4 years, with emphasis on writing, including instruction in reading and speaking skills and in literary understanding and appreciation
Mathematics	3 years or more (1 year of credit each for algebra I and II, and geometry; 1/2 year of credit each for trigonometry, calculus (not pre-calculus), other math courses beyond algebra II and Computer math/Computer science)	3 years	3 years, including 2 years of algebra and 1 year of geometry	3 years, including 1 year each of elementary algebra, geometry, and intermediate algebra
Social Sciences	3 years or more (1 year of credit each for American history, world history, American government; 1/2 year of credit each for economics, geography, psychology, and other history)			3 years, including 1 year of geography (or a combination of courses incorporating geographic studies, such as world history, western civilization, Latin American studies) and 1 year of US history
Social Studies		3 years	3 years, including 1 year of US history and 1 year of geography	
Science	3 years or more (Natural sciences: one year of credit each for General/Physical/Earth Science, Biology, Chemistry, and Physics)	3 years	3 years, including 1 year each of a biological and a physical science	
Computer Science		1/2 year		
Foreign Language		Recommended for college-bound students, but no specific amount is given.	2 years of a single world language	2 years of a single second language
Fine Arts			1 year of either fine arts or world culture	1 year of visual or performing arts, including instruction in the history and interpretation of the art form (e.g., theater arts, music, band, chorus, orchestra, drawing, painting, photography, graphic design)
World Culture			1 year of either world culture or fine arts	

ACT, Inc., publisher of the college admissions test most often taken by Minnesota students; the recommendations of the Minnesota State Colleges and Universities (MnSCU); and the recommendations of the University of Minnesota/Twin Cities.

With respect to the amount of coursework recommended in the four major content areas (English language arts, mathematics, science, and social studies), the new Minnesota requirements are identical to the recommendations shown in Table 4.1 (p. 29). The Minnesota requirements differ from the recommendations with respect to specific content within the four major academic areas, just as the various recommendations in Table 4.1 differ among themselves. Also, the Minnesota requirements and the various recommendations in Table 4.1 differ with respect to content beyond that in the four major content areas. In comparing the new Minnesota requirements to the recommendations, it is important to remember that the Minnesota requirements apply to all high school students, whereas the ACT, MnSCU, and University of Minnesota preparation standards were designed primarily for college-bound students.

Will these new course requirements improve student academic achievement? Recently, Teitelbaum (2003) reported research on the question of whether increasing high school math and science requirements in other states had improved student achievement gains during the high school years. He concluded that it had not. In those other states, he found that many schools did not strictly enforce requirements for three years of science and mathematics. Only some students satisfied the requirement by taking advanced coursework. He concluded that increasing credit requirements is not sufficient, by itself, to ensure improved high school achievement gains in mathematics and science. Teitelbaum's results suggest that Minnesota's high school course requirements will lead to improved achievement only if they are consistently applied and if students satisfy the requirements by completing challenging courses in language arts, mathematics, science, and social studies. In brief, whether the new policy will raise student achievement will depend on the quality of implementation. Other states have tried to ensure that high school coursework is challenging by requiring advanced courses (e.g., mathematics at the level of Algebra I and above), adopting rigorous statewide standards in each subject area, and/or using statewide assessments to monitor successful mastery of challenging content.

ACT Survey of Recommended Coursework Completion. The ACT testing program asks test-takers to report on recommended coursework taken (or expected to be taken by the end of high school). The recommended coursework is shown in Table 4.1 (p. 29). However, the ACT survey only provides data on the group of students who take the *ACT* college admissions test, most of whom are college bound. Therefore, results cannot be generalized to the population of all Minnesota high school students.

Figure 4.1 (p. 31) shows the trend in student-reported coursework over the last decade among Minnesota *ACT* test-takers. This figure shows the percentage of students reporting all of the recommended coursework. From 1994–96, there was a steady increase in the percentage of test-takers completing the core. The percentage leveled off at 73% between 1995–96 and 1997–98, dropping to 71% in 1998–99, where it remained for four years. In academic years 2002–03, the percentage dropped again, to 70%. In other words, just over 30% of the Minnesota students taking the *ACT* have not completed, and do not expect to complete, the full set of courses

recommended by ACT.⁷

Over the past five years, the percentage of test-takers completing the core has dropped by 3%, and last year the percentage reached its lowest point in the past ten years.

Figure 4.2, below, shows the percentage, by ethnicity, of ACT test-takers in academic years 2001, 2002, and 2003 who completed the core coursework recommended by ACT. Black, American Indian, and Hispanic

test-takers were less prepared than their Asian and White peers. Overall, compared to last year, the percentage of students who completed ACT's recommended core decreased slightly (from 71% to 70%). For four of the five ethnic groups there was little change (Asians, Blacks, and Whites) or no change (Hispanics). However, the small changes among Asian, Black, and White students were in the negative direction, declines of one to two percent. The largest change was an increase of 6% that occurred among American Indian students and that largely reversed last year's decline in this group. Shrinking the differences in ACT test performance (see Chapter 5) that appear in comparisons by ethnicity will require progress in closing the

Figure 4.1 Percentage of Minnesota ACT Test-takers Having Completed the ACT Recommended Core Academic Preparation, by School Year: 1994–2003

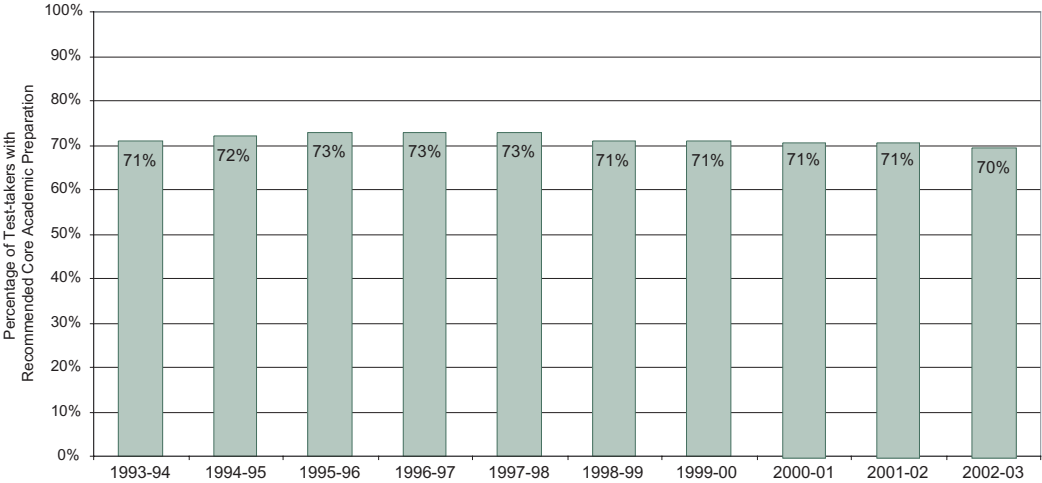
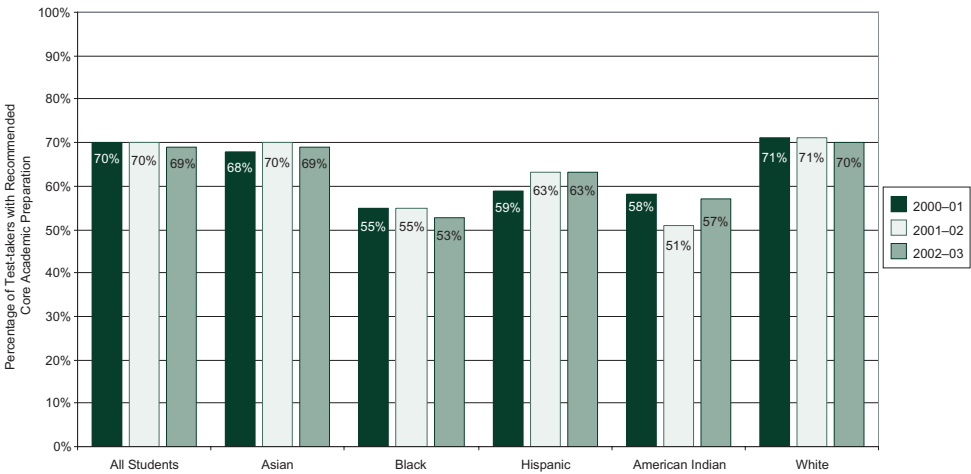


Figure 4.2 Percentage of Minnesota ACT Test-takers Having Completed the ACT Recommended Core Academic Preparation, by Ethnicity: Academic Years 2000–01 through 2002–03



coursework preparation gaps shown in Figure 4.2.

In addition to the new Minnesota high school course requirements described above, two other trends will presumably lead to changes in high school coursework and course content around the state in the next five years. First, as mentioned in Chapter 2, new standards were adopted in reading/language arts and mathematics. New standards in other content

NOTES

⁷ ACT recommends three years of science, including two years of physical science (i.e., chemistry, physics). Many Minnesota high schools, and Minnesota's public colleges and universities, on the other hand, require three years of science, but only one of these must be physical science. Students could, therefore, take two years of a life science (biology), and plus one year of a physical science, and thereby complete three years of high school science without satisfying the ACT requirements.

areas will follow. Secondly, the college admissions tests are changing to reflect changing emphases in higher education. By 2005, the *SAT I* college admissions test will add a writing section and expand its mathematics section to encompass Algebra II (as well as Algebra I and Geometry; (<http://www.collegeboard.com/about/newsat>)). By that same year, the *ACT* college admissions test will also add a writing section. The *ACT* already covers high school mathematics up through Algebra II (<http://www.act.org/aap/writing>). This increased emphasis on writing and high school math through Algebra II will likely lead to an increased emphasis on these topics in secondary schools.

Minnesota Department of Education Survey of High School Math Coursework Completed

In addition to the 11th grade math test, the Minnesota Department of Education asked students about the high school math that they had taken in each of the following categories:

- Algebra I (including Algebra I or Integrated Math I)
- Geometry (including Geometry or Integrated Math II)
- Algebra II (including Algebra II or Integrated Math III)
- Pre-calculus (including Pre-calculus, Integrated Math 4, or International Baccalaureate Math Studies)
- Calculus (including Calculus, Advanced Placement (AP) Calculus, AP Statistics, or International Baccalaureate Higher Level Math)

We have labeled each of these five categories by the course considered to be the most commonly taken in the category: Algebra I, Geometry, Algebra II, Pre-calculus, and Calculus. The labels are not fully descriptive of the categories; for instance, the Calculus category includes two higher level math courses other than calculus. Furthermore, we have ranked the rigor of the course content from low to high as follows: Algebra I, Geometry, Algebra II, Pre-calculus, and Calculus. This ranking is debatable. For instance, Algebra II may not be higher than Geometry, although most students take Algebra II only after having taken Geometry. In the Calculus category, only Calculus and AP Calculus are clearly higher than Pre-calculus. Finally, we have added a sixth category, “None”, to encompass students who did not report completing coursework in any of the five categories listed above. All students were then classified by the highest math course category in which they reported having completed work.

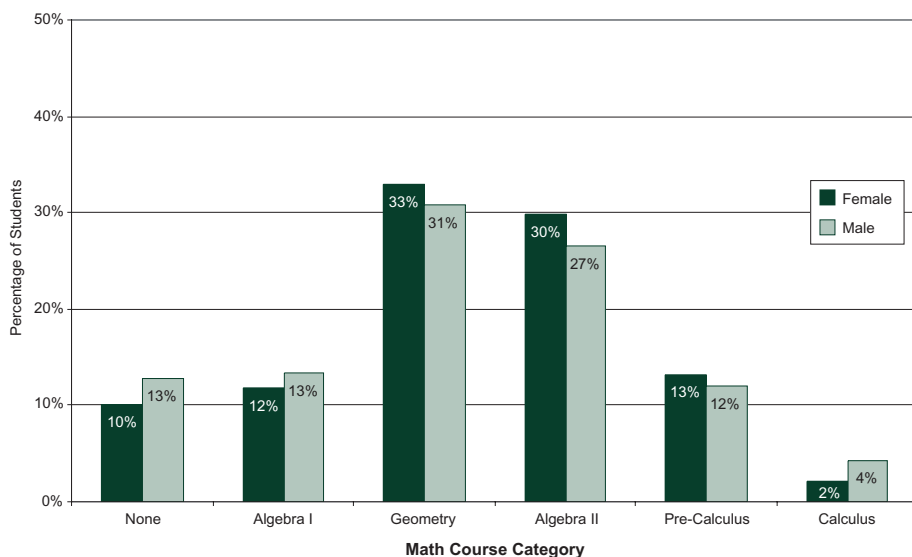
Figure 4.3 (p. 33) shows the percentage of males and females reporting each category as their highest category completed. While the differences among the males and females seem small, they mirror the pattern shown in national data: boys predominate in the lowest (None and Algebra I) and highest categories (Calculus); girls predominate in the middle categories (Geometry, Algebra II, and Pre-calculus). For instance, 13% of the boys reported no math, while only 10% of the girls had taken no math. More boys (26%) than girls (22%) have progressed no further than Algebra I. Girls are

more likely to have gone beyond Algebra I to either Geometry, Algebra II, or Pre-calculus. Even though girls are more likely to go beyond Algebra II, they frequently stop before Calculus, and more boys (4%) than girls (2%) completed something in the Calculus category.

In the last half of the 20th century, there was concern about the fact that girls took fewer advanced high school math courses than boys (Davenport, Davison, Kuang, Ding, Kim, & Kwak, 1988). Whether this is still a problem depends

on how one defines advanced math. Boys predominate in our highest category, Calculus, but few males or females had completed any coursework in this category. On the other hand, if one defines “advanced math” as the college preparatory coursework in Table 4.1 (Algebra I and above), then girls were generally further along in the sequence than boys. Over time, this problem—girls taking fewer advanced high school math courses—has diminished to the point that the problem is evidenced only at the very highest levels of high school mathematics.

Figure 4.3 Percentage of 11th Grade Students by the Highest Level Math Course Category Completed, by Gender: 2002–03

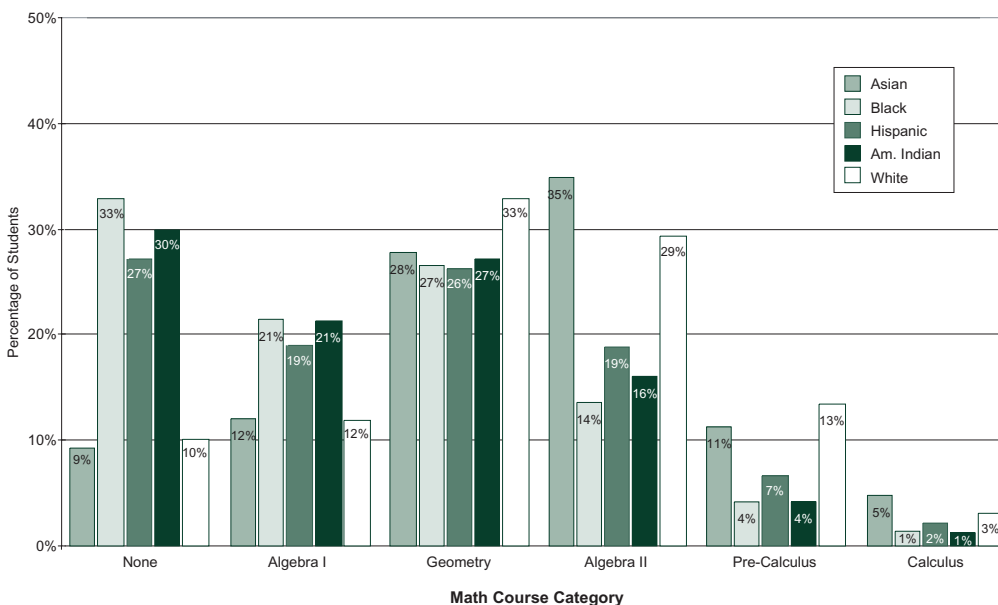


* Each math course category is named according to the most common math course taken at that level, although most categories include other courses that are considered to be at roughly the same level of difficulty. The categories contain the following possible coursework: Algebra I includes both Algebra I and Integrated Math I; Geometry includes both Geometry and Integrated Math II; Algebra II includes both Algebra II and Integrated Math III; Pre-calculus includes Pre-calculus, Integrated Math IV, and International Baccalaureate Math Studies; and Calculus includes Calculus, Advanced Placement Calculus, Advanced Placement Statistics, and International Baccalaureate Higher Level Mathematics.

Figure 4.4 (p. 34) shows the highest level of math coursework completed by ethnicity. There are major differences between Asian and White students as compared to American Indian, Black, and Hispanic students. At the low end, 25% or more of Black, Hispanic, and American Indian students report having completed no work in the math categories above, whereas only about 10% of Asian and White students have completed no coursework. At the upper end, 51% of Asian students and 45% of White students have completed work at the level of Algebra II or above; only 19% of Blacks, 28% of Hispanics, and 21% of American Indians have done so. National studies have found that when the full range of coursework is considered (including math coursework below Algebra I), minority and majority students differ widely in the level of math coursework completed, but not in the total amount (number of Carnegie units) completed. Minority and majority students are both studying math in high school, but not the same content.

It is unclear why minority students take less advanced level mathematics. They may elect to take less advanced coursework in math because they feel less well prepared; because they are less likely to attend a four-year college; or because they do not see themselves as headed for careers that require mathematics. Alternatively, based on prior achievement, attendance, or

Figure 4.4 Percentage of 11th Grade Students by the Highest Level Math Course Category Completed, by Ethnicity: 2002–03



* Each math course category is named according to the most common math course taken at that level, although most categories include other courses that are considered to be at roughly the same level of difficulty. The categories contain the following possible coursework: Algebra I includes both Algebra I and Integrated Math I; Geometry includes both Geometry and Integrated Math II; Algebra II includes both Algebra II and Integrated Math III; Pre-calculus includes Pre-calculus, Integrated Math IV, and International Baccalaureate Math Studies; and Calculus includes Calculus, Advanced Placement Calculus, Advanced Placement Statistics, and International Baccalaureate Higher Level Mathematics.

stated career plans, minority students may be assigned (or counseled into) less challenging mathematics courses.

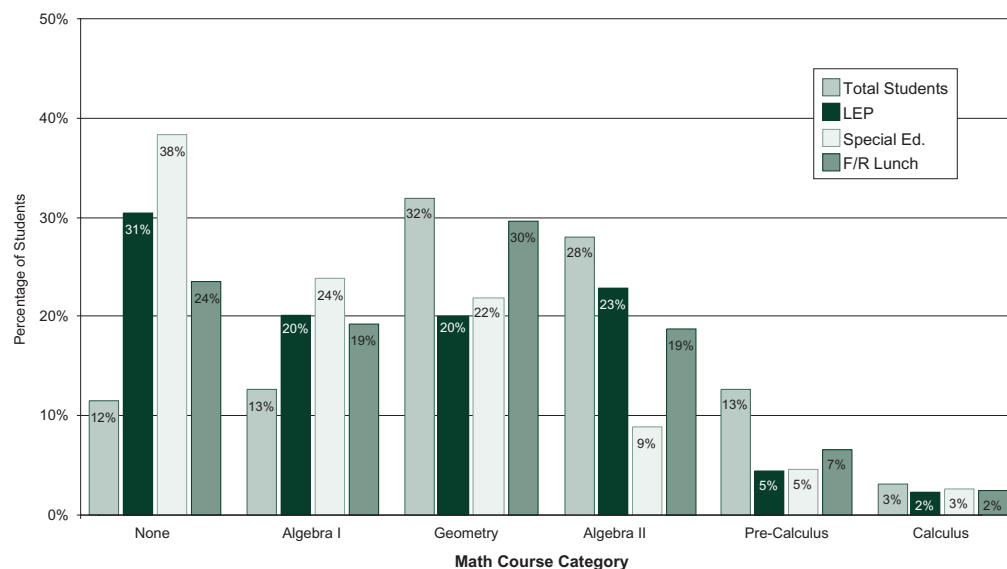
Whatever the reason, closing the ethnic gaps in achievement will probably require closing the gap between minority and majority students in the amount, but more importantly, the level of math coursework completed.

Figure 4.5 shows the percentage of 11th grade students who completed each math course category,

broken down by limited English proficiency status, special education status, and poverty, and as compared to all students in the state. Students in these three subgroups are less likely to have completed coursework in the more advanced categories.

Figures 4.6 and 4.7 (p. 35) show the highest math level completed as a function of student attendance rate and student mobility. Not surprisingly,

Figure 4.5 Percentage of 11th Grade Students by the Highest Level Math Course Category Completed, by Total Number of Students, LEP, Special Education, & F/R Lunch: 2002–03



* Each math course category is named according to the most common math course taken at that level, although most categories include other courses that are considered to be at roughly the same level of difficulty. The categories contain the following possible coursework: Algebra I includes both Algebra I and Integrated Math I; Geometry includes both Geometry and Integrated Math II; Algebra II includes both Algebra II and Integrated Math III; Pre-calculus includes Pre-calculus, Integrated Math IV, and International Baccalaureate Math Studies; and Calculus includes Calculus, Advanced Placement Calculus, Advanced Placement Statistics, and International Baccalaureate Higher Level Mathematics.

students with good attendance and continuous enrollment in a single school are more likely to have completed higher level mathematics coursework.

Figure 4.6 Percentage of 11th Grade Students by the Highest Level Math Course Category Completed, by Attendance Rate: 2002–03

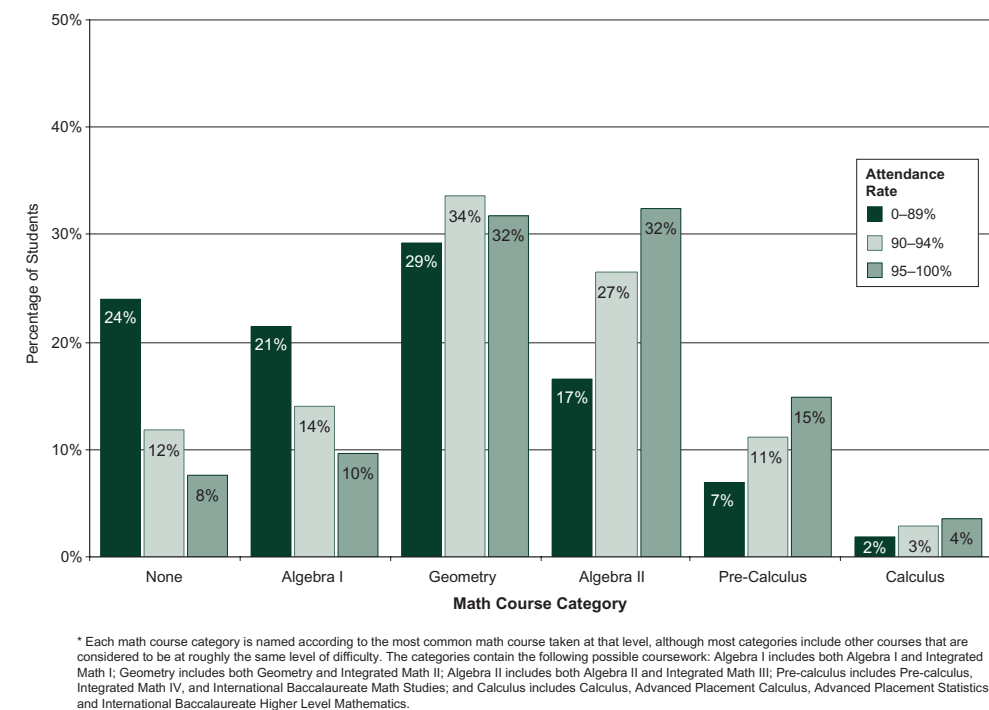


Figure 4.7 Percentage of 11th Grade Students by the Highest Level Math Course Category Completed, by Midyear School Transfers: 2002–03

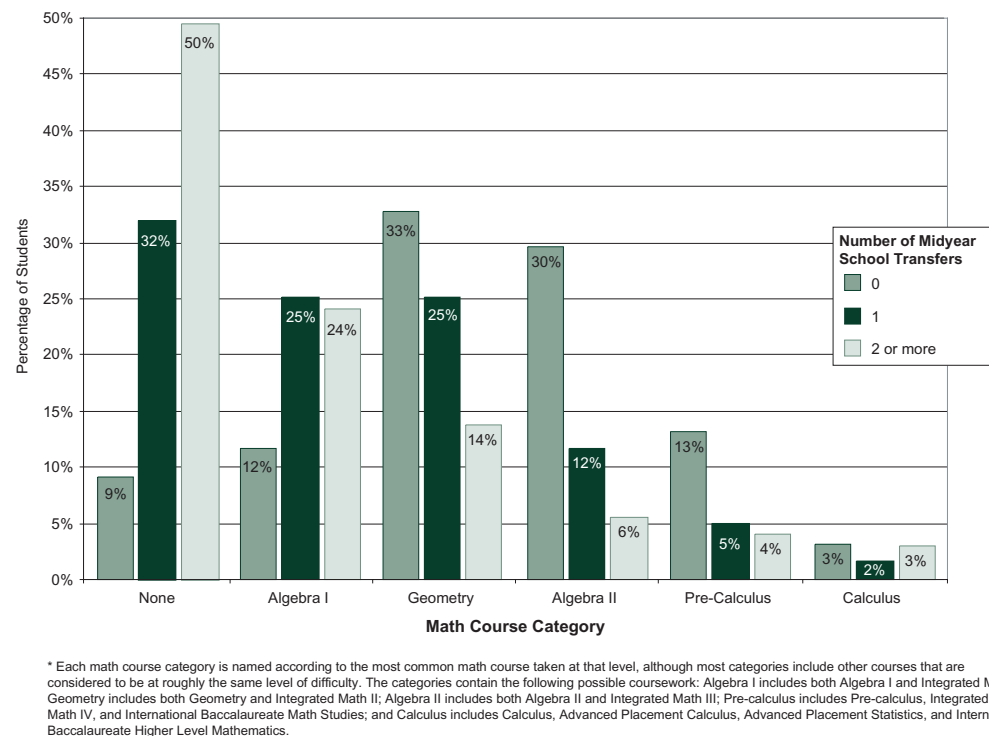
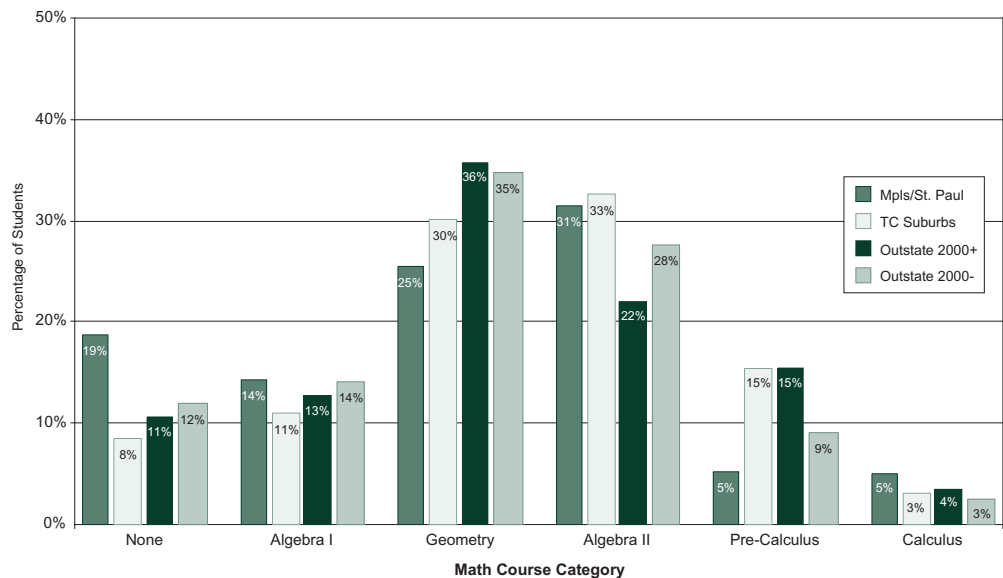


Figure 4.8 shows the highest math level completed by students in various regions of our state. Students in Minneapolis/St. Paul were more likely than students in other areas of the state to report having taken no math. Twenty-two to 33% of students in all regions had completed Geometry. Only 15% or fewer reported that they completed Pre-calculus. Pre-calculus was more commonly completed by students in the suburbs and large outstate schools. It is worth noting, however, that students in outstate schools seem more likely to stop their math training at Geometry, compared to students in Minneapolis and St. Paul, or the suburbs, who tend to continue on to Algebra II. Students in Minneapolis and St. Paul were slightly more likely to report having completed some coursework in the highest category (Calculus).

Figure 4.8 Percentage of 11th Grade Students by the Highest Level Math Course Category* Completed, by Strata: 2002–03



* Each math course category is named according to the most common math course taken at that level, although most categories include other courses that are considered to be at roughly the same level of difficulty. The categories contain the following possible coursework: Algebra I includes both Algebra I and Integrated Math I; Geometry includes both Geometry and Integrated Math II; Algebra II includes both Algebra II and Integrated Math III; Pre-calculus includes Pre-calculus, Integrated Math IV, and International Baccalaureate Math Studies; and Calculus includes Calculus, Advanced Placement Calculus, Advanced Placement Statistics, and International Baccalaureate Higher Level Mathematics.

Attendance

For any indicator used in the 2003 Adequate Yearly Progress determinations, this report includes data from the same year used in the 2003 AYP process. Since 2002 attendance data is used in the current (2003) AYP process, our attendance data in this *Yearbook* is based on the same database as last year's *Yearbook*. However, we have made several changes in the reporting:

- Attendance is reported for all grades (1–12), not just for selected grades.
- Attendance rates have been computed using the formulas used in the AYP process.
- All students have been included in the calculations, not just those on campus for the entire day. Previously, we excluded students who would be off campus for part of the day (for example, students who would attend a higher education institution as part of a post-secondary options program, or who would be at a job site as part of a school-to-

work transition program). For such students, the attendance rate is computed as a percentage of the hours the student is expected to be on campus.

Therefore, even though the data in Table 4.2 come from the same database as last year's attendance table, the numbers do not consistently match those from last year. The biggest differences occur in the high school grades and result largely from the inclusion of all students as opposed to just those who were on the high school campus full-time.

Table 4.2 shows the average attendance rate in Minnesota for grades 1–12, by student group. For the purpose of evaluating elementary, middle, and junior high schools, Minnesota has adopted an average attendance rate target of 90%. Student groups with an average attendance rate less than 90% are marked in bold. Even though high schools are evaluated for AYP on graduation rate rather than attendance, we have also marked high school student groups with an average attendance rate less than 90%. Good attendance is no less important in high school than in earlier grades.

As in past years, Table 4.2 shows high rates of attendance in the elementary grades, with declining attendance from 8th grade through the end of high school. This pattern of declining attendance through the junior high and high school grades is characteristic of every student group in Table 4.2. As

Table 4.2 Average Attendance Rate (AYP Calculation) for 1st to 12th Grades: 2002

		Grade											
		1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th *	10 th *	11 th *	12 th *
TOTAL		96%	96%	96%	96%	96%	95%	95%	94%	93%	92%	90%	86%
GENDER	Female	96%	96%	96%	96%	96%	95%	95%	94%	93%	92%	90%	86%
	Male	96%	96%	96%	96%	96%	95%	95%	95%	93%	92%	90%	86%
ETHNICITY	Asian	96%	97%	97%	97%	97%	97%	96%	95%	94%	91%	89%	83%
	Black	94%	94%	95%	95%	95%	94%	92%	91%	89%	87%	84%	78%
	Hispanic	94%	94%	94%	95%	94%	94%	92%	91%	87%	84%	83%	79%
	American Indian	93%	93%	93%	93%	93%	91%	89%	88%	84%	81%	79%	76%
	White	96%	96%	96%	96%	96%	96%	95%	95%	94%	93%	91%	87%
STRATA	Mpls/St. Paul	95%	95%	95%	95%	95%	95%	93%	92%	90%	88%	85%	81%
	TC Suburbs	96%	96%	96%	96%	96%	96%	95%	95%	94%	93%	91%	86%
	Outstate 2000+	96%	96%	96%	96%	96%	95%	94%	94%	93%	92%	90%	87%
	Outstate 2000-	96%	96%	96%	96%	96%	96%	95%	95%	94%	92%	91%	88%
LEP		95%	96%	96%	96%	96%	96%	94%	93%	90%	88%	86%	85%
SPECIAL ED		95%	95%	95%	95%	95%	94%	93%	92%	91%	89%	88%	86%
F/R LUNCH		95%	95%	95%	95%	95%	94%	93%	92%	90%	88%	87%	83%
MIDYEAR SCHOOL TRANSFERS	0	96%	96%	96%	96%	96%	96%	95%	95%	94%	93%	92%	88%
	1	93%	93%	94%	94%	93%	92%	89%	88%	86%	82%	79%	70%
	2 or more	90%	90%	90%	89%	90%	87%	84%	82%	82%	81%	79%	72%
PUBLIC SCHOOLS	Non-Charter	96%	96%	96%	96%	96%	95%	95%	94%	93%	92%	90%	86%
	Charter	95%	95%	95%	95%	95%	94%	94%	93%	88%	84%	82%	75%
ALCs		94%	94%	95%	95%	95%	94%	90%	87%	79%	75%	72%	65%

* The elementary level attendance target rate for AYP purposes is 90%. (At the high school level, attendance rate is not used to determine whether schools have made adequate yearly progress.) Subgroups not reaching the 90% attendance rate, both for elementary and high school level students, are shown in boldface type.

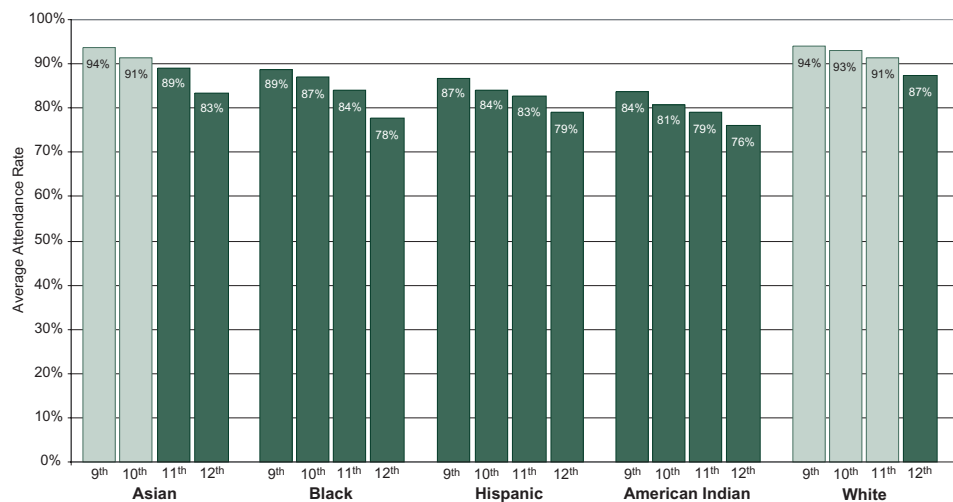
students reach the age at which school attendance is no longer required, attendance suffers.

In the elementary grades, only two student groups in Table 4.2 fall below the 90% target: highly mobile 4th and 6th graders who transferred between schools two or more times during the year. By 9th grade, three of the five ethnic groups (American Indian, Black, and Hispanic) students have average attendance rates below the target. By 11th grade, all four minority ethnic groups have attendance rates below the target. Figure 4.9 shows attendance by ethnic group over the four high school grades.

By 11th grade, attendance rates fall below the target in the largest urban schools (Minneapolis/St. Paul), charter schools, and alternative learning centers (ALCs). They also fall below the target for LEP students, special education students, and low income students eligible for free or reduced priced lunch (Figure 4.9).

In the 12th grade data, virtually all student groups have attendance rates below the target. In part, this may be due to the legendary “senioritis” of students approaching graduation. In part, however, it may be due to another phenomenon. In recent years, more and more students have needed a fifth or sixth year of high school in order to complete graduation requirements (course or test requirements), and these students are classified in our database as seniors. These returning seniors have been included in the attendance data for 12th grade. We suspect that the low attendance in 12th grade is due, in part, to poor attendance among these returning students.

Figure 4.9 Average Attendance Rate for 9th to 12th Grades, by Ethnicity: 2002



Note: The light colored bars represent subgroups with a 90% or better attendance rate. The darker bars represent subgroups with less than a 90% attendance rate.

Clearly, the greatest need for improved attendance is in the upper grades. As will be seen below, student groups with poor attendance in grades 9–11 often also have poor graduation rates. They may also have difficulty completing challenging coursework and may, therefore, be assigned to (or elect to take) less rigorous classes.

Graduation Rate and Dropout Data

In past years, Minnesota has used a true longitudinal approach to compute graduation rates. In such a procedure, all students who enter 9th grade in a given year are tracked for four years. Under NCLB, states are encouraged to adopt a simpler method of calculation called the “quasi-longitudinal approach” described in the box, below. It is called the quasi-longitudinal approach because it does not require tracking students, but it is designed to give a good approximation of the graduation rate that would be obtained by tracking students longitudinally over time.

The quasi-longitudinal approach is simpler because it does not require actually tracking students, which can be difficult in cases where students change high schools and districts over the four years. Adopting the quasi-longitudinal approach will tend to make our computed graduation rate more comparable to that in other states, since most other states are likely to adopt (or keep using) the quasi-longitudinal approach.⁸ However, experience indicates that the quasi-longitudinal method of computation tends to give a somewhat higher figure than the calculation rate used in prior years. Because of this tendency, results based on the quasi-longitudinal approach should not be compared to rates reported from prior years.

After having adopted the quasi-longitudinal method for computing graduation rate, Minnesota adopted a target graduation rate for high schools. High schools are expected to have an 80% graduation rate, or to show year-to-year improvement toward the 80% rate. In what follows, we will use the 80% target to evaluate the graduation rates below.

Table 4.3 (p. 40) contains graduation rate data for 2002. For comparison purposes, the table also contains the data from 2001. For both years, the graduation rate was 84%.

Computing Graduation Rates

To compute graduation rates for a given year—say 2002—the quasi-longitudinal approach uses the following five pieces of information that go back to the academic year 1998–99 (when the class of 2002 would have entered high school).

A = the number of 12th graders who graduated in academic year 2001–02

B = the number of 12th graders who dropped out in academic year 2001–02.

C = the number of 11th graders who dropped out in academic year 2000–01.

D = the number of 10th graders who dropped out in academic year 1999–00

E = the number of ninth graders who dropped out in academic year 1998–99

From the information above, the graduation rate is computed as follows:

Graduation rate =
$$\frac{A}{A + B + C + D + E}$$

If no students transferred in or out of the high school over the four year period 1998–99 through 2001–02, then the quasi-longitudinal and longitudinal methods would give the same result so long as the same computational formula were used with both methods. Because students do transfer, the longitudinal and quasi-longitudinal approaches can give different results for school, district, and state graduation rates.

NOTES

⁸Results from Minnesota based on the quasi-longitudinal approach should be comparable to those from other states based on the same approach. However, data are sometimes reported from other states based on a different method of calculation. For instance, census data are often used. Because census data include private school and GED degrees in their count of graduates, graduation rates computed from census data are usually higher.

Table 4.3 High School Graduation and Dropout Data: 2001 and 2002

		2001 Number of Students	2002 Number of Students	2001 Number of Dropouts	2002 Number of Dropouts	2001 Number of Graduates	2002 Number of Graduates	2001 Graduation Rate (%)	2002 Graduation Rate (%)
TOTAL		67,272	67,522	10,967	10,891	56,305	56,631	84	84
GENDER	Male	32,952	33,428	4,537	4,500	28,415	28,928	86	87
	Female	34,320	34,094	6,430	6,391	27,890	27,703	81	81
ETHNICITY	Asian	3,251	3,367	763	765	2,488	2,602	77	77
	Black	3,797	4,125	2,002	2,048	1,795	2,077	47	50
	Hispanic	1,767	2,043	848	1,002	919	1,041	52	51
	Am.Indian	1,388	1,515	747	863	641	652	46	43
	White	57,069	56,472	6,607	6,213	50,462	50,259	88	89
STRATA	Mpls/St. Paul	7,806	7,972	5,308	5,235	4,246	4,339	54	54
	Suburbs	25,119	25,384	3,031	2,853	22,088	22,531	88	89
	Outstate2000+	15,741	15,874	2,277	2,382	13,464	13,492	86	85
	Outstate2000-	18,133	18,037	1,920	1,897	16,213	16,140	89	90
LEP	Yes	1,939	2,266	800	985	1,139	1,281	59	57
	No	65,333	65,256	10,167	9,906	55,166	55,350	84	85
SPECIAL ED	Yes	5,832	6,273	1,472	1,589	4,360	4,684	75	75
	No	61,440	61,249	9,495	9,302	51,945	51,947	85	85
F/R LUNCH	Yes	10,356	11,370	3,161	3,512	7,195	7,858	70	69
	No	56,916	56,152	7,806	7,379	49,110	48,773	86	87
PUBLIC SCHOOL	Non-charter	66,690	66,771	10,716	10,575	55,974	56,196	84	84
	Charter	582	751	251	316	331	435	57	58
ALCs		10,713	10,384	6,277	6,291	3,896	4,093	38	39

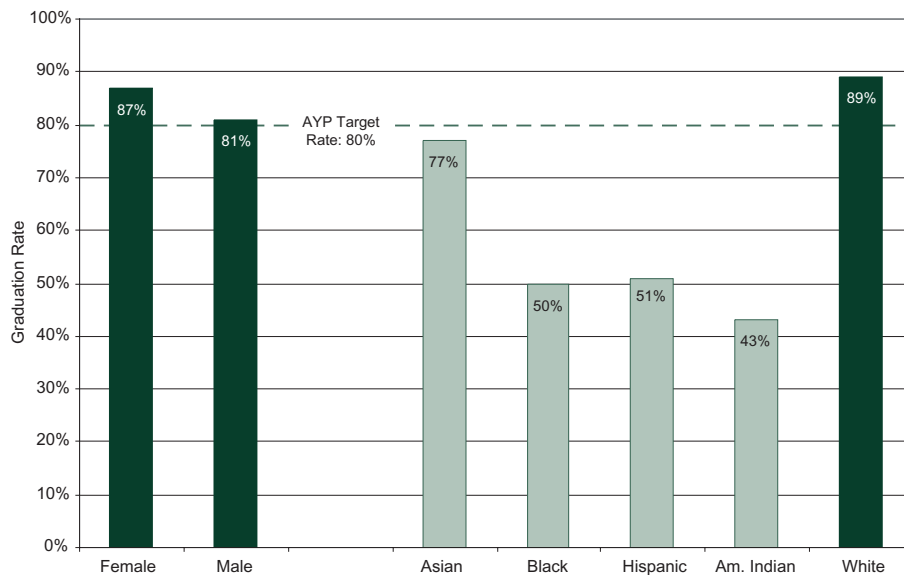
Note: LEP = limited English proficiency; Special Ed. = students with an individual education plan (IEP); F/R Lunch = eligible for free or reduced-price lunch.

Gender Differences. Figure 4.10 (p. 41) shows the graduation rate for boys and girls. For both academic years 2001 and 2002, the graduation rate for girls is higher. In 2001, the graduation rates for girls and boys were 86% and 81% respectively. In 2002, the graduation rates for girls and boys were 87% and 81% respectively. Both boys and girls have graduation rates above the state target of 80%, although the boys barely made the target.

Ethnic Differences. Figure 4.10 also shows the graduation rate by ethnicity for 2002. White students had the highest graduation rates, 89%. The graduation rates for minority students were all below the state target of 80%: 77% for Asians, 50% for Blacks, 51% for Hispanics, and 43% for American Indian students. Differences among ethnic groups in high school graduation rates tend to parallel differences among ethnic groups in high school attendance. With the exception of Asian students in 10th grade, minority students have attendance rates in grades 10–12 that are below the state expectation (see Table 4.2, p. 37), and low attendance may partially explain the low graduation rates.

Strata and Charter Schools. Graduation results also vary by type of school district. Figure 4.11 (p. 41) shows the graduation rates for various types of districts that differ by location, size, and type of organization. Graduation rates were above the 80% target for schools in suburban (89%), large outstate (88%), and small outstate (90%) high schools. However, graduation rates did

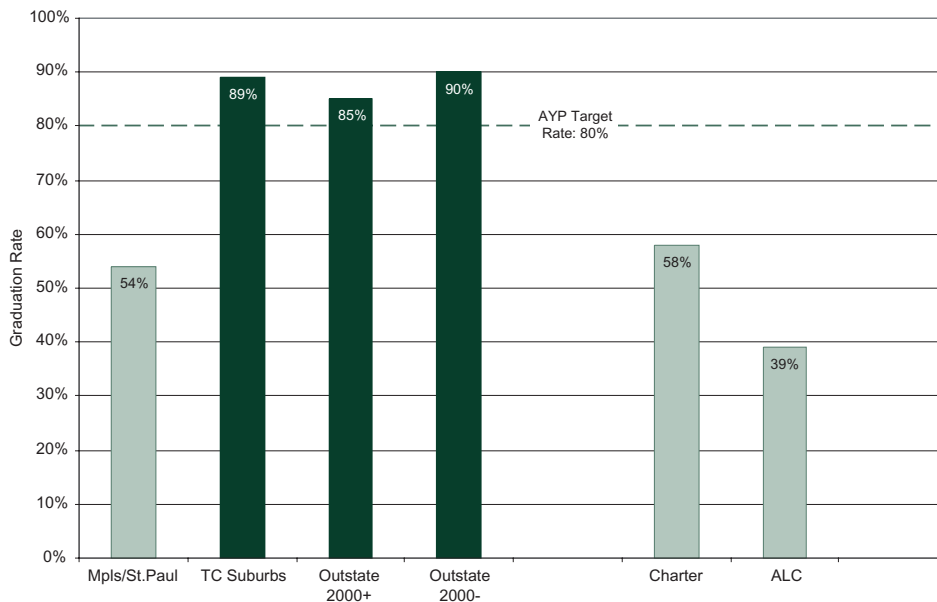
Figure 4.10 Graduation Rate, by Gender and Ethnicity: 2002



Note: The darker bars represent subgroups meeting the AYP target graduation rate (80%). The lighter bars represent subgroups not meeting the AYP target graduation rate.

not meet the target in the urban schools of Minneapolis and St. Paul (54%), charter schools (58%), or Alternative Learning Centers (39%). After 9th grade, urban and charter schools and Alternative Learning Centers have graduation rates below the state expectation of 90% attendance (see Table 4.2, p. 37), and again, low attendance in grades 10–12 may partially explain the low graduation rates.

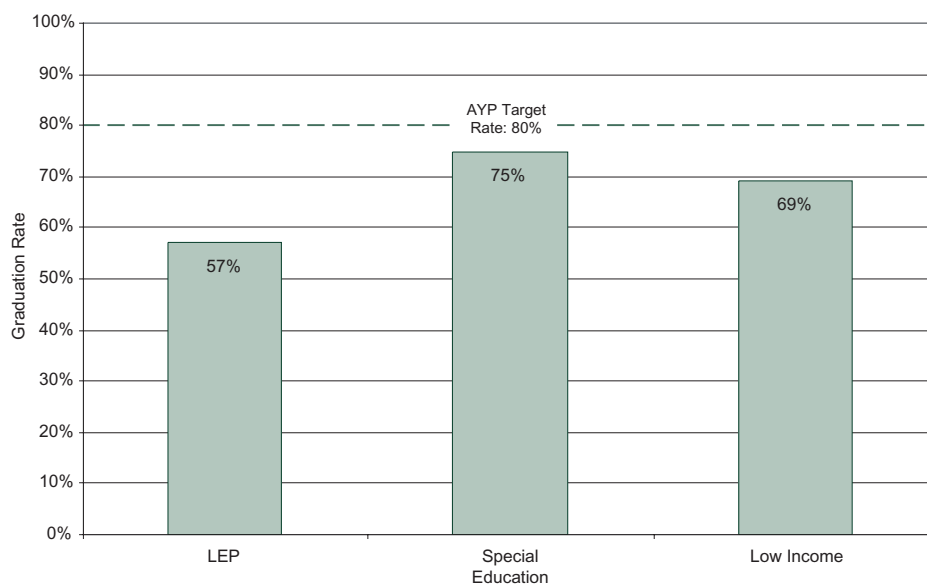
Figure 4.11 Graduation Rate, by Regions of the State, Charter Schools, and Alternative Learning Centers: 2002



Note: The darker bars represent groups meeting the AYP target graduation rate (80%). The lighter bars represent groups not meeting the AYP target graduation rate.

Disadvantaged Students. Figure 4.12 (p. 42) shows the graduation rates for limited English proficiency students, special education students,

Figure 4.12 Graduation Rate for Limited English Proficiency, Special Education, and Low Income* Students: 2002



*Low Income students = students receiving F/R Lunch (free or reduced-price lunch). The AYP target graduation rate is 80%.

and low income students eligible for free or reduced-price lunch. All of these rates are below the target of 80%: 57% for limited English proficiency students, 75% for special education students, and 69% for low income students. After 9th grade, all of these groups have attendance rates below the state expectation of 90% (see Table 4.2, p. 37), and low attendance in grades 10–12 may partially explain the low graduation rates.

All groups of students' attendance rates fell below the state expectation of 90% in grade 12. However, student groups and schools that maintained an attendance rate at or above the state's expected 90% attendance through 11th grade, as shown in Table 4.2 (p. 37), also met the state's graduation expectation of 80%, as shown in Table 4.3 (p. 40).

Summary and Conclusions

In the area of high school coursework, one of the most significant developments of the past year is the new high school course requirements that apply to students who will begin their 9th grade studies in 2004. It is natural to ask whether such requirements will increase student achievement and close achievement gaps between majority and minority students. The most relevant data are in math and science (Davenport et al., 1998, Teitelbaum, 2003, Singham, 2003). From these studies, we conclude that the new requirements can increase achievement—but only if they are implemented well. In our opinion, they are likely to increase achievement only if they lead to an increase in the amount of coursework and the level of coursework completed by students. They will only help close achievement gaps if they lead to a closing of the gaps both in the amount and level of coursework taken by more and less advantaged students. In short, the new requirements must be accompanied by high expectations for all students if they are to help close achievement gaps.

Toward the end of high school, attendance rates fall to the point where many student subgroups have rates below the state expectation. Such attendance rates do not seem conducive to the completion of the challenging coursework envisioned in the new course requirements. Not surprisingly, Figures 4.6 and 4.7 (p. 35) show that students with poor attendance are less likely to have reported completing what we have classified as the higher levels of high school mathematics. Without raising attendance, it may not be possible to increase both the amount and level of coursework successfully completed by some students, and thus raise overall levels of achievement and close achievement gaps, through the new course requirements.

Using the method of calculating graduation rates adopted by Minnesota and other states in response to NCLB, the graduation rate is here reported as 84% for both 2001 and 2002, assuming inclusion of students in both “regular” and alternative high schools. In Tables 4.2 (p. 37) and 4.3 (p. 40), student groups who maintained an attendance rate above the state expectation through 11th grade also met the state graduation rate. Conversely, groups that did not meet the state attendance expectation through 11th grade did not meet the state graduation expectation of 80%. Graduation rates for American Indian students and students at alternative learning centers were less than 50% (43% and 39% respectively).

If various segments of our students are to bring their graduation rate up to the state target graduation rate, they may first need to bring their attendance rate up to the state’s expected attendance level. Even though high schools are not evaluated on attendance for the purpose of determining AYP, high schools cannot ignore attendance. Some of them may fail to make the expected graduation rate for AYP if they do not first raise attendance rates.

CHAPTER 5: ACHIEVEMENT

In any educational system, one measure of success is student achievement. In this chapter, we examine achievement data to track progress over time in student performance, to compare our students to those in other states, and to examine equity of achievement across major subgroups specified in the No Child Left Behind Act (e.g., ethnicity, socioeconomic status). With some of the data, we summarize the relationship of achievement to student attendance, school poverty concentration, school funding, and school size. This chapter contains data from three sources:

- Minnesota 4th grade students' performance on the 2002 *National Assessment of Educational Progress (NAEP)* in reading and writing.
- Minnesota students' performance on statewide tests in academic year 2003: the *Minnesota Comprehensive Assessments (MCAs)* in 3rd grade reading and mathematics, the *MCAs* in 5th grade reading, writing, and mathematics, the 8th grade *Basic Skills Tests (BSTs)* in reading and mathematics, the 10th grade *MCAs* in reading and writing, and the 11th grade *MCA* in mathematics.
- Minnesota's college bound students' performance during the past year on the *ACT*, which is the college entrance examination taken most frequently by Minnesota students.

The data are examined with respect to these major questions: Has achievement been improving over time? How do Minnesota students compare to those from other states around the country? Are we moving toward greater equity of achievement levels across gender, ethnicity, and socioeconomic status? In short, to what extent does student achievement display both excellence and equity?

The Performance of Minnesota 4th Grade Students on the 2002 *National Assessment of Educational Progress (NAEP)* Reading and Writing Examinations

The *National Assessment of Educational Progress*, or “Nation’s Report Card” results are important for two reasons. First, the assessments are taken by a representative sample of students from almost every state. Therefore, the results provide a comparison of Minnesota student achievement to that of students nationally and state by state. Second, the data provide independent confirmation (or disconfirmation) of trends in statewide testing. For example, over the past five years, scores on statewide tests have been rising. If Minnesota classrooms have been too narrowly focusing on the content of Minnesota tests, we might see rising scores on statewide tests without seeing a corresponding rise in scores on other tests, such as the *NAEP* tests. On the other hand, if student performance is improving in reading generally, and not just on the reading content of Minnesota tests, then we would expect Minnesota student scores to rise on

both the Minnesota statewide assessments and on the *NAEP* and other tests as well. The *NAEP* and *MCA* tests do measure different skills to a certain extent; however, comparison is still valuable, for the reasons mentioned above. The data reported below tell us how Minnesota students compare to other students around the country and, in reading, whether the achievement increases seen on statewide tests can be confirmed by independent evidence from another testing program.

While this year's *NAEP* data are important, they have limitations. For example, *NAEP* tests have not been administered every year. Additionally, examinations have not been administered in every subject or in every grade. In 2002, *NAEP* tests were administered in reading and writing at three grade levels, 4th, 8th, and 12th. The data were released in 2003. A representative sample of Minnesota students was drawn only in 4th grade. Therefore, this section covers only 4th grade reading and writing data.

Fourth Grade Reading

For these 4th grade reading data, two questions are of interest. First, how do our students compare to others around the country? Second, do the data confirm the increases in reading achievement seen in the statewide tests?

Description of NAEP 4th Grade Reading Achievement Levels

Basic Level. Fourth grade students performing at the Basic level should demonstrate an understanding of the overall meaning of what they read. When reading text is appropriate for 4th graders, they should be able to make relatively obvious connections between the text and their own experiences, and extend the ideas in the text by making simple inferences.

For example, when reading literary text, Basic-level 4th graders should be able to tell what the story is generally about—providing details to support their understanding—and be able to connect aspects of the stories to their own experiences.

When reading information text, they should be able to tell what the selection is generally about or identify the purpose for reading it, provide details to support their understanding, and connect ideas from the text to their background knowledge and experiences.

Proficient Level. Fourth grade students performing at the Proficient level should be able to demonstrate an overall understanding of the text, providing inferential as well as literal information. When reading text appropriate to 4th grade, they should be able to extend the ideas in the text by making inferences, drawing conclusions, and making connections to their own experiences. The connections between the text and what the student infers should be clear.

For example, when reading literary text, Proficient-level 4th graders should be able to summarize the story, draw conclusions about the characters or plot, and recognize relationships such as cause and effect.

When reading informational text, Proficient-level students should be able to summarize the information and identify the author's intent or purpose. They should be able to draw reasonable conclusions from the text, recognize relationships such as cause and effect or similarities and differences, and identify the meaning of the selection's key concepts.

Advanced Level. Fourth grade students performing at the Advanced level should be able to generalize about topics in the reading selection and demonstrate an awareness of how authors compose and use literary devices. When reading text appropriate to 4th grade, they should be able to judge texts critically and, in general, give thorough answers that indicate careful thought.

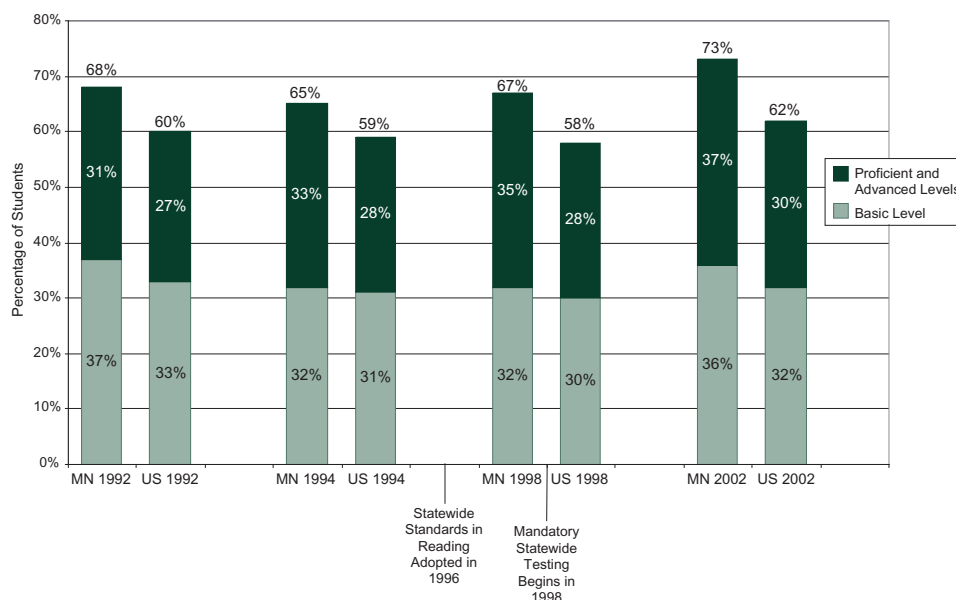
For example, when reading literary text, Advanced-level students should be able to make generalizations about the point of the story and extend its meaning by integrating personal experiences and other readings with ideas suggested by the text. They should be able to identify literary devices such as figurative language.

When reading informational text, Advanced-level 4th graders should be able to explain the author's intent by using supporting material from the text. They should be able to make critical judgments on the form and content of the text and explain their judgments clearly.

NAEP divides achievement into three levels: Basic, Proficient, and Advanced. The levels are described in the shaded box on page 46, and we have used those levels in describing results. Not all students fall into one of these three categories. For example, students who have not yet reached the Basic level can be grouped into a fourth category, Below Basic.

Figure 5.1 shows the percentage of 4th graders in Minnesota and the United States as a whole who scored at the Basic, Proficient, or Advanced levels on the last four *NAEP* reading assessments: 1992, 1994, 1998, and 2002. In that period of time (1992–02), Minnesota first adopted statewide standards in reading and mathematics (1996) and implemented mandatory statewide testing in both reading and math (1998) for all students in grades 3, 5, and 8. In all four years, Minnesota students scored higher than students nationwide. In Minnesota, the percentage of students scoring at the Basic level or above declined from 68% to 65% between 1992 and 1994, but has continued to rise since that time. In 2002, 73% of the Minnesota students scored at the Basic level or above, up from 68% in 1992. These score increases tend to confirm the increases in reading achievement appearing on statewide tests during the elementary grades (3rd and 5th grades) since 1998, when those tests began. It is interesting to note that the percentage of students reaching the Basic level or above actually decreased slightly from 1992 to 1994, both in Minnesota and the U.S. In 1992, 68% of Minnesota students reached the Basic level or above, compared with 60% of students nationwide; in 1994, 65% of Minnesota students scored at Basic or above, compared with 59% of students nationwide. From 1992 to 2002, most of the increase was in the percentage of students scoring at the Proficient level or above: 31% of Minnesota students in 1992, compared with 37% in 2002, and 27% of students nationwide in 1992, compared with 30% nationwide.

Figure 5.1 Percentage of Minnesota and U.S. 4th Grade Students Scoring at the Basic Level and at or above the Proficient Level on the *National Assessment of Educational Progress* Reading Assessment: 1992–02



If reading achievement is rising in Minnesota, is it rising faster than in other states? Figure 5.1 shows that since 1992, the percentage of students scoring at the Basic level or above has increased by 5% in Minnesota (from 68% to

73%), but only by 2% nationwide (from 60% to 62%).

Further evidence of this real improvement in reading can be seen in Table 5.1. For each of the four *NAEP* 4th grade reading assessments, Table 5.1 shows the states with mean scores higher than Minnesota's. When the difference is statistically significant ($p < .05$), the state is shown in bold letters. From 1992 to 2002, the number of states with a higher mean score decreased from nine in 1992 to just three in 2002. The number of states with a significantly higher mean score decreased from five to just two.⁹

Particularly in 2002, the states scoring higher than Minnesota tend to be concentrated in New England. For instance, in 2002, Connecticut,

Table 5.1 States with *National Assessment of Educational Progress* 4th Grade Reading Mean Scale Scores Above Minnesota's: 1992–2002

Year			
States Ahead in 1992	States Ahead in 1994	States Ahead in 1998	States Ahead in 2002
Connecticut	Connecticut	Colorado	Connecticut
Iowa	Iowa	Connecticut	
Maine	Maine	Iowa	
Massachusetts	Massachusetts	Kansas	
	Montana	Maine	
New Hampshire	New Hampshire	Massachusetts	
New Jersey	New Jersey	Montana	
North Dakota	North Dakota	New Hampshire	
Wisconsin	Rhode Island		
Wyoming	Wisconsin	Wisconsin	
	Wyoming		Vermont

Note: **Boldface type** has been used to identify states where the difference is statistically significant ($p < .05$). Retrieved from <http://nces.ed.gov/nationsreportcard/states/profile.asp> and from <http://nces.ed.gov/nationsreportcard/states/statecompar.asp> on 10/27/03.

NOTES

⁹ As this report was going to press, *NAEP* released new data on 4th graders tested in 2003. These new data tended to confirm increased reading achievement among Minnesota 4th graders since 1994, but 2003 students did not show as large an increase over 1994 as that shown by 2002 students, nor as high a ranking compared to other states.

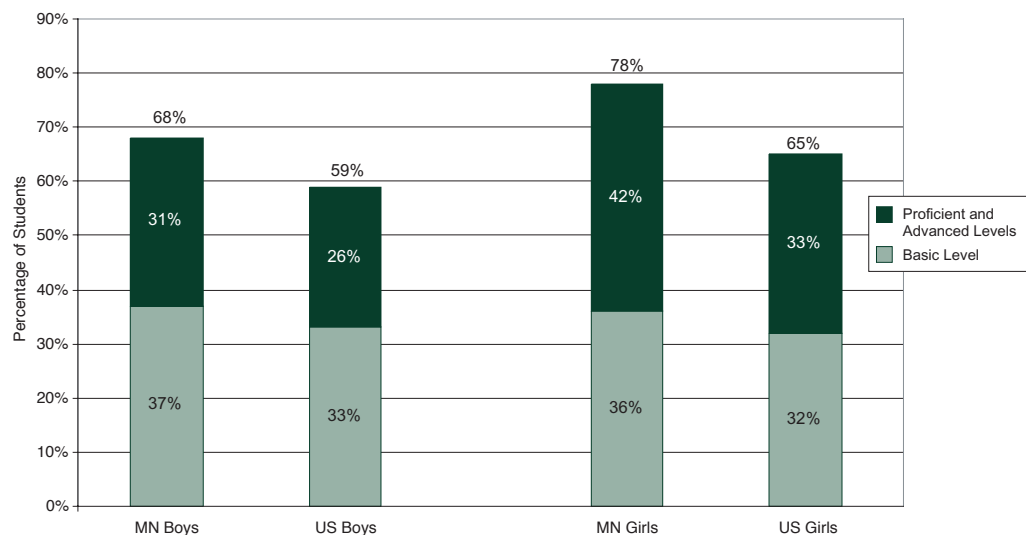
in reading. It is notable that, for boys, a larger percentage in both Minnesota and the U.S. scored at the Basic level than at the Proficient level or above (37% of Minnesota boys, and 33% of boys nationwide, were at the Basic level; while 31% of Minnesota boys and 26% of boys nationwide scored at the Proficient level or above). In contrast, 36% of Minnesota girls and 32% of girls nationwide scored at Basic, but 42% of Minnesota girls and 33% of girls nationwide scored at the Proficient level or above.

Figure 5.3 (p. 49) shows the percentage of students in each major ethnic group in Minnesota and the United States who scored at or above the Basic

Massachusetts, and Vermont were the only three states with higher mean scores than Minnesota's. In any examination of its reading programs, Minnesota should look beyond its immediate neighbors in the upper Midwest to states in New England for models of reading standards and reading curricula.

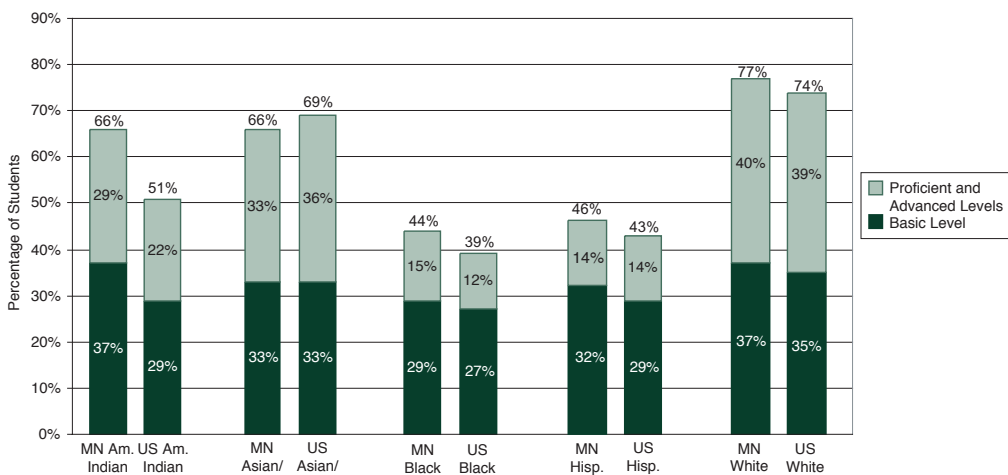
Figure 5.2 (p. 49) shows the percentage of boys and girls scoring at the Basic level or above in Minnesota and the U.S. Both Minnesota boys and girls score above their gender peers nationally. Both in Minnesota and in the U.S. generally, girls scored higher than boys. Girls also outperformed boys on Minnesota's statewide test

Figure 5.2 Percentage of Minnesota and U.S. 4th Grade Students Scoring at the Basic Level and at or above the Proficient Level on the *National Assessment of Educational Progress* Reading Assessment, by Gender: 1999–02



level. With the exception of Asian students, each group in Minnesota scored above their ethnic peers. Sixty-six percent of Minnesota’s Asian students scored at or above Basic while 69% of Asian students nationwide did so. We suspect that Minnesota’s Asian students did less well than their Asian peers nationwide because Minnesota has a high percentage of first- or second-generation Asian students from non-English-speaking homes. Their limited English proficiency would pose an obstacle to reading proficiency.

Figure 5.2 Percentage of Minnesota and U.S. 4th Grade Students Scoring at the Basic Level and at or above the Proficient Level on the *National Assessment of Educational Progress* Reading Assessment, by Ethnicity: 1999–02



While Minnesota’s Black and Hispanic students scored above their peers nationally, it is important to note that in both subgroups, fewer than 50% of students scored at or above the basic level. In general, when we look at the percentage of Minnesota and U.S. students scoring at the Basic level, as compared with the percentage of students scoring at or above the Proficient level, students in minority subgroups had larger percentages scoring at the Basic level than at or above the Proficient level. Only in the case of White students (both in Minnesota and nationwide), and Asian students nationwide, do we see a larger percentage of students scoring at or above the Proficient level than at the Basic level.

In summary, the *NAEP* 4th grade reading data confirm the increases in reading scores seen in statewide testing. Minnesota students score higher than the national average. Boys are above the national average for boys and

girls are above the national average for girls, although Minnesota boys score below Minnesota girls. While Minnesota's minority subgroups score below Minnesota's White students, Minnesota's minority subgroups (other than Asians) scored higher than their ethnic peers nationwide.

Fourth Grade Writing

The *NAEP* 4th grade writing results provide a basis for comparing Minnesota students to students from around the nation. They do not, however, provide a basis for confirming or disconfirming increases in statewide writing scores, because the *NAEP* 4th grade writing assessment has not been given to a representative sample of Minnesota students in prior years. The only prior administration of *NAEP* writing assessments to a sufficiently large, representative sample of Minnesota students occurred at the 8th grade.

As with the reading data, we have used *NAEP*'s three achievement levels in describing the Minnesota and national results. The boxed text (below) describes the 4th grade writing achievement levels: Basic, Proficient, and Advanced. Those students who have not yet reached the Basic level can be grouped in a fourth achievement category, which we will call Below Basic.

Figure 5.4 (p. 51) shows the percentage of 4th grade girls and boys from

Description of NAEP 4th Grade Writing Achievement Levels

Students performing at the Basic level should be able to:

- Demonstrate appropriate response to the task in form, content, and language;
- Use some supporting details;
- Demonstrate organization appropriate to the task; and
- Demonstrate sufficient command of spelling, grammar, punctuation, and capitalization to communicate to the reader.

Students performing at the Proficient level should be able to:

- Create an effective response to the task in form, content, and language;
- Demonstrate an awareness of the intended audience;
- Use effective organization appropriate to the task;
- Use sufficient elaboration to clarify and enhance the central idea;
- Use language appropriate to the task and intended audience; and
- Have few errors in spelling, grammar, punctuation, and capitalization that interfere with communication.

Students performing at the Advanced level should be able to:

- Create an effective and elaborated response to the task in form, content, and language;
- Express analytical, critical, and/or creative thinking;
- Have unity of form and content in response to the task;
- Demonstrate an awareness of the intended audience;
- Use effective organization appropriate to the task;
- Show proficient use of transitional elements;
- Elaborate and enhance the central idea with descriptive and supportive details;
- Use language appropriate to the task and intended audience; and
- Enhance meaning through control of spelling, grammar, punctuation, and capitalization.

Minnesota and the U.S. who scored at the Basic level or above on the *NAEP* writing test. *NAEP* reported that Minnesota's average score (156) was higher than the national average, but only by three points. Both Minnesota boys and girls scored slightly better than boys and girls in the nation as a whole. Just as girls across the nation scored higher than boys, Minnesota girls outscored the Minnesota boys. In Minnesota, 39% of the girls, but only 19% of the boys, scored at the Proficient level or above. In Minnesota's own writing examinations at 5th and 10th grades, this same gender difference can be seen: girls score higher than boys.

Figure 5.4 Percentage of Minnesota and U.S. 4th Grade Students Scoring at the Basic Level and at or above the Proficient Level on the 2002 *National Assessment of Educational Progress* Writing Exam: All Students, by Gender

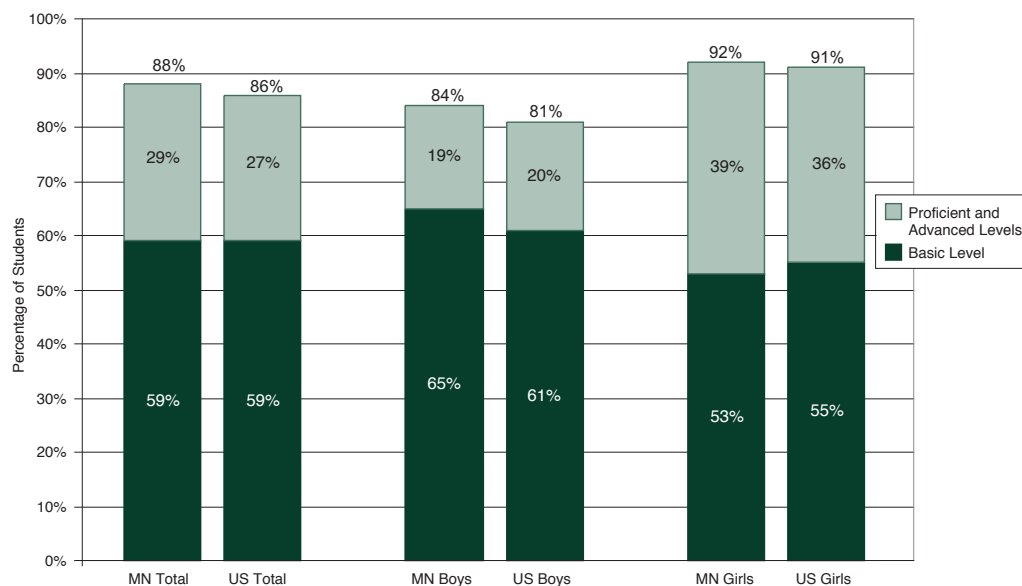
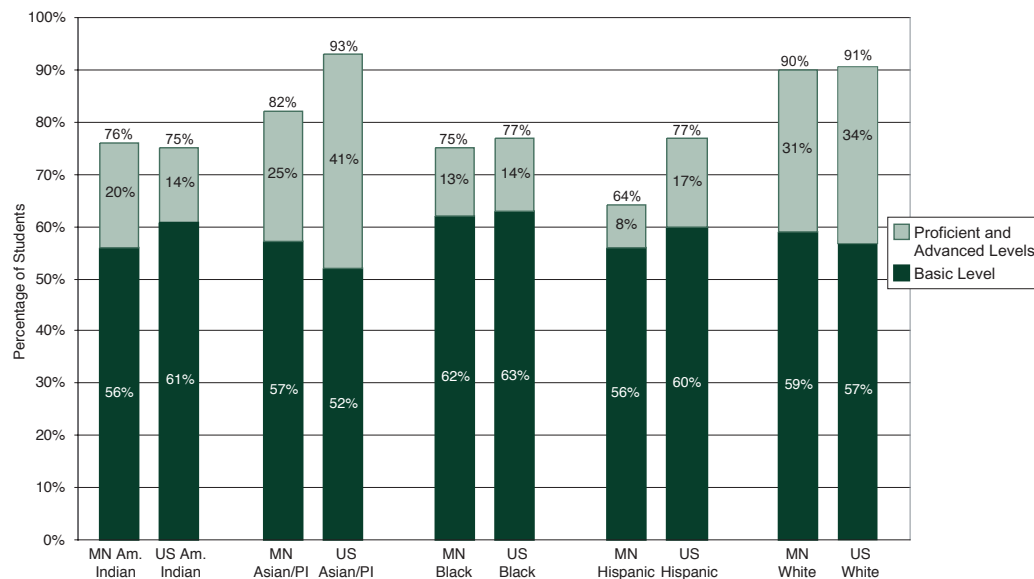


Figure 5.5 shows the percentage of each Minnesota and U.S. ethnic group scoring at or above the Proficient level. When compared to their ethnic peers around the nation, only Minnesota's American Indian students had a higher percentage scoring at or above the Basic level than did the same subgroup nationwide, and the difference is only 1% (76% vs. 75%). Both Minnesota Asian and Hispanic students scored below their ethnic peers nationwide.

Figure 5.5. Percentage of Minnesota and U.S. 4th Grade Students Scoring at the Basic Level and at or above the Proficient Level on the 2002 *National Assessment of Educational Progress* Writing Assessment, by Ethnicity



While Asian students nationwide scored as well as or better than White students in writing, Minnesota's Asian students did not perform as well as Minnesota's White students. *NAEP* reports that two of the ethnic gaps were significantly wider in Minnesota than in the nation generally: the gap between Asian and White students and the gap between Hispanic and White students. While Minnesota's overall average in writing may have been above the national average, this can be largely attributed to the higher percentage of White students in Minnesota compared to the percentage of White vs. minority students in the nation as a whole. When we compare student results

for Minnesota and the U.S., Minnesota students do not outperform their counterparts of the same ethnicity around the United States.

Figure 5.5 (p. 51) also highlights differences, some very large, in the percentage of students scoring at the Basic level as compared to students scoring as Proficient or above. Specifically, 56% of Minnesota's Hispanic students scored at the Basic level, compared with only 8% scoring at or above the Proficient level; 56% of Minnesota's American Indian students scored at the Basic level, compared with only 20% at the Proficient level or above; 62% of Minnesota's Black students scored at the Basic level, compared with 13% scoring at Proficient or above; 57% of Minnesota's Asian students scored at Basic, compared with 25% scoring at Proficient or above; and 59% of Minnesota's White students scored at the Basic level, compared with 31% scoring at Proficient or above.

The picture is much the same nationwide, although the difference between the percentage of Asian students scoring at Basic level and the percentage scoring at or above Proficient is smaller than for students of other ethnicities. In the U.S., 60% of Hispanic students, 61% of American Indian students, and 63% of Black students scored at the Basic level, compared with 17% of Hispanic students, 14% of American Indian students, and 14% of Black

students scoring at Proficient or above. Fifty-two percent of Asian students nationwide scored at the Basic level, compared with 41% at or above Proficient; while 57% of White students in the U.S. scored at the Basic level, compared with 34% scoring at or above Proficient.

The right column of Table 5.2 shows the states that had higher means than Minnesota on the 2002 *NAEP* 4th grade writing test. If the difference ($p < .05$) is significant, the state is shown in bold. In 2002, thirteen states had higher means than Minnesota. Four states had significantly higher scores, and all four are northeastern states.

How does Minnesota compare to other states in the writing achievement of its 4th graders? Minnesota did have a significantly higher mean than the United States as a whole, but this can be attributed to Minnesota's high proportion of White students. When we compare students of like ethnicity, Minnesota

Table 5.2 States with *National Assessment of Educational Progress* Writing Mean Scale Scores Above Minnesota's: 1998 and 2002

Year	
States Ahead in 1998	States Ahead in 2002
Colorado	
Connecticut	Connecticut
	Delaware
	Florida
Maine	Maine
	Maryland
Massachusetts	Massachusetts
Montana	
	New York
North Carolina	North Carolina
	Ohio
Oklahoma	
Oregon	
Texas	Rhode Island
Virginia	Vermont
	Virginia
	Washington
Wisconsin	

Note: **Boldface type** has been used to identify states where the difference is statistically significant ($p < .05$). Retrieved from <http://nces.ed.gov/nationsreportcard/states/profile.asp> on 10/27/03.

students show virtually no tendency to score above their counterparts nationally.

In reading, the *NAEP* results confirm the increases in reading scores seen in statewide testing: reading results for Minnesota students were above the national average. Writing results were less favorable than those in reading. While Minnesota students scored above the national average in both subject areas, the writing mean was only three points above the national average. In reading, only three states had mean scores above Minnesota (and only two were significantly above), but in writing thirteen states had means above Minnesota (with five of those significantly above). In reading, every ethnic group except Asians scored above their American ethnic peers. In writing, every ethnic group scored about the same or lower than their American ethnic peers. In comparison with other states, writing is Minnesota's weakest area. (For *NAEP* mathematics results, see our 2001 *Yearbook*).

Minnesota's weakest area is increasing in importance, at least for colleges and universities. Both college admissions testing programs, the *ACT* and *SAT*, have announced plans to incorporate writing assessments into their tests. This will make writing more important for entry into four year colleges and universities. It also seems to reflect an increased importance attached to writing by those colleges and universities. The increased emphasis on writing, and Minnesota students' rather mediocre writing performance as compared to other states both in the 2002 *NAEP* 4th grade assessment and the earlier 1998 *NAEP* 8th grade assessment (Table 5.2), would seem to call for more attention to this subject area.

STUDENT PERFORMANCE IN THE MINNESOTA ACHIEVEMENT TESTING PROGRAMS

Throughout the education literature, lower achievement test scores are correlated with limited English proficiency, disabilities, mobility (frequent school or residence changes), and student poverty (eligibility for free or reduced-price lunch). It is important to remember that, while these characteristics correlate with lower achievement test scores, we cannot attribute cause-and-effect to those characteristics. Other factors may also contribute to students' achievement levels (low or high), and it is crucially important not to assume that any one or any particular combination of the above factors is "the reason" for low achievement. Because of their association with lower test scores, however, achievement results are shown along with information about student background factors associated with test performance.

In 1997–98, Minnesota began statewide testing in grades 3, 5, and 8 for all students. In 1998–99, a writing test was added in 10th grade. In 2002, a reading assessment was added in 10th grade and a mathematics assessment was added in 11th grade. In 3rd and 5th grades, students take the *Minnesota Comprehensive Assessments (MCAs)*, which are aligned with Minnesota's standards in reading, mathematics, and writing.

In 8th grade students take the multiple-choice *Basic Skills Tests (BSTs)*, the state's high school graduation tests that cover reading and mathematics content. The 8th grade test is the student's first chance to demonstrate mastery of the basic high school requirements. For the class of 2001 and beyond, any student scoring at least 600 (approximately 75% of the items correct) on the *BSTs* meets this high school requirement (mastery of basic skills). Students who do not meet the minimum graduation standard in reading or mathematics on their first attempt in 8th grade will have additional opportunities to retake the test in later grades.

The 10th grade writing examination is the student's first opportunity to demonstrate mastery of the high school basic requirement in writing. Students who do not meet the minimum graduation standard on their first attempt in 10th grade will have additional opportunities to retake the test in later grades.

In addition to the writing test, 10th graders also take the *MCA* reading test, composed of both multiple choice and open ended items. This test is aligned with state standards in reading. In 11th grade, students take the *MCA* mathematics test, composed of both multiple choice and open ended items and aligned with the state's high school mathematics standards in algebra (e.g., algebraic patterns), geometry (e.g., space, shape, and measurement), and statistics and probability (e.g., chance and data).

Because of Minnesota's new statewide standards and the implementation of the No Child Left Behind Act, the tests have undergone changes in 2003. Where the changes are more extensive, comparing this year's results to prior years ranges from difficult to impossible. At one extreme, the 8th grade *BSTs* changed little, and therefore one can readily compare results this year to prior years for purposes of tracking trends over time. At the other extreme, the 11th grade mathematics test changed dramatically. The content was re-organized, new achievement levels were set, and scoring was revised. No attempt will be made on this test or the 10th grade reading test to compare results from this year with those from last year. Somewhere in the middle lie the 3rd and 5th grade tests, which were revised, although not so dramatically. For these tests, we have compared results to prior years after making some adjustments to take into account uncertainties relating to comparisons with prior years. These comparisons must be viewed with caution, however, in light of changes in the tests and the conditions under which they were taken.

The high school graduation tests (i.e., the 8th and 10th grade *BSTs* in reading, mathematics, and writing) have clear passing scores. However, the 3rd and 5th grade *MCAs* use proficiency levels between I and IV. The various levels of student performance in the *MCA* testing program are explained in the sidebar. In accordance with the 1998 Minnesota Omnibus Education Act, Subdivision 1, and to provide context for the test scores, the tables at the end of Chapter 5 include data on the percentage of test-takers with limited English proficiency (LEP), test-takers in special education, test-takers who are new to the district, and test-takers who are from low income families. In addition to the tables at the end of this chapter, Appendix B (pp. 105–130)

contains tables showing how scores change when certain groups of students are removed from the results.

Achievement Levels in the MCA Testing Program

The achievement levels of the MCA describe students' progress toward the state's standards in reading, mathematics, and writing. Originally, MCA scores were grouped into four levels of performance (Levels I, II, III, and IV) used to report results to students and parents. However, the original Level II encompassed such a wide range of achievement that it was an imprecise description of performance. Level II was therefore divided into Level IIa and Level IIb. The text in the shaded box at right describes the achievement levels.

MCA Achievement Levels

Achievement levels describe Minnesota students' progress toward the state's content standards in reading, mathematics and, for 5th graders, writing.

Level IV—Students at this level demonstrate superior performance, knowledge and skills well beyond what is expected at the grade level.

Level III—Students at this level are working above grade level and demonstrate solid performance in the knowledge and skills necessary for satisfactory work in the state's content standards. Many are proficient with challenging subject matter.

Level IIb—Most students in this level are working on grade-level material and are on track to achieve satisfactory work in the state's content standards.

Level IIa—Students in this level have partial knowledge and skills necessary for the state's content standards. They typically are working on slightly below grade-level material in one or more content area.

Level I—Students at this level have gaps in the knowledge and skills necessary for satisfactory work in the state's content standards. These students typically are working significantly below grade level and typically need additional instruction to progress beyond finding obvious answers and simple details.

Statewide Results on the 3rd Grade Minnesota Comprehensive Assessments in Reading and Mathematics

Tables 5.3 and 5.4 (pp. 56–57) show the 3rd grade reading and mathematics results. With the exception of the last line, labeled “Private Schools,” all results are based only on public school students. Private schools participate on a voluntary basis. Since some private schools elect to participate and others do not, the participating private school students may or may not be representative of all private school students. This creates potential interpretation problems when we seek to compare student achievement for private and public schools: aside from the obvious difficulties inherent in comparing populations that may be very different, there are additional issues relating to possible differences in curriculum, teaching methods, availability of books and supplies, and even learning environment. On the other hand, it is useful to have what data are available from private schools, but readers should be cautious about generalizing from the results reported here for the population of private school students.

Because the evaluation of schools under No Child Left Behind is based on a proficiency index, we have added a new column to Tables 5.3 and 5.4 showing the average proficiency index (“Mean Proficiency Index”) for the state as a whole and for each subgroup. If the average proficiency index falls below the AYP target, then the index is printed in bold. The AYP target is given in the footnote at the bottom of each table. The sidebar explains how proficiency indexes are calculated.

Almost 57,000 3rd graders in public schools attempted the reading and mathematics examination, or 95% of the 3rd graders enrolled at the time of

How proficiency indexes are calculated

Based on the student's MCA Level, each student is assigned a score. The student gets a score of 0 (no credit) if they score in Level I. The student receives a score of .5 (half credit) if they score in Level IIa. The student receives a score of 1 (full credit) if they score in Level IIb or higher. The mean proficiency index for a school is the mean of these student scores. Technically, a proficiency index is a number between 0 and 1, but they are often written without decimals: 72 instead of .72 or 30 instead of .30. A school's proficiency index will equal 1.00 (100 if written without decimals) only if all students score at or above Level IIb, the state's achievement target for all children. Under NCLB, every school must keep raising its mean proficiency index, and by academic year 2013–14, the mean proficiency index must reach 100. (See Appendix C (p.133) for details on how Minnesota's AYP targets were derived.)

Table 5.3 2003 Grade 3: *Minnesota Comprehensive Assessment* Results in Reading

		No. Tested	% At or Above Level III	% At or Above Level IIb*	% At or Above Level IIa	Mean Proficiency Index**	Mean Scale Score	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		56,821	60 (49) [49]	77 (67)	90 (84) [84]	82	1,522	95	8	13	4	31
GENDER	Female	27,821	64 (52) [53]	81 (70)	92 (87) [87]	85	1,541	96	8	8	4	32
	Male	28,947	57 (45) [45]	74 (64)	88 (81) [82]	79	1,503	95	8	17	4	31
ETHNICITY	Asian	2,755	41 (26) [27]	61 (44)	81 (68) [68]	70	1,445	83	61	8	4	62
	Black	4,410	30 (21) [20]	49 (37)	72 (60) [60]	58	1,386	92	12	15	10	75
	Hispanic	2,339	32 (22) [23]	51 (37)	74 (61) [63]	59	1,395	79	59	12	9	74
	Am. Indian	1,108	42 (26) [28]	62 (46)	83 (71) [73]	68	1,443	93	1	18	8	68
	White	45,879	67 (55) [55]	83 (73)	93 (89) [89]	87	1,548	98	1	13	2	21
LEP		3,381	19 (10) [13]	39 (24)	67 (51) [54]	51	1,348	73	—	8	7	82
SPECIAL ED		6,324	30 (22) [21]	46 (35)	65 (54) [53]	49	1,372	85	5	—	4	42
NEW TO DISTRICT		1,760	40 (38) [38]	58 (56)	77 (76) [75]	64	1,425	90	16	14	—	59
MIGRANTS		173	18 (11) [—]	39 (21)	62 (45) [—]	47	1,330	73	77	11	8	94
F/R LUNCH		16,759	40 (28) [28]	59 (46)	80 (69) [69]	67	1,433	91	21	17	7	—
ATTENDANCE RATE	95-100%	39,941	63 (51) [51]	80 (69)	92 (86) [86]	85	1,534	96	8	12	2	27
	90-94%	11,329	57 (47) [47]	75 (65)	88 (82) [83]	79	1,508	95	7	15	3	37
	0-89%	2,772	47 (34) [33]	64 (51)	82 (70) [71]	68	1,459	90	9	22	8	60
MIDYEAR SCHOOL TRANSFERS	0	51,123	62 (51) [51]	79 (69)	91 (86) [86]	84	1,530	96	7	13	2	29
	1	2,579	43 (30) [31]	59 (46)	79 (66) [69]	66	1,437	90	19	18	8	61
	2 or more	343	24 (16) [15]	41 (31)	66 (56) [51]	50	1,358	86	17	25	19	84
STRATA	Mpls/St. Paul	5,932	37 (27) [27]	55 (42)	76 (64) [63]	63	1,422	90	31	12	5	69
	TC Suburbs	24,455	65 (55) [54]	81 (73)	92 (88) [88]	85	1,545	96	6	12	3	19
	Outstate 2000+	12,376	62 (50) [50]	79 (68)	92 (86) [86]	83	1,526	97	5	14	3	30
	Outstate 2000-	13,170	62 (49) [49]	80 (68)	92 (86) [86]	84	1,526	97	2	14	3	37
CHARTER		886	38 (27) [22]	54 (41)	76 (62) [57]	64	1,420	93	21	11	6	62
ALCs		104	45 (52) [—]	72 (70)	87 (83) [—]	77	1,457	96	2	8	31	58
PRIVATE SCHOOLS		1,150	66 (57) [57]	84 (76)	95 (92) [91]	88	1,553	—	—	—	—	—

Note: Percentages given for achievement levels (columns with multiple percentages) correspond to the following (reading the columns left to right): Percentages in plain text= 2003 percentage; text in (parentheses)=2002 percentage; text in [brackets]=2001 percentage. In academic year 2001, Level II included both Level IIa and IIb. Therefore, there is no 2001 score [in square brackets] for Level IIb. **Mean Proficiency Index scores below the AYP target (63 in 3rd grade reading) are shown in bold type.

testing. As compared to last year, the number of students tested declined by about 2,000, although the percentage of students remained about the same. The decline in number of students attempting largely reflects a decline in 3rd grade enrollment from last year to this year.

Figure 5.6 (p. 57) shows the trend in 3rd grade reading and mathematics scores over the past four years. Tables 5.3 and 5.4 also show the average proficiency index for all public school students, all private school students taking the test, and various public school student subgroups. If a student group failed to make the AYP target (63 in reading; 66 in math), their mean proficiency index appears in bold. Six groups did not reach the target in either reading or mathematics: Blacks, Hispanics, LEP students, special education students, migrant students, and high mobility students. Students in charter schools had mean proficiency indices above the target in reading, but not mathematics.

Statewide Results in 5th Grade *Minnesota Comprehensive Assessments* in Reading and Mathematics

As shown in Tables 5.5 and 5.6 (pp. 58–59), more than 60,000 public school 5th grade students attempted the reading and mathematics tests.

Table 5.4 2003 Grade 3: Minnesota Comprehensive Assessment Results in Mathematics

		No. Tested	% At or Above Level III	% At or Above Level IIb*	% At or Above Level IIa	Mean Proficiency Index**	Mean Scale Score	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		56,815	57 (48) [53]	75 (65)	95 (90) [90]	83	1,545	95	8	13	4	31
GENDER	Female	27,750	58 (47) [52]	76 (64)	95 (90) [91]	84	1,552	96	8	8	4	32
	Male	29,024	56 (48) [53]	75 (66)	94 (90) [90]	82	1,539	95	8	17	4	31
ETHNICITY	Asian	2,754	47 (35) [37]	64 (50)	92 (84) [83]	76	1,497	84	61	8	4	62
	Black	4,413	28 (19) [20]	45 (33)	80 (70) [68]	60	1,383	92	12	15	10	75
	Hispanic	2,325	32 (22) [25]	50 (36)	85 (76) [75]	64	1,412	79	59	12	9	74
	Am. Indian	1,116	37 (28) [32]	59 (43)	89 (80) [83]	70	1,444	93	1	18	8	68
	White	45,874	62 (54) [59]	81 (71)	97 (94) [94]	87	1,574	98	1	13	2	21
LEP		3,381	26 (17) [22]	45 (30)	83 (72) [72]	61	1,385	73	—	8	7	82
SPECIAL ED		6,444	31 (24) [26]	49 (38)	82 (71) [70]	58	1,406	86	5	—	4	42
NEW TO DISTRICT		1,806	35 (35) [40]	54 (52)	85 (84) [84]	66	1,430	90	16	14	—	59
MIGRANTS		179	23 (16) [—]	39 (24)	79 (64) [—]	55	1,350	75	77	11	8	94
F/R LUNCH		16,799	38 (29) [33]	58 (45)	88 (80) [80]	71	1,446	91	21	17	7	—
ATTENDANCE RATE	95-100%	39,949	60 (51) [56]	78 (68)	96 (92) [92]	86	1,563	96	8	12	2	27
	90-94%	11,303	52 (44) [49]	71 (62)	93 (89) [89]	80	1,520	95	7	15	3	37
	0-89%	2,780	40 (31) [34]	61 (47)	88 (79) [79]	70	1,457	90	9	22	8	60
MIDYEAR SCHOOL TRANSFERS	0	51,102	59 (50) [55]	77 (67)	96 (92) [92]	85	1,555	96	7	13	2	29
	1	2,589	39 (29) [33]	58 (45)	87 (78) [79]	69	1,447	90	19	18	8	61
	2 or more	344	23 (17) [15]	42 (29)	78 (65) [65]	56	1,359	86	17	25	19	84
STRATA	Mpls/St. Paul	5,927	39 (30) [32]	56 (44)	86 (77) [76]	68	1,452	90	31	12	5	69
	TC Suburbs	24,427	63 (54) [57]	80 (71)	96 (93) [93]	86	1,575	95	6	12	3	19
	Outstate 2000+	12,382	57 (48) [53]	76 (66)	95 (91) [91]	84	1,542	97	5	14	3	30
	Outstate 2000-	13,186	57 (47) [54]	77 (66)	96 (93) [93]	85	1,544	97	2	14	3	37
CHARTER		887	33 (22) [21]	50 (38)	83 (71) [67]	65	1,412	93	21	11	6	62
ALCs		106	40 (50) [—]	63 (67)	92 (92) [—]	76	1,457	97	2	8	31	58
PRIVATE SCHOOLS		1,154	59 (47) [57]	79 (68)	97 (93) [94]	87	1,556	—	—	—	—	—

Note: Percentages given for achievement levels (columns with multiple percentages) correspond to the following (reading the columns left to right): Percentages in plain text= 2003 percentage; text in (parentheses)=2002 percentage; text in [brackets]=2001 percentage. In academic year 2001, Level II included both Level IIa and IIb. Therefore, there is no 2001 score [in square brackets] for Level IIb. **Mean Proficiency Index scores below the AYP target (66 in 3rd grade mathematics) are shown in bold type.

Figure 5.6 Percentage of Grade 3 Students at or above Levels IIa and IIb and at Levels III and IV in Reading and Mathematics: 2000–03

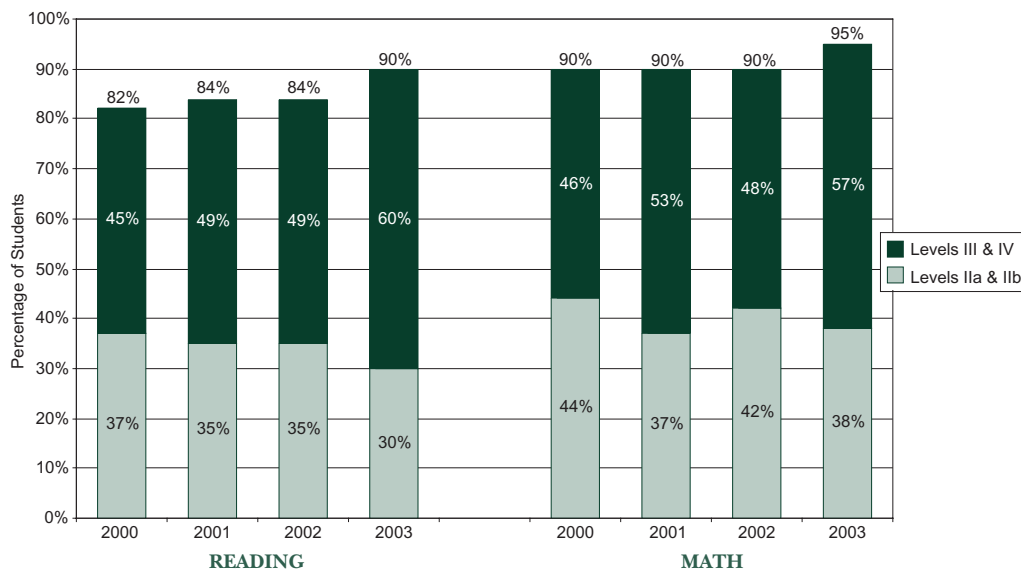
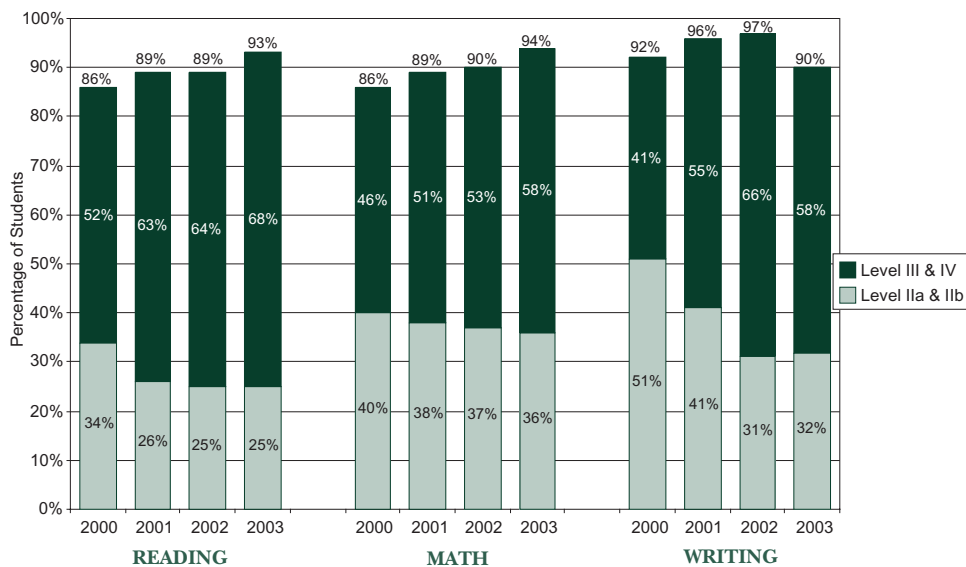


Table 5.5 2003 Grade 5: Minnesota Comprehensive Assessment Results in Reading

		No. Tested	% At or Above Level III	% At or Above Level IIb*	% At or Above Level IIa	Mean Proficiency Index**	Mean Scale Score	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		60,191	68 (64) [63]	81 (75)	93 (89) [89]	85	1,571	96	7	14	3	31
GENDER	Female	29,413	72 (68) [67]	85 (78)	95 (92) [91]	88	1,595	96	7	10	3	32
	Male	30,744	64 (61) [59]	78 (72)	92 (88) [87]	83	1,547	95	7	19	3	31
ETHNICITY	Asian	2,790	49 (38) [34]	67 (49)	89 (75) [72]	76	1,495	83	55	8	4	66
	Black	4,603	35 (29) [28]	54 (42)	79 (70) [66]	64	1,416	93	9	19	9	77
	Hispanic	2,165	41 (33) [33]	58 (46)	81 (70) [69]	66	1,439	81	52	15	10	73
	Am. Indian	1,306	45 (39) [36]	66 (53)	87 (80) [79]	73	1,467	95	1	22	7	69
	White	49,026	74 (71) [70]	86 (82)	96 (93) [93]	89	1,599	98	1	14	2	21
LEP		2,962	24 (15) [16]	43 (25)	75 (57) [57]	57	1,371	74	—	11	7	84
SPECIAL ED		7,588	34 (29) [29]	49 (39)	72 (62) [61]	54	1,397	86	5	—	4	44
NEW TO DISTRICT		1,729	49 (52) [50]	65 (64)	84 (83) [82]	69	1,464	88	14	17	—	58
MIGRANTS		169	25 (17) [-]	43 (26)	75 (48) [-]	54	1,369	78	77	10	14	96
F/R LUNCH		17,773	47 (40) [39]	65 (54)	86 (77) [76]	73	1,470	91	18	20	6	—
ATTENDANCE RATE	95-100%	42,615	70 (67) [66]	84 (77)	95 (91) [90]	88	1,584	96	6	13	2	27
	90-94%	11,889	66 (61) [61]	80 (72)	92 (88) [88]	84	1,558	96	5	16	3	37
	0-89%	3,099	52 (47) [44]	69 (59)	86 (80) [79]	73	1,492	92	6	24	6	56
MIDYEAR SCHOOL TRANSFERS	0	54,620	70 (66) [65]	83 (77)	94 (91) [90]	87	1,580	96	6	14	2	29
	1	2,644	47 (42) [41]	65 (54)	85 (75) [74]	72	1,472	90	17	20	8	65
	2 or more	339	31 (26) [26]	50 (37)	75 (63) [65]	58	1,389	90	9	31	16	85
STRATA	Mpls/St. Paul	6,241	42 (35) [34]	59 (46)	82 (71) [69]	68	1,454	90	27	16	5	70
	TC Suburbs	25,398	74 (71) [69]	86 (81)	96 (93) [92]	89	1,604	96	5	13	3	18
	Outstate 2000+	13,275	69 (66) [66]	83 (77)	94 (91) [91]	87	1,573	97	4	16	3	30
	Outstate 2000-	14,500	68 (65) [63]	83 (77)	94 (91) [91]	86	1,568	97	2	15	3	36
CHARTER		773	44 (34) [37]	58 (47)	79 (74) [67]	66	1,447	92	18	16	6	59
ALCs		60	50 (55) [-]	70 (68)	92 (87) [-]	74	1,479	90	2	13	50	47
PRIVATE SCHOOLS		1,023	75 (72) [70]	87 (82)	97 (95) [94]	91	1,597	—	—	—	—	—

Note: Percentages given for achievement levels (columns with multiple percentages) correspond to the following (reading the columns left to right): Percentages in plain text= 2003 percentage; text in parentheses = 2002 percentage; text in [brackets]=2001 percentage. In academic year 2001, Level II included both Level IIa and IIb. Therefore, there is no 2001 score [in square brackets] for Level IIb. **Mean Proficiency Index scores below the AYP target (70 in 5th grade reading) are shown in bold type.

Figure 5.7 Percentage of Grade 5 Students at or above Levels IIa and IIb and at Levels III and IV in Reading, Mathematics, and Writing: 2000–03



Almost 61,000 5th grade students took the 5th grade writing test. These students constitute 95% (96% for writing) of the 5th graders enrolled at the time of testing. The number attempting the test is down from last year, reflecting the fact that fewer students were enrolled in 5th grade.

Figure 5.7 shows the four-year trend in 5th grade reading, mathematics, and writing scores.

Tables 5.5 and 5.6 (above and p. 59) show the mean

Table 5.6 2003 Grade 5: *Minnesota Comprehensive Assessment* Results in Mathematics

		No. Tested	% At or Above Level III	% At or Above Level IIb*	% At or Above Level IIa	Mean Proficiency Index**	Mean Scale Score	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		60,079	58 (53) [51]	77 (70)	94 (90) [89]	84	1,536	95	7	14	3	31
GENDER	Female	29,309	57 (53) [50]	77 (71)	94 (90) [89]	84	1,533	96	7	10	3	32
	Male	30,734	59 (52) [51]	78 (70)	94 (89) [88]	84	1,538	95	7	19	3	31
ETHNICITY	Asian	2,804	45 (37) [32]	66 (54)	91 (82) [78]	77	1,491	83	55	8	4	66
	Black	4,585	22 (18) [17]	42 (34)	78 (66) [62]	58	1,374	92	9	19	9	77
	Hispanic	2,181	29 (24) [23]	52 (41)	83 (73) [72]	64	1,412	82	52	15	10	73
	Am. Indian	1,300	33 (26) [24]	58 (47)	87 (78) [77]	69	1,435	94	1	22	7	69
	White	48,893	64 (59) [57]	83 (77)	97 (94) [93]	88	1,562	97	1	14	2	21
LEP		2,966	19 (15) [15]	41 (30)	80 (66) [65]	58	1,372	74	—	11	7	84
SPECIAL ED		7,627	28 (23) [22]	48 (37)	78 (66) [64]	56	1,397	86	5	—	4	44
NEW TO DISTRICT		1,745	34 (39) [37]	57 (57)	85 (82) [80]	66	1,427	88	13	17	—	58
MIGRANTS		170	12 (10) [-]	36 (23)	77 (57) [-]	53	1,346	78	77	10	14	96
F/R LUNCH		17,756	35 (30) [28]	59 (49)	87 (78) [76]	70	1,441	91	17	20	6	—
ATTENDANCE RATE	95-100%	42,548	61 (56) [54]	80 (74)	95 (92) [91]	86	1,551	96	6	13	2	27
	90-94%	11,828	54 (48) [46]	75 (66)	93 (88) [87]	82	1,518	95	5	16	3	37
	0-89%	3,087	39 (33) [31]	62 (51)	87 (78) [77]	70	1,453	91	6	24	6	56
MIDYEAR SCHOOL TRANSFERS	0	54,491	60 (55) [53]	79 (72)	95 (91) [90]	85	1,545	96	6	14	2	29
	1	2,634	35 (32) [29]	58 (49)	86 (76) [72]	68	1,439	90	17	20	8	65
	2 or more	338	20 (16) [19]	39 (32)	73 (60) [62]	52	1,357	90	9	31	16	85
STRATA	Mpls/St. Paul	6,230	34 (30) [27]	55 (46)	84 (75) [71]	67	1,434	90	27	16	5	70
	TC Suburbs	25,374	65 (60) [58]	83 (77)	96 (93) [92]	88	1,570	96	5	13	3	18
	Outstate 2000+	13,230	58 (53) [51]	79 (71)	95 (91) [91]	85	1,537	96	4	16	3	30
	Outstate 2000-	14,470	55 (51) [48]	78 (71)	95 (91) [91]	84	1,526	96	2	15	3	36
CHARTER		771	32 (26) [24]	51 (38)	81 (69) [67]	64	1,408	92	18	15	6	59
ALCs		58	28 (40) [-]	50 (60)	84 (84) [-]	60	1,402	87	2	13	50	47
PRIVATE SCHOOLS		1,024	62 (53) [50]	84 (74)	97 (93) [92]	89	1,547	—	—	—	—	—

Note: Percentages given for achievement levels (columns with multiple percentages) correspond to the following (reading the columns left to right):

Percentages in plain text= 2003 percentage; text in (parentheses) = 2002 percentage; text in [brackets]=2001 percentage. In academic year 2001, Level II included both Level IIa and IIb. Therefore, there is no 2001 score [in square brackets] for Level IIb. **Mean Proficiency Index scores below the AYP target (65 in 5th grade mathematics) are shown in bold type.

proficiency indices for all public school students, all private school students taking the test, and subgroups of public students. Mean proficiency indices below the AYP target (70 in reading; 65 in math) are shown in bold. Eight student groups were below the target for both reading and mathematics: Blacks, Hispanics, LEP students, special education students, migrant students, mobile students transferring schools two or more times, and students in charter schools. Students new to their district and students in large urban districts (Minneapolis/St. Paul) fell below the target for reading but not mathematics. Students in alternative learning centers (ALCs) fell below the target in mathematics, but not in reading.

Under NCLB, the goal is to have all students scoring at or above the proficient level by 2013–14. If all students in a subgroup are scoring at or above proficient, then the mean proficiency index for the subgroup will be 100 (see sidebar, p. 57). In Tables 5.3–5.6, neither the private school students nor any public school subgroup has a mean proficiency index of 100. Only one subgroup, private school students in 5th grade reading, has a proficiency index barely over 90, although private schools are exempt from the NCLB requirements. Large improvements in achievement will be required through-

Table 5.7 2003 Grade 5: *Minnesota Comprehensive Assessment* Results in Writing

		No. Tested	% At or Above Level III	% At or Above Level IIb	% At or Above Level IIa	Mean Scale Score	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		60,992	58(66)[55]	68(78)	90(97)[96]	1,584	95	7	14	3	31
GENDER	Female	29,791	68(74)[65]	77(84)	94(98)[98]	1,678	96	7	10	3	32
	Male	31,130	49(59)[46]	60(72)	86(95)[95]	1,494	95	7	19	3	31
ETHNICITY	Asian	2,958	52(58)[48]	62(72)	87(95)[95]	1,538	87	55	8	4	66
	Black	4,650	36(42)[33]	45(55)	76(89)[88]	1,354	93	9	19	9	77
	Hispanic	2,255	38(47)[38]	48(60)	79(91)[90]	1,393	83	52	15	10	73
	Am. Indian	1,307	37(46)[36]	48(61)	79(93)[91]	1,376	94	1	22	7	69
	White	49,017	62(70)[59]	72(82)	92(98)[97]	1,623	97	1	14	2	21
LEP		3,201	30(40)[33]	40(55)	75(88)[88]	1,326	79	—	11	7	84
SPECIAL ED		7,709	27(36)[25]	36(49)	67(86)[84]	1,266	86	5	—	4	44
NEW TO DISTRICT		1,708	42(56)[46]	51(69)	80(94)[93]	1,413	85	13	17	—	57
MIGRANTS		189	19(39)[—]	28(53)	66(87)[—]	1,232	83	76	10	14	96
F/R LUNCH		18,081	41(50)[39]	51(64)	81(93)[92]	1,414	92	17	20	6	—
ATTENDANCE RATE	95–100%	42,806	61(68)[58]	70(80)	91(97)[97]	1,608	97	6	13	1	27
	90–94%	11,905	55(64)[53]	65(76)	88(96)[96]	1,555	95	5	16	3	37
	0–89%	3,119	43(51)[41]	54(64)	81(92)[91]	1,437	92	6	24	6	56
MIDYEAR SCHOOL TRANSFERS	0	54,779	60(67)[57]	69(79)	91(97)[97]	1,598	96	6	14	2	29
	1	2,700	41(50)[40]	51(64)	80(90)[89]	1,420	91	17	20	8	65
	2 or more	351	27(34)[26]	35(45)	70(86)[84]	1,269	91	9	31	15	85
STRATA	Mpls/St. Paul	6,391	41(48)[40]	51(62)	80(91)[91]	1,418	91	27	16	5	70
	TC Suburbs	25,681	66(71)[63]	75(81)	93(97)[97]	1,661	96	5	13	3	18
	Outstate 2000+	13,358	59(68)[53]	69(80)	90(98)[96]	1,582	96	4	16	3	30
	Outstate 2000–	14,732	53(65)[51]	64(79)	89(97)[96]	1,534	96	2	15	3	36
CHARTER		826	36(42)[31]	45(59)	78(93)[91]	1,373	94	18	15	5	59
ALCs		67	31(29)[—]	37(45)	75(85)[—]	1,341	87	2	11	49	49
PRIVATE SCHOOLS		592	56(69)[58]	67(82)	90(97)[97]	1,571	—	—	—	—	—

Note: Percentages given for achievement levels (columns with multiple percentages) correspond to the following (reading the columns left to right): Percentages in plain text= 2003 percentage; text in parentheses = 2002 percentage; text in [brackets]=2001 percentage. In academic year 2001, Level II included both Level IIa and IIb. Therefore, there is no 2001 score [in square brackets] for Level IIb. **Mean Proficiency Index scores below the AYP target (70 in 5th grade reading) are shown in bold type.

out the public education system if Minnesota schools are to meet the reading and mathematics proficiency targets of the No Child Left Behind Act.

Statewide Results in 5th Grade Minnesota Comprehensive Assessment in Writing

Table 5.7 shows the 5th grade writing data. Almost 61,000 public school 5th grade students attempted the writing assessment, down about 100 students from last year. Since writing scores are not used in determining AYP, a proficiency index was not calculated for writing results.

Unlike the reading and mathematics scores, writing scores showed a notable drop (see Figure 5.7, p. 58). The percentage of students scoring at or above Level IIa dropped from 97% to 90%. The percentage of students scoring at

or above Level III dropped from 66% to 58%. Because it is very difficult to maintain the difficulty of the writing test at a constant level from year to year, some or all of this decline may be due to changes in the content or scoring of the writing examination this year. Only time will tell whether this drop is the beginning of a trend or a one-time event.

Statewide Results on High School Graduation Tests

Tables 5.8 and 5.9 (below and p. 62) show the 8th grade *BST* results in reading and mathematics for all public school students tested. Table 5.10 (p. 63) shows the public school results for the 10th grade writing test. Data are also shown for students in those private schools that participated in the testing on a voluntary basis. Students from the participating private schools may or may not be representative of all private school students. For public school students, these tests provide the first opportunity to pass the

Table 5.8 2003 Grade 8: *Basic Skills Test* Results in Reading for All Public School Students Tested

		No. Tested	% Meeting Minimum Standard	Mean Number Correct	Mean Scale Score	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		64,841	81 (80)[79]	34	647	97	5	13	3	27
GENDER	Female	31,829	83 (83)[82]	34	651	97	5	8	3	27
	Male	32,949	79 (77)[76]	33	643	97	5	18	3	27
ETHNICITY	Asian	3,300	62 (61)[60]	31	620	97	51	9	3	64
	Black	4,300	49 (46)[45]	28	598	95	11	21	7	76
	Hispanic	2,025	55 (52)[51]	29	607	94	43	14	7	67
	Am. Indian	1,378	59 (54)[56]	29	610	93	0+	24	9	64
	White	53,086	87 (86)[84]	35	656	98	0+	12	2	18
LEP		3,232	35 (31)[32]	25	584	95	—	10	5	85
SPECIAL ED		7,819	42 (40)[37]	26	591	90	4	—	5	44
NEW TO DISTRICT		1,640	59 (64)[63]	30	615	91	9	25	—	56
MIGRANTS		127	28 (26)[—]	24	578	89	72	11	11	92
F/R LUNCH		17,019	60 (59)[57]	30	614	95	16	21	6	—
ATTENDANCE RATE	95-100%	40,262	85 (84)[83]	35	654	98	5	11	1	21
	90-94%	15,522	79 (79)[78]	34	644	97	4	14	2	29
	0-89%	6,259	65 (63)[62]	31	622	92	6	26	7	51
MIDYEAR SCHOOL TRANSFERS	0	58,825	83 (82)[81]	34	651	98	5	12	2	24
	1	2,700	56 (55)[57]	29	609	93	14	25	10	61
	2 or more	527	41 (42)[40]	26	589	89	9	48	19	80
STRATA	Mpls/St. Paul	6,266	55 (54)[53]	29	610	95	27	16	3	69
	TC Suburbs	26,888	86 (85)[84]	35	656	97	3	12	3	16
	Outstate 2000+	14,777	83 (82)[80]	34	649	97	3	13	3	25
	Outstate 2000-	16,247	82 (81)[79]	34	647	97	1	13	3	30
CHARTER SCHOOLS		663	65 (68)[70]	31	628	96	7	19	6	47
ALCs		528	44 (40)[—]	27	594	90	10	16	16	63
PRIVATE SCHOOLS		4,451	94 (93)[91]	37	672	—	—	—	—	—

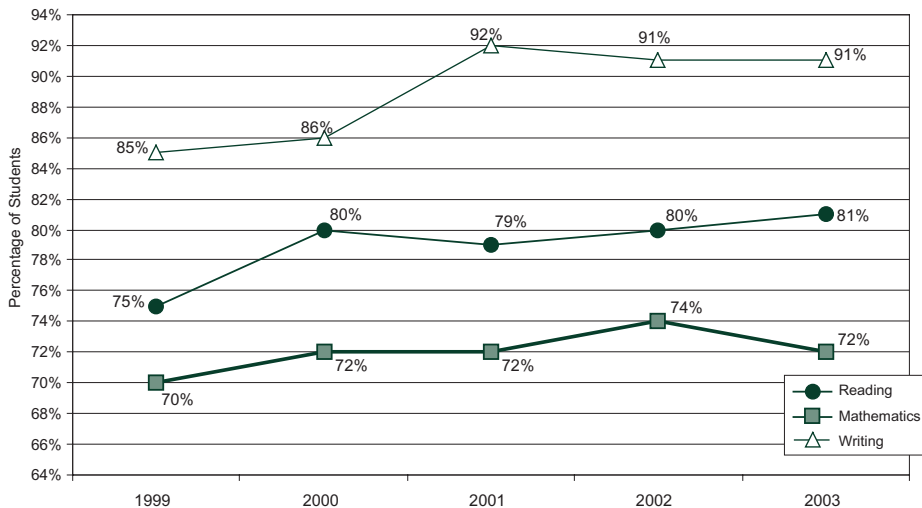
Note: Percentages given for achievement levels (columns with multiple percentages) correspond to the following (reading the columns left to right): Percentages in plain text= 2003 percentage; text in (parentheses) = 2002 percentage; text in [brackets]=2001 percentage. In academic year 2001, Level II included both Level IIa and IIb. Therefore, there is no 2001 score [in square brackets] for Level IIb. **Mean Proficiency Index scores below the AYP target (70 in 5th grade reading) are shown in bold type.

Table 5.9 2003 Grade 8: *Basic Skills Test* Results in Mathematics for All Public School Students Tested

		No. Tested	% Meeting Minimum Standard	Mean Number Correct	Mean Scale Score	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		64,888	72 (74)[72]	55	630	97	5	13	3	27
GENDER	Female	31,864	72 (74)[71]	55	629	97	5	8	3	27
	Male	32,961	72 (75)[72]	55	630	97	5	18	3	27
ETHNICITY	Asian	3,303	61 (62)[59]	52	617	97	51	9	3	64
	Black	4,297	33 (33)[30]	43	581	95	11	21	7	76
	Hispanic	2,032	43 (43)[40]	46	593	94	43	14	7	67
	Am. Indian	1,362	43 (46)[43]	47	593	92	0+	24	9	64
	White	53,131	78 (80)[77]	56	637	98	0+	12	2	18
LEP		3,241	34 (32)[33]	44	582	95	—	10	5	84
SPECIAL ED		7,803	30 (33)[30]	42	577	90	4	—	5	44
NEW TO DISTRICT		1,663	44 (55)[51]	47	595	92	9	25	—	56
MIGRANTS		127	30 (22)[—]	43	578	89	72	11	11	92
F/R LUNCH		17,045	49 (52)[48]	48	600	95	16	21	6	—
ATTENDANCE RATE	95-100%	40,259	78 (80)[78]	56	638	98	5	11	1	21
	90-94%	15,521	69 (72)[69]	54	625	97	4	14	2	29
	0-89%	6,239	50 (52)[49]	48	601	92	6	26	7	51
MIDYEAR SCHOOL TRANSFERS	0	58,822	75 (77)[75]	55	633	98	5	12	2	24
	1	2,681	42 (45)[44]	46	592	93	14	25	10	61
	2 or more	525	25 (30)[26]	41	572	89	9	48	19	80
STRATA	Mpls/St. Paul	6,269	46 (48)[44]	47	598	95	27	16	3	69
	TC Suburbs	26,856	75 (79)[77]	56	635	97	3	12	3	16
	Outstate 2000+	14,788	74 (77)[73]	55	633	97	3	13	3	25
	Outstate 2000-	16,295	74 (76)[73]	55	631	97	1	13	3	30
CHARTER		680	58 (57)[56]	51	613	98	7	19	6	47
ALCs		540	26 (27)[—]	42	575	92	10	16	16	63
PRIVATE SCHOOLS		4,428	85 (85)[83]	58	647	—	—	—	—	—

Note: Percentages given for achievement levels (columns with multiple percentages) correspond to the following (reading the columns left to right): Percentages in plain text= 2003 percentage; text in parentheses = 2002 percentage; text in [brackets]=2001 percentage. In academic year 2001, Level II included both Level IIa and IIb. Therefore, there is no 2001 score [in square brackets] for Level IIb. **Mean Proficiency Index scores below the AYP target (70 in 5th grade reading) are shown in bold type.

Figure 5.8 Percentage of Grade 8 and Grade 10 Students Meeting High School Graduation Standards in Reading, Mathematics, and Writing, by School Year: 1999–2003



required high school graduation tests. (Private school students are not required to pass the state's high school graduation tests.)

More than 64,800 public school 8th graders participated in the reading and mathematics tests—or 97% of all 8th graders enrolled on the day of the tests. More than 64,700 students attempted the 10th grade writing test, or 94% of all students enrolled on test day. In other words, almost all students are attempting the 8th and 10th grade tests.

Table 5.10 2003 Grade 10: *Basic Skills Test* Results in Writing for All Public School Students Tested

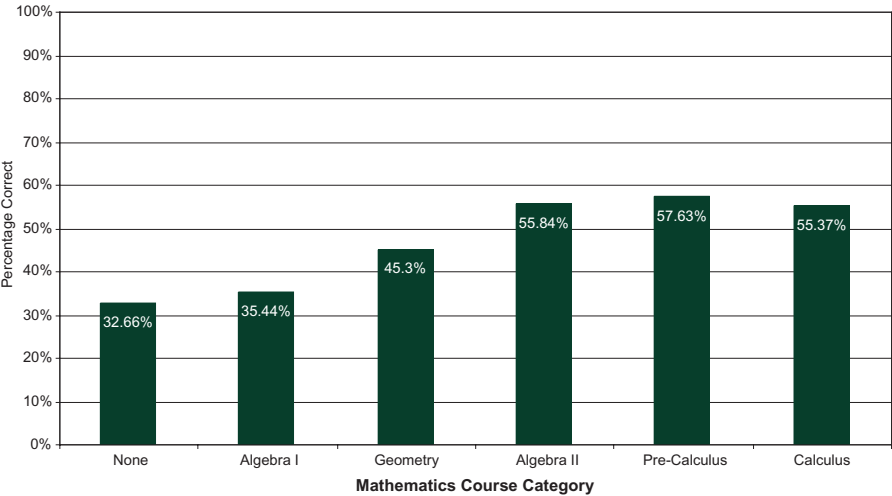
		No. Tested	% Meeting Minimum Standard	Mean Scale Score	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		64,745	91 (91)[92]	3.22	97	5	12	3	23
GENDER	Female	31,495	94 (94)[95]	3.34	97	4	8	3	23
	Male	33,195	87 (88)[89]	3.10	96	5	17	3	24
ETHNICITY	Asian	3,092	80 (80)[80]	3.01	97	41	7	3	58
	Black	3,753	66 (62)[66]	2.70	93	18	18	9	70
	Hispanic	1,718	66 (70)[74]	2.73	90	40	14	8	60
	Am. Indian	1,134	80 (81)[82]	2.93	91	0+	24	12	58
	White	54,252	94 (94)[95]	3.29	97	0+	12	2	16
LEP		2,715	48 (48)[54]	2.43	91	—	8	6	83
SPECIAL ED		7,292	63 (63)[66]	2.64	90	3	—	7	39
NEW TO DISTRICT		1,783	74 (78)[80]	2.83	90	9	27	—	56
MIGRANTS		85	49 (51)[—]	2.45	87	63	12	13	87
F/R LUNCH		14,351	77 (77)[79]	2.90	93	16	21	7	—
ATTENDANCE RATE	95-100%	38,922	94 (94)[95]	3.29	98	4	9	1	17
	90-94%	14,704	91 (91)[93]	3.21	97	4	13	3	24
	0-89%	7,691	81 (82)[84]	2.99	92	6	23	9	43
MIDYEAR SCHOOL TRANSFERS	0	57,378	93 (93)[94]	3.26	98	4	11	2	20
	1	3,061	74 (72)[75]	2.85	92	14	24	11	53
	2 or more	891	67 (68)[70]	2.72	86	9	40	25	67
STRATA	Mpls/St. Paul	5,493	73 (72)[75]	2.83	94	28	13	5	63
	TC Suburbs	26,470	93 (93)[94]	3.27	97	3	11	3	13
	Outstate 2000+	14,989	92 (92)[94]	3.24	96	3	13	3	22
	Outstate 2000-	16,985	92 (93)[93]	3.24	98	1	13	3	26
CHARTER SCHOOLS		808	77 (82)[79]	2.91	96	4	18	15	48
ALCs		1,555	72 (74)[—]	2.75	86	10	19	22	53
PRIVATE SCHOOLS		1,917	97 (97)[98]	3.55	—	—	—	—	—

Note: Percentages given for achievement levels (columns with multiple percentages) correspond to the following (reading the columns left to right): Percentages in plain text= 2003 percentage; text in parentheses = 2002 percentage; text in [brackets]=2001 percentage. In academic year 2001, Level II included both Level IIa and IIb. Therefore, there is no 2001 score [in square brackets] for Level IIb. **Mean Proficiency Index scores below the AYP target (70 in 5th grade reading) are shown in bold type.

Figure 5.8 (p. 62) shows the 8th grade reading and mathematics pass rates and the 10th grade writing results for each of the past five years. In reading, the overall percentage of students passing rose slightly, from 80% in 2002 to 81% in 2003. However, the percentage of Black, LEP, special education, migrant, highly mobile, and ALC students meeting the minimum standards in reading was below 50% (see Table 5.8, p. 61). The mathematics pass rate fell slightly, from 74% to 72%. Several subgroups reported less than half of students meeting the minimum standards in mathematics. For example, only one-third of Black students, and only 43% of both Hispanic and American Indian students met minimum standards (see Table 5.9, p. 62). The percentage of students passing the writing test remained constant overall, at 91%. Only two-thirds of Black and Hispanic students met the minimum standard in writing (see Table 5.10).

The mathematics test remains the most difficult high school graduation examination for students to pass on their first attempt, according to the

Figure 5.9 Mean Percentage Correct on the 11th Grade Mathematics Test, by Highest Mathematics Course Category* Completed: 2002–03



percentages of students who succeed in passing each test on their first try.

It follows that improvement of students’ basic skills in mathematics requires the most attention. Not only are the initial pass rates lower in mathematics than in reading or writing, but also pass rates in mathematics have improved less since 1999 (2%) than for either reading (6%) or writing (also 6%).

*Mathematics course categories are named for the most common math course that students take; however, most categories include other courses considered to be at roughly the same level of difficulty. Course categories include the following: None = no mathematics completed; Algebra I = Algebra I, Integrated Math I; Geometry = Geometry, Integrated Math II; Algebra II = Algebra II, Integrated Math III; Pre-calculus = Pre-calculus, Integrated Math IV, International Baccalaureate Math Studies; Calculus = Calculus, Advanced Placement Calculus, Advanced Placement Statistics, and International Baccalaureate Higher Level Mathematics.

Statewide Results on the *Minnesota Comprehensive Assessments* in Reading and Mathematics for High School Students

Table 5.11 (p. 65) shows the 10th grade *MCA* results in reading for all public school students. More than 62,000 students, or 94% of those enrolled on the day of testing, attempted the exam. (The five levels into which achievement scores are divided are described on page 67). Since the test has undergone substantial revision this year, results cannot be compared to those of prior years.

Ninety-five percent of the students scored at or above Level II. Eighty-one percent scored above Level III, the state’s expected level under the No Child Left Behind Act. Under the Act, the goal is to have all students scoring at or above Level III by 2013–14. In the current year, 19% of our 10th graders fell below the expectation. However, 54% of Black students fell below the state expectation in reading (see Table 5.11).

Table 5.12 (p. 66) shows the 11th grade results in mathematics for public school students, and various subgroups of public school students. More than 58,500 students attempted the test, 90% of the students enrolled on the day of testing. This is well above the percentage who attempted the test last year (86%), but well below the percentages attempting the tests in earlier grades. While participation in testing is defined differently under No Child Left Behind than we have defined “attempting” here, the low percentage of students attempting the test suggests that many high schools must increase participation if they are to meet the NCLB testing guidelines.¹⁰ The percentage of students attempting the test is low, in part because on a typical day, only 90% of the enrolled 11th grade students are in attendance (See Table 4.2, p. 37). To reach the 95% participation required under NCLB, attendance on test day must be higher than on a normal day or a substantial number of students must be tested in make-up sessions once they resume attendance.

NOTES

¹⁰ Under NCLB a child is said to have participated if they were present in school and offered the opportunity to take the test or an alternate test. The student need not complete any items to be considered as participating. In our computations, students are said to have attempted the test if they completed at least six items on the statewide test. Students taking an alternate test are not included in our percentages of students attempting. To be consistent with prior year reports, we have reported the percentage attempting, not the percentage participating.

Table 5.11 2003 Grade 10: *Minnesota Comprehensive Assessment* Results in Reading for All Public School Students Tested

		Number Tested	Mean Scale Scores	% At or Above Level IV	% At or Above Level III	% At or Above Level II	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		62,169	1,619	41	81	95	94	4	10	5	21
GENDER	Female	30,433	1,653	45	86	97	94	3	6	5	21
	Male	31,720	1,587	36	76	93	93	4	14	5	21
ETHNICITY	Asian	2,809	1,557	28	73	93	87	36	5	7	55
	Black	3,335	1,407	12	46	78	83	15	16	18	66
	Hispanic	1,534	1,458	17	56	84	80	33	13	13	56
	Am. Indian	1,010	1,478	17	61	88	84	0+	21	18	54
	White	52,697	1,644	44	85	96	96	0+	10	3	15
LEP		2,128	1,358	4	38	76	72	—	7	12	82
SPECIAL ED		6,393	1,375	8	39	76	81	2	—	11	36
NEW TO DISTRICT		2,991	1,430	13	50	83	81	8	23	—	50
MIGRANTS		66	1,370	6	39	80	70	56	12	18	85
F/R LUNCH		12,891	1,492	20	62	87	86	14	18	12	—
ATTENDANCE RATE	95–100%	37,411	1,651	46	86	97	96	3	8	2	16
	90–94%	14,205	1,601	37	79	94	94	3	12	4	24
	0–89%	7,069	1,511	24	64	88	83	5	20	16	41
MIDYEAR SCHOOL TRANSFERS	0	56,426	1,634	43	84	96	95	3	10	3	19
	1	2,682	1,463	17	56	84	82	11	20	17	50
	2 or more	774	1,393	8	44	78	80	6	37	41	66
STRATA	Mpls/St. Paul	4,750	1,481	22	57	84	85	24	12	10	59
	TC Suburbs	25,243	1,648	46	85	96	95	2	10	4	12
	Outstate 2000+	13,907	1,624	40	83	95	94	2	11	4	19
	Outstate 2000-	15,917	1,626	40	84	96	96	1	11	3	24
ALCs		1,599	1,378	7	40	78	78	9	17	57	47
CHARTER		721	1,498	24	61	86	85	3	14	22	40

According to Table 5.12 (p. 66), 95% of the students attempting the test scored at or above Level II. Seventy-nine percent scored at or above Level III, the expected level set by Minnesota under the No Child Left Behind Act. By 2013–14, the goal is to have all students scoring at or above Level III. In the current year, 21% of those attempting the test scored below the expected level. Once again, this varied among ethnic groups, with 60% of Black students failing to reach the expected level. Clearly, student achievement will need to improve if schools are to reach the goal of having all students scoring at or above Level III by 2013–14.

The Minnesota Department of Education (2003) described how mathematics achievement varied as a function of amount of math. In their report, amount of math refers, not simply to the number of courses taken, but also to the highest level of math reached. The last four rows of Table 5.12 show how achievement on the 11th grade mathematics assessment varied as a function of amount of math exposure as defined in the MDE report (no exposure, little exposure, some exposure, and more math exposure). “More math exposure” means more and higher-level exposure.

Various authors have emphasized the fact that the highest level of mathematics taken is just as important as the number of courses completed

Table 5.12 2003 Grade 11: *Minnesota Comprehensive Assessment* Results in Mathematics for All Public School Students Tested

		No. Tested	Mean Scale Scores	% At or Above Level IV	% At or Above Level III	% At or Above Level II	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		58,525	1,549	35	79	95	90	4	9	5	18
GENDER	Female	28,904	1,550	34	82	96	90	3	6	5	18
	Male	29,589	1,548	35	77	94	89	4	13	5	18
ETHNICITY	Asian	2,737	1,542	30	78	96	85	33	5	6	51
	Black	2,836	1,389	7	40	77	75	22	12	18	66
	Hispanic	1,226	1,445	12	58	89	73	31	12	13	51
	Am. Indian	795	1,451	14	58	88	81	0+	20	14	48
	White	50,093	1,563	38	82	96	92	0+	9	4	13
LEP		2,000	1,401	6	45	82	68	—	5	11	82
SPECIAL ED		5,429	1,384	6	37	79	76	2	—	10	31
NEW TO DISTRICT		2,903	1,432	12	52	85	74	8	18	—	38
MIGRANTS		47	1,391	2	43	85	61	48	4	17	83
F/R LUNCH		10,516	1,462	17	62	89	82	16	16	10	—
ATTENDANCE RATE	95-100%	33,379	1,578	41	85	97	94	3	8	2	15
	90-94%	13,883	1,531	30	77	95	90	3	11	5	19
	0-89%	7,769	1,466	17	63	90	79	5	16	14	32
MIDYEAR SCHOOL TRANSFERS	0	53,408	1,559	37	81	96	92	3	9	3	16
	1	2,351	1,430	11	53	85	77	12	20	19	45
	2 or more	660	1,395	5	43	81	74	6	33	44	55
STRATA	Mpls/St. Paul	4,252	1,467	19	60	87	80	28	10	10	57
	TC Suburbs	24,150	1,570	40	81	96	91	2	9	5	10
	Outstate 2000+	13,061	1,557	36	82	96	91	1	9	4	15
	Outstate 2000-	14,931	1,541	31	81	96	93	0+	10	3	21
ALCs		2,216	1,394	3	44	83	70	8	15	51	37
CHARTER		665	1,446	13	56	89	82	1	13	18	36
LEVEL OF MATH EXPOSURE	No recorded exposure	3,906	1,391	9	38	77	48	11	38	21	40
	Little math exposure	14,601	1,437	7	58	90	92	6	17	9	28
	Some math exposure	25,138	1,556	34	88	98	97	3	5	2	15
	More math exposure	14,880	1,688	70	96	99	98	1	3	2	9

NOTES

¹¹ Each category is named according to the most common math course taken, although most categories include courses that are considered to be at roughly the same level of difficulty. For example, Algebra I includes both Algebra I and Integrated Math I; Geometry includes both Geometry and Integrated Math II; Algebra II includes both Algebra II and Integrated Math 3; Pre-calculus includes Pre-calculus, Integrated Math 4, and International Baccalaureate Math Studies; while Calculus includes Calculus, Advanced Placement Calculus, Advanced Placement Statistics, and International Baccalaureate Higher Level Mathematics.

(Teitelbaum, 2003; Singham, 2003; Davenport et al., 1998). To further emphasize the importance of mathematics course content, as opposed to simply the number of courses completed, Table 5.13 and Figure 5.9 (p. 64)¹¹ show that the mean percentage of items answered correctly varies with the highest-level math course the student has taken. From lowest to highest, we have ranked the highest reported math course categories as follows: None, Algebra I, Geometry, Algebra II, Pre-calculus, and Calculus. Some aspects of this ordering are debatable. For instance, Geometry may be just as high as Algebra II, although most students seem to take Algebra II after Geometry. Also, we have called the last category Calculus; this category includes Calculus, Advanced Placement Calculus, Advanced Placement Statistics, and the International Baccalaureate Higher Level Mathematics courses. Only Calculus and AP Calculus in this highest category are clearly above Pre-calculus.

Despite these questions concerning our ranking of highest math course taken, Figure 5.9 (p. 64) shows that the mean percentage correct on the MCAs increases as a function of highest course taken until Calculus. Possibly because of the various courses included in the “Calculus” category (e.g.,

Grade 10 MCA Reading Achievement Levels (Draft)

Level 1

At this level, a student typically

- Locates and identifies literal main ideas and details in text.
- Understands information in text that contains lists, bold-faced headings, charts and graphs.
- Recognizes point of view when directly stated.
- Identifies fact and opinion when given a list of choices.

Level 2

At this level, a student typically:

- Recognizes how an author's emotional language can show bias, how an author develops a logical argument, and what makes a source credible.
- Draws conclusions and makes inferences and generalizations from the text for a variety of purposes.
- Understands sentences and paragraphs containing figurative language or unfamiliar vocabulary in context.
- Infers an author's unstated point of view from clues in the text.

Level 3

At this level, a student typically:

- Understands more difficult text that may include non-contemporary language, abstract ideas, and challenging vocabulary.
- Infers an author's unstated point of view in more difficult text.
- Draws conclusions and makes inferences and generalizations from more difficult text.

Level 4

At this level, a student typically:

- Analyzes difficult text to determine pattern of organization (such as cause/effect or compare/contrast) as an aid to comprehension.
- Analyzes difficult text to determine how the type of communication might shape or limit the content (i.e., editorial vs. informational).
- Uses figurative and idiomatic language and analogies to understand difficult and historical text.
- Analyzes how the author's experience shaped the point of view expressed in a text.

Level 5

At this level, a student typically:

- Evaluates logic of reasoning by identifying fallacies in an author's argument.
- Evaluates an author's point of view and applies that point of view in a new context.
- Analyzes purpose, fact and opinion, source, and evidence to determine credibility in difficult text representing multiple perspectives.
- Applies multiple strategies to derive meaning from difficult text.

Grade 11 MCA Math Achievement Levels (Draft)

Level 1

At this level, a student typically:

- Follows directions.
- Uses visualization skills to solve basic problems.
- Uses the four basic arithmetic operations with whole numbers.
- Plots points on a graph.

Level 2

At this level, a student typically:

- Performs computations when given explicit directions.
- Uses spatial visualization skills to solve a variety of problems.
- Solves problems requiring a single step.
- Uses basic arithmetic skills, including fractions, decimals and percentages.
- Reads a graph.
- Plots points in the coordinate system.
- Measures using simple units.
- Classifies plane figures.

Level 3

At this level, a student typically:

- Applies computational skills when given the formula.
- Selects and correctly applies a formula to solve a problem.
- Solves problems requiring two or three steps.
- Uses mathematical concepts such as exponentials, square roots and linear relationships.
- Makes appropriate use of a calculator.

Level 4

At this level, a student typically:

- Applies concepts and skills in unfamiliar situations.
- Creates an expression or equation to represent a situation.
- Solves problems requiring multiple steps.
- Uses and is able to explain mathematical concepts.
- Provides justifications for solutions.
- Models exponential growth and decay.
- Uses exponent laws.
- Uses similar figures to solve problems.

Level 5

At this level, a student typically:

- Justifies mathematical reasoning.
- Applies mathematical concepts and skills in unfamiliar situations.
- Creates an expression or equation to represent a situation.
- Solves problems requiring multiple steps.
- Uses correct mathematical language (vocabulary, symbolic representation).

The level descriptions above were taken from the Minnesota Education Department Web page entitled, "2003 MCA Achievement Level Descriptors — Draft." Retrieved 9/22/03 from:

http://education.state.mn.us/stellent/groups/public/documents/translatedcontent/pub_026627.pdf.

Calculus, Advanced Placement Statistics, etc.), students with Calculus as their highest course category did not score above those with Pre-calculus or Algebra II as their highest course.

Teitelbaum (2003) found that in states with three or more years of required math, students did take more high school math, but they did not have greater gains in math achievement than students in states with less required math. Davenport et al. (1998) found that minority and majority students differ greatly in the highest levels of mathematics taken, but differ little in the amount of high school mathematics taken. Minnesota has just increased the number of required math courses to three for students who will enter 9th grade in 2004.

Will increasing the number of courses improve student achievement? Teitelbaum's (2003) data would suggest that the requirement will increase the amount of high school mathematics taken by students. However, the requirements may not increase achievement unless the requirement also increases the highest level of mathematics taken by students. Figure 5.9 (p. 64) shows the association between math achievement and highest-level course completed.

Will increasing the amount of required math help close achievement gaps? The findings in Davenport et al. (1998) suggest that, to close achievement gaps, minority students need to increase their highest level of mathematics taken, not just the amount of mathematics taken. As Figure 4.5 (p. 34) shows, minority students are less likely to complete the higher level high school mathematics courses associated with higher achievement.

Achievement Levels and Gender

Figures 5.10–5.13 (pp. 68–69) contrast the performance of boys and girls on the various Minnesota statewide assessments. Figure 5.10 shows the mean proficiency indices in 3rd grade reading and mathematics for boys and girls. Girls have a higher proficiency index in both reading and mathematics,

but both boys and girls met the AYP target (63 in reading and 66 in math) for this year.

Figure 5.11 (p. 69) shows the mean proficiency indices in 5th grade reading and mathematics for boys and girls. While girls have a higher index in reading, there is no difference in mathematics. Both boys and girls met the state's proficiency index target for mathematics (65) and reading (70).

Figure 5.12 (p. 69) shows the pass rates for boys and girls on the state's high school

Figure 5.10 Grade 3 Mean Proficiency Index in Reading and Mathematics, by Gender: 2002–03

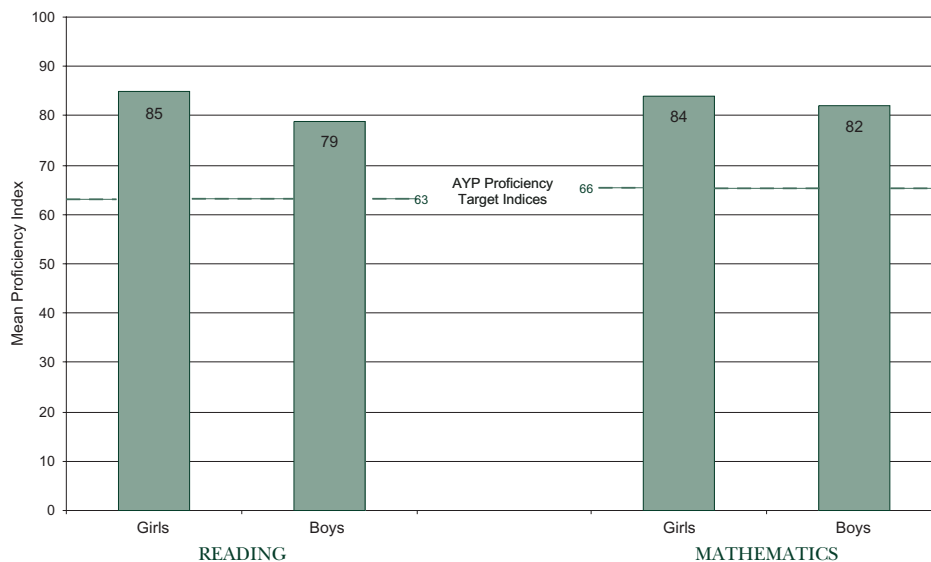
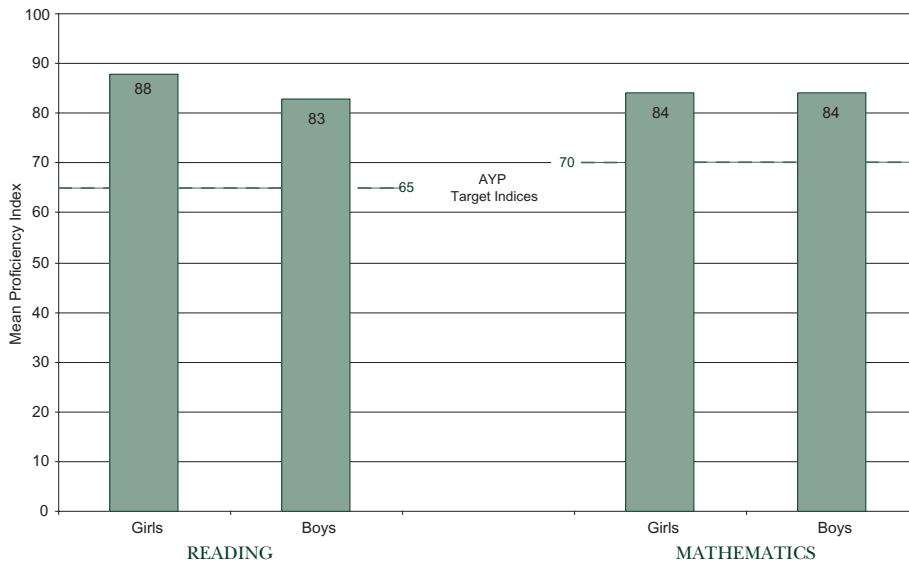


Figure 5.11 Grade 5 Mean Proficiency Index in Reading and Mathematics, by Gender: 2002–03



graduation tests: the 8th grade reading and mathematics tests and the 10th grade writing test. In mathematics, boys and girls had the same pass rate (72%). Mathematics is the only subject in which boys did as well as girls. In reading 83% of the girls passed, compared to only 79% of the boys. In writing, 94% of the girls passed, compared to only 87% of the boys.

Figure 5.13 compares the performances of boys and girls on the 10th grade *MCA* in reading and the 11th grade *MCA* in mathematics.

Figure 5.12 Percentage of Grade 8 and Grade 10 Students Meeting High School Graduation Standards in Reading, Mathematics, and Writing, by Gender: 2002–03

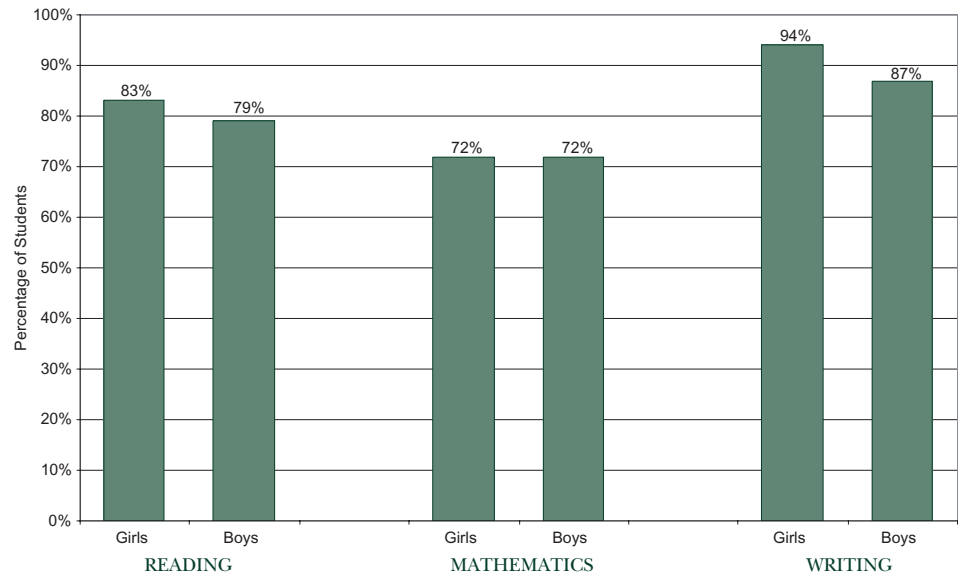
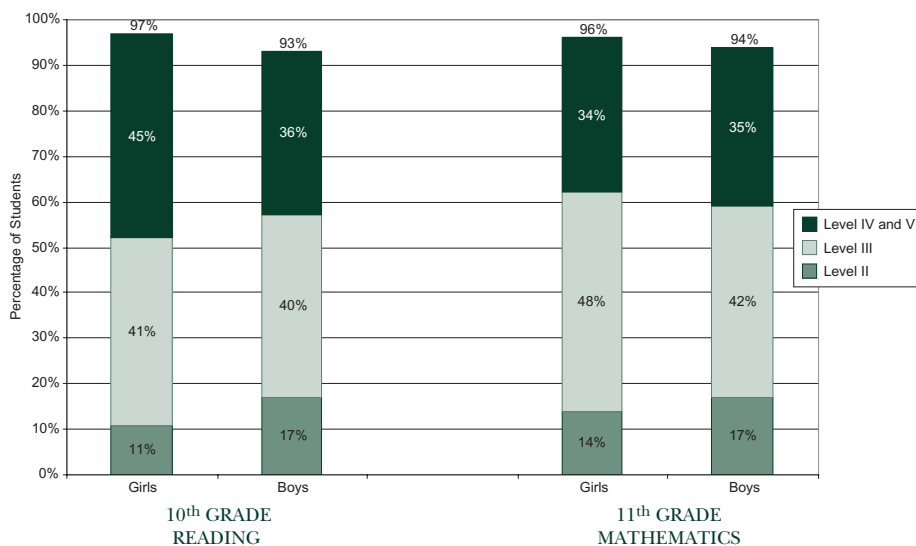


Figure 5.13 Percentage of Grade 10 and Grade 11 Students at or above Level II, Level III, and at Levels IV and V in Reading and Mathematics, by Gender: 2002–03



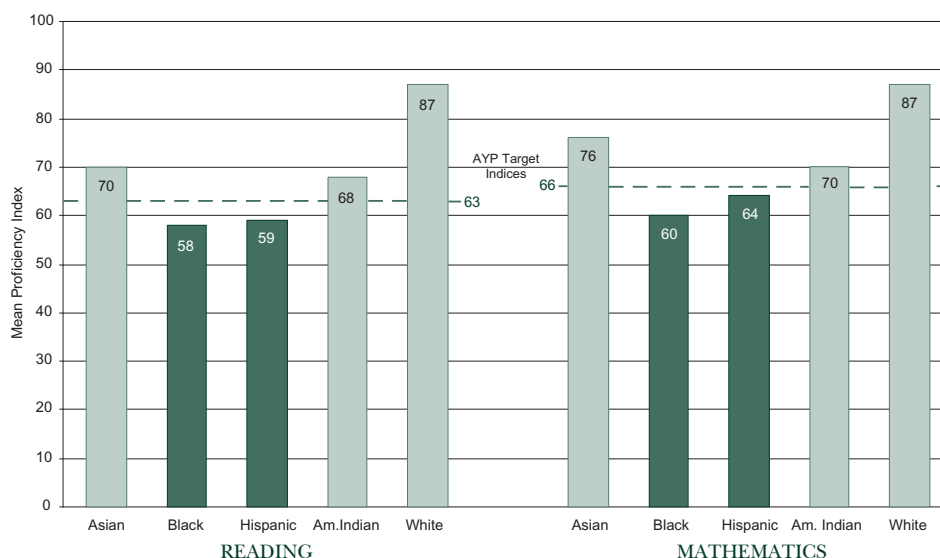
In reading, girls had a higher percentage scoring at or above Level II (97% vs. 93%), at or above Level III (86% vs. 76%), and in the top two levels (45% vs. 36%). In mathematics, girls had a higher percentage scoring at or above Level II (96% vs. 94%) and at or above Level III (82% vs. 77%), but boys had a slightly higher percentage in the highest category (35% vs. 34%).

Several trends from past years appear in the current data, including the newer assessments at the high school grades. First, when there is any difference in mathematics, it tends to be smaller than in reading or writing. As an example, both boys and girls had a 72% pass rate on the 8th grade *BST* in mathematics (Figure 5.12). Second, in reading, girls tended to outperform boys. For example, on the 8th grade *BST* in reading, girls had an 83% pass rate while boys had a 79% pass rate (Figure 5.12). Third, girls outperformed boys in writing. For example, 94% of the girls passed the 10th grade writing test, compared to only 87% of the boys (Figure 5.12). The largest gender differences were in reading and writing, and these larger differences favored girls. These same trends appear in the elementary, junior high, and high school data. While gender differences in mathematics are most frequently discussed in the education literature, the mathematics difference is the smallest of the differences in these data.

Achievement Levels and Ethnicity

Figures 5.14–5.17 show the all-too-familiar ethnic differences in achievement on the various Minnesota statewide assessments. These differences are also apparent in the earlier *NAEP* data. For 3rd grade reading

Figure 5.14 Grade 3 Mean Proficiency Index in Reading and Mathematics, by Ethnicity: 2002–03



Note: The lighter bars represent groups meeting AYP targets; darker bars represent groups not meeting AYP targets.

and mathematics, Figure 5.14 shows the mean proficiency index for each ethnic group. Light-colored bars represent groups whose mean proficiency indices are above this year's target for 3rd grade reading or math. Darker bars represent ethnic groups whose mean proficiency indices are below this year's target. In both reading and mathematics, Asian, American Indian, and White students had mean proficiency indices above the target. Black and Hispanic students did not. It is notable that even though more than 60% of both Asian and American Indian students are eligible for free or reduced-price lunch, and more than 60% of the Asian students are in limited English proficiency programs, both Asian and American Indian students had mean proficiency indices above this year's state target. It should also be noted that poverty rates are higher (over 70%) for Black and Hispanic students, whose mean proficiency indices did not meet the state target.

Figure 5.15 shows the mean proficiency indices in 5th grade reading and mathematics for the five major ethnic groups. Again, the lighter bars represent student groups whose mean proficiency indices were at or above the state target for 5th grade reading (70) or mathematics (65). Darker bars represent groups with mean proficiency indices below the target. As in 3rd grade, Asian, American Indian, and White students were above the target. Black and Hispanic students were not. Black and Hispanic students have the highest poverty rates among the ethnic groups (over 70%) and over half of the Hispanic students are in limited English proficiency programs. Despite their high rate of poverty, American Indian students reached the mean proficiency target in both math and reading. Despite both high rates of poverty and limited English proficiency, Asian students also reached the mean proficiency index target in both reading and mathematics.

Figure 5.15 Grade 5 Mean Proficiency Index in Reading and Mathematics, by Ethnicity: 2002–03

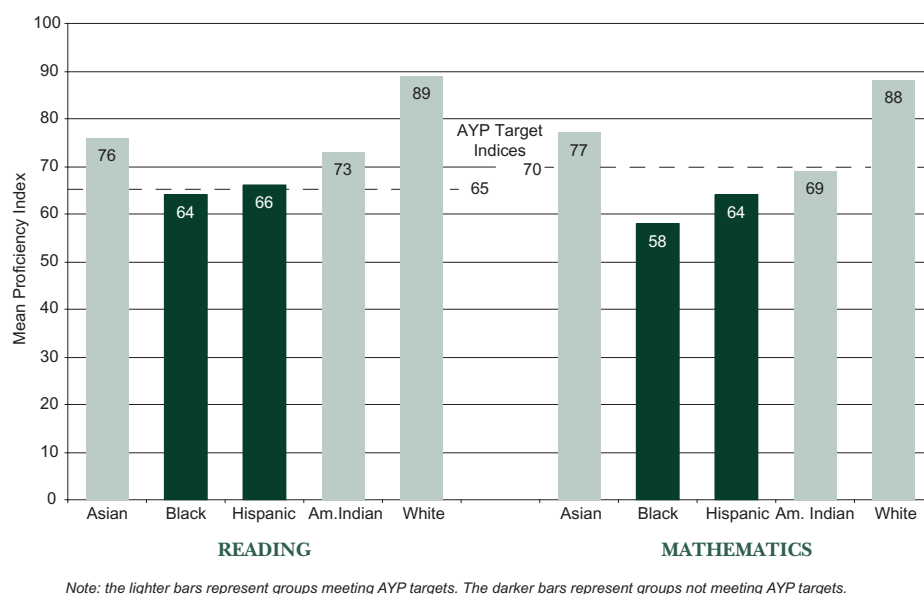


Figure 5.16 shows the percentage of 8th and 10th grade students passing the high school graduation tests, by ethnicity. White students have the highest passing rate on all three tests followed by Asians. American Indians are usually in the middle followed by Blacks and Hispanics.

Figure 5.16 Percentage of Grade 8 and Grade 10 Students Meeting High School Graduation Standards in Reading, Mathematics, and Writing, by Ethnicity: 2002–03

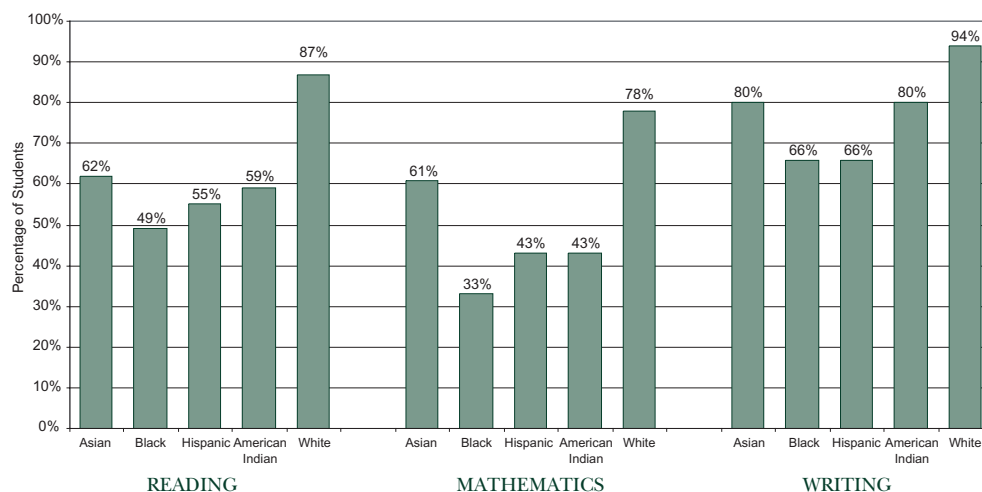
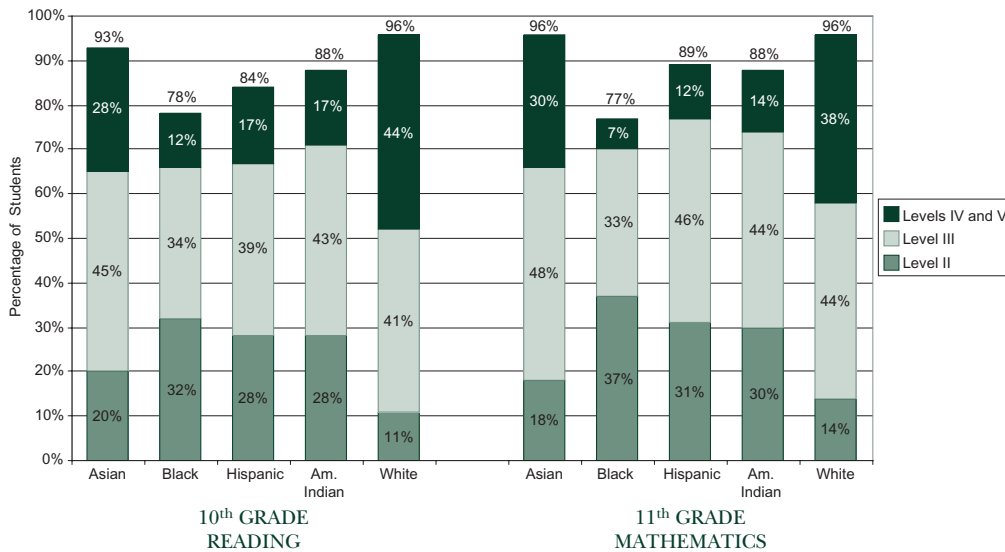


Figure 5.17 (p. 72) shows results by ethnicity on the 10th grade MCAs in reading and the 11th grade mathematics test. Differences among ethnic groups are similar to those at other grades, although differences between Asian and White students are comparatively smaller. This may be due in part to the fact that the percentage of Asian students with limited English

Figure 5.17 Percentage of Grade 10 and Grade 11 Students at or above Level II and Level III, and at Levels IV and V in Reading and Mathematics, by Ethnicity: 2002–03

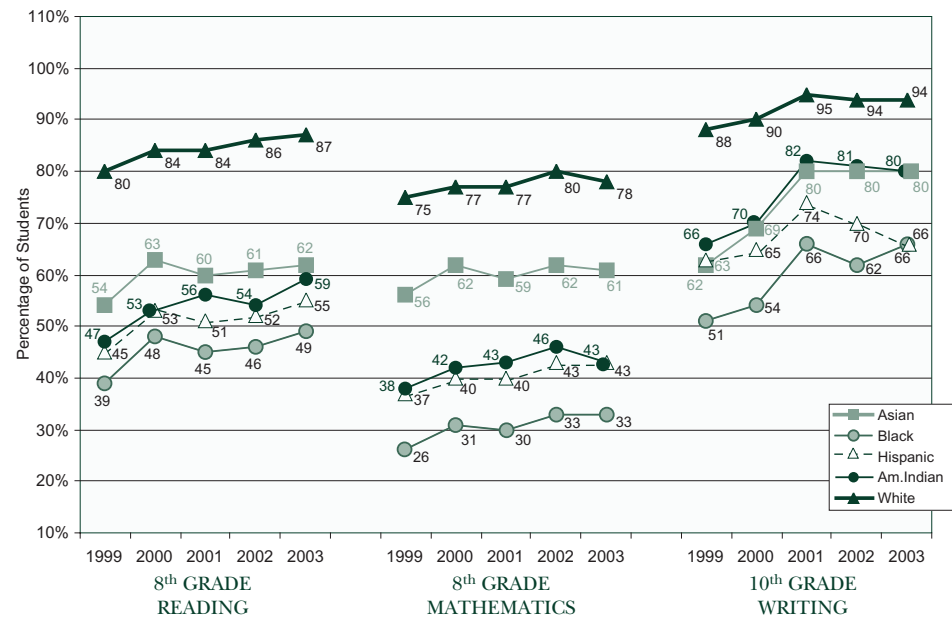


proficiency is much smaller in the high school grades 10 (36%) and 11 (33%) than in the earlier grades (e.g., over 60% in the elementary grades).

For the *BSTs*, Figure 5.18 shows the changing 8th grade pass rates (10th grade pass rates in writing) on the high school graduation tests by ethnic group for the past five years. Over the five years, pass rates have increased for every ethnic group in all three subject areas. The pass rates among ethnic minority stu-

dents are increasing, but the white/minority achievement gaps are not closing or closing very little, because pass rates for whites are also increasing. Achievement gaps, therefore, cannot be expected to disappear in the near future if current trends continue (Davenport, Davison, Kwak, Guven, Chan, & Irish, 2002).

Figure 5.18 Percentage of Grade 8 and Grade 10 Students Passing the *Basic Skills Tests* in Reading, Mathematics, and Writing, by Ethnicity: 1999–2003



Attendance

Student achievement on statewide tests also varies according to attendance level (see Figures 5.19–5.22, pp. 73–74). These differences are consistent across subject areas and grade levels; a higher attendance rate is associated with higher proficiency indices on the 3rd and 5th grade *MCAs* in reading, writing, and mathematics. It is associated with higher pass rates on high school graduation tests for 8th and 10th graders, as well as with higher levels of performance on the 10th grade reading test and the 11th grade math test.

Figure 5.19 Grade 3 Mean Proficiency Index in Reading and Mathematics, by Attendance Rate: 2002–03

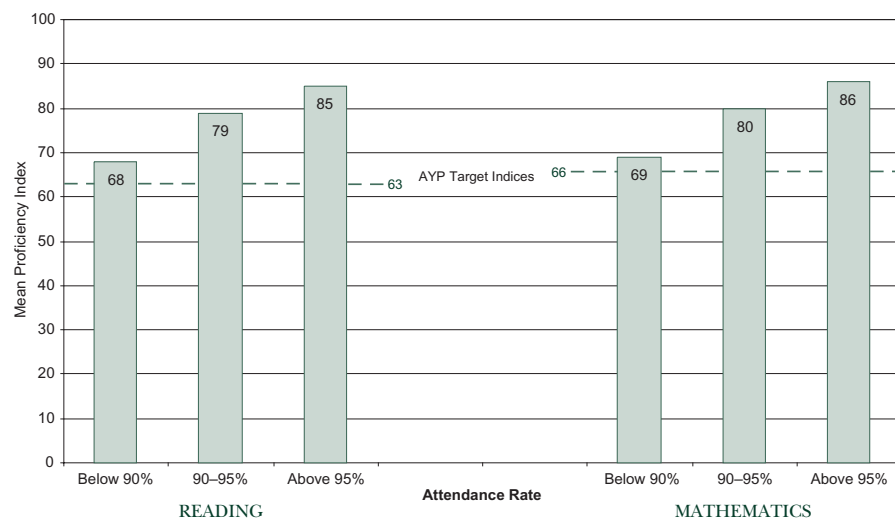


Figure 5.20 Grade 5 Mean Proficiency Index in Reading and Mathematics, by Attendance Rate: 2002–03

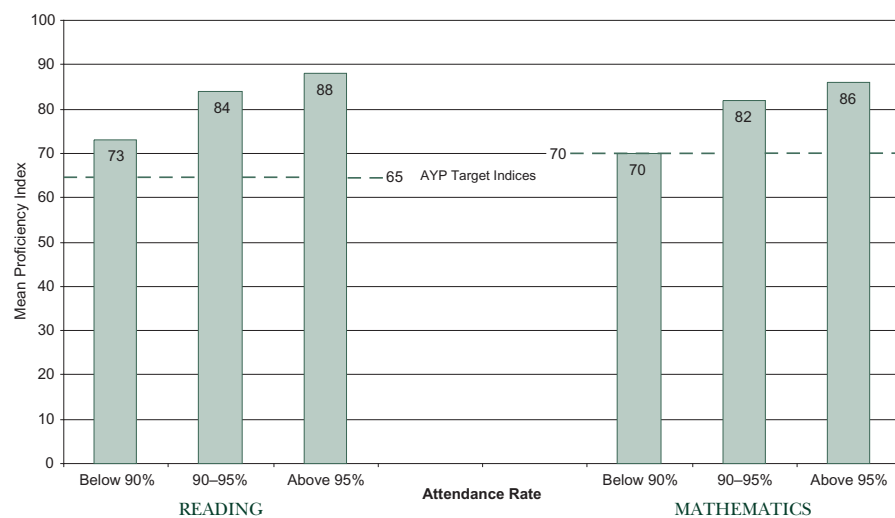


Figure 5.21 Percentage of Grade 8 and Grade 10 Students Meeting High School Graduation Standards in Reading, Mathematics, and Writing, by Attendance Rate: 2002–03

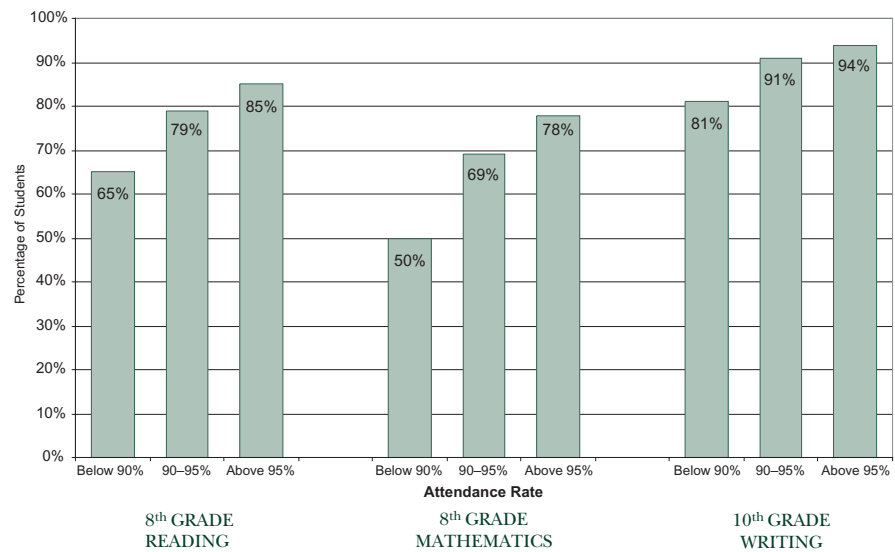


Figure 5.22 Percentage of Grade 10 and Grade 11 Students at or above Level II and Level III, and at Levels IV and V in Reading and Mathematics, by Attendance Rate: 2002–03

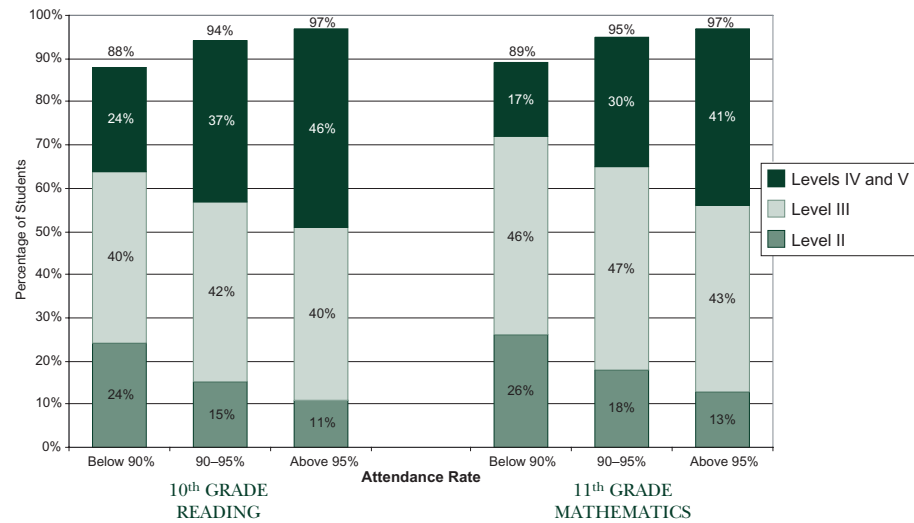
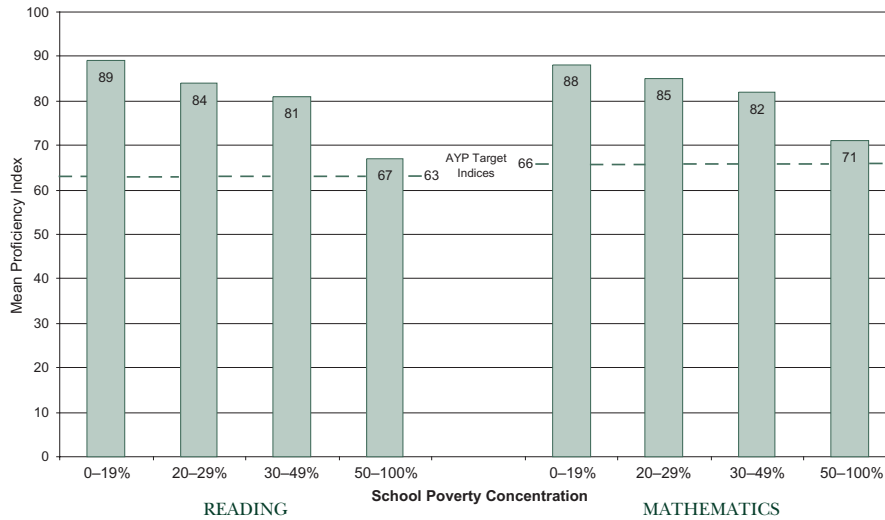


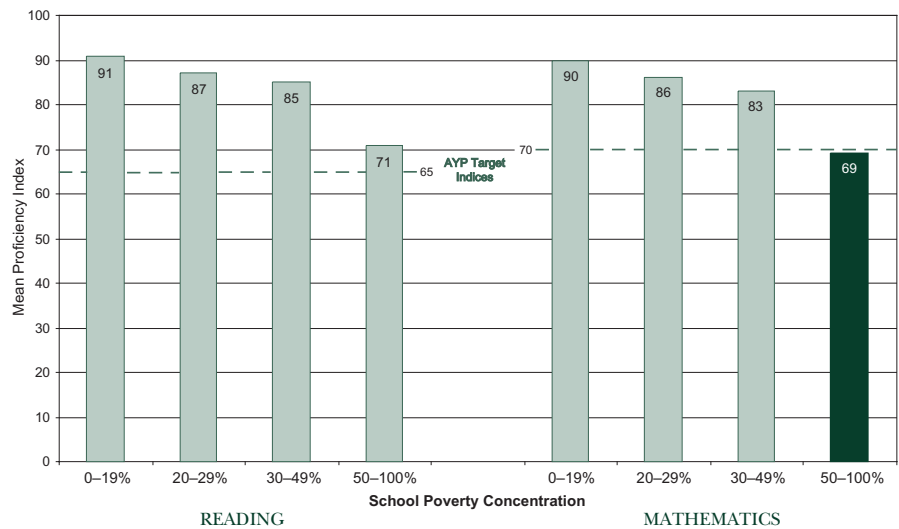
Figure 5.23 Grade 3 Mean Proficiency Index in Reading and Mathematics, by School Poverty Concentration: 2002–03



Achievement and Poverty Levels

Figures 5.23–5.26 (pp. 74–75) show how student achievement varies among schools with differing concentrations of poverty.¹² Schools with lower poverty concentrations display higher student achievement across all grade levels and subject areas tests. Achievement levels decrease most significantly in schools with the highest poverty concentrations (50–100% of the students in the school).

Figure 5.24 Grade 5 Mean Proficiency Index in Reading and Mathematics, by School Poverty Concentration: 2002–03



NOTES

¹² School poverty concentration is defined as the percentage of students in a school who are eligible, under federal regulations, for free or reduced-price lunch.

Figure 5.25 Percentage of Grade 8 and Grade 10 Students Meeting High School Graduation Standards in Reading, Mathematics, and Writing, by School Poverty Concentration: 2002–03

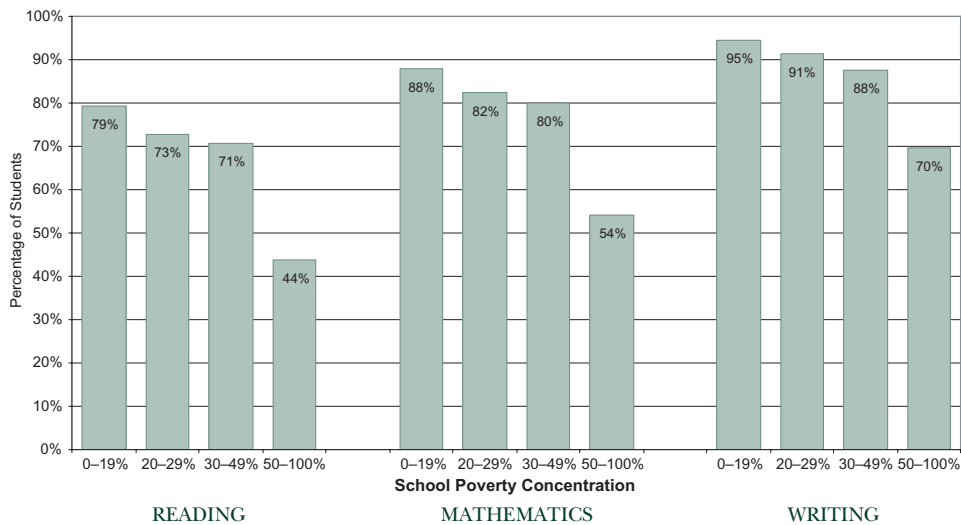
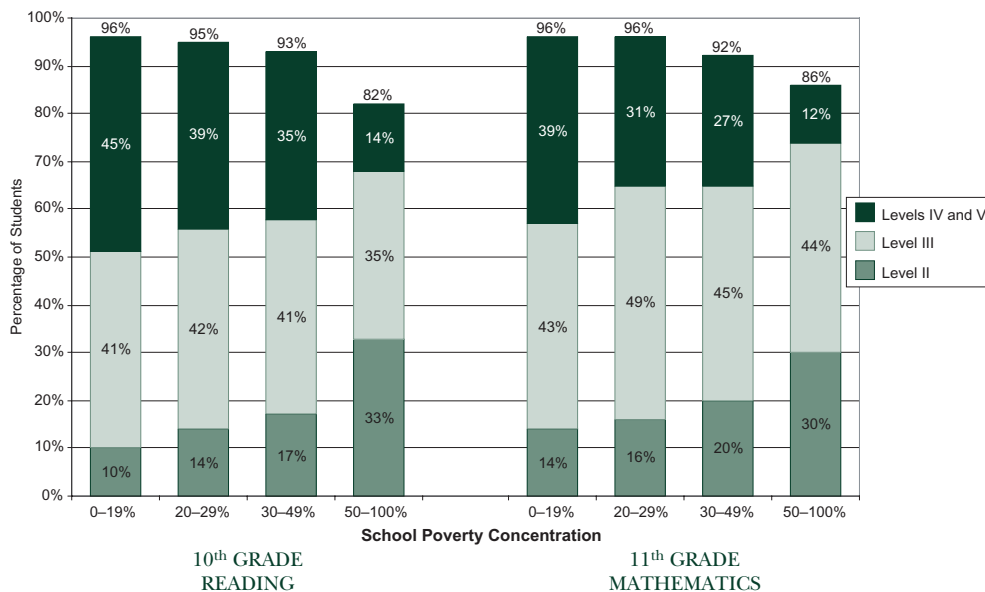


Figure 5.26 Percentage of Grade 10 and Grade 11 Students at or above Level II and Level III, and at Levels IV and V in Reading and Mathematics, by School Poverty Concentration: 2002–03



The Performance of Minnesota Students in College Admissions Testing

In addition to examining data from Minnesota’s 3rd, 5th, 8th, and 10th grade testing programs, it is also important to know how well Minnesota’s college-bound students are performing as they approach the end of high school. College admissions exams can provide one measure of this performance. Of the two popular college admissions tests, more Minnesota students take the *ACT* than the *Scholastic Assessment Test (SAT)*. Therefore, we have chosen to report *ACT* scores.

Figure 5.27 (p. 76) shows the trend in national and Minnesota *ACT* composite scores over the past decade. The national trend shows a very small, steady increase during the early 1990s, and a leveling off after the 1996–97 academic year. Last year (2002–03) the mean *ACT* composite score at the

national level stayed the same as for 2001–02, at 20.8. This is very slightly below the level for 2000–01 (21.0). Trends for Minnesota’s students were similar. Their scores increased over the first few years, peaking in 1997–98 and then fluctuating in small increments through last year’s 22.0 average composite score.

Figure 5.27 Minnesota and National *ACT* Composite Scores, by School Year: 1994–2003

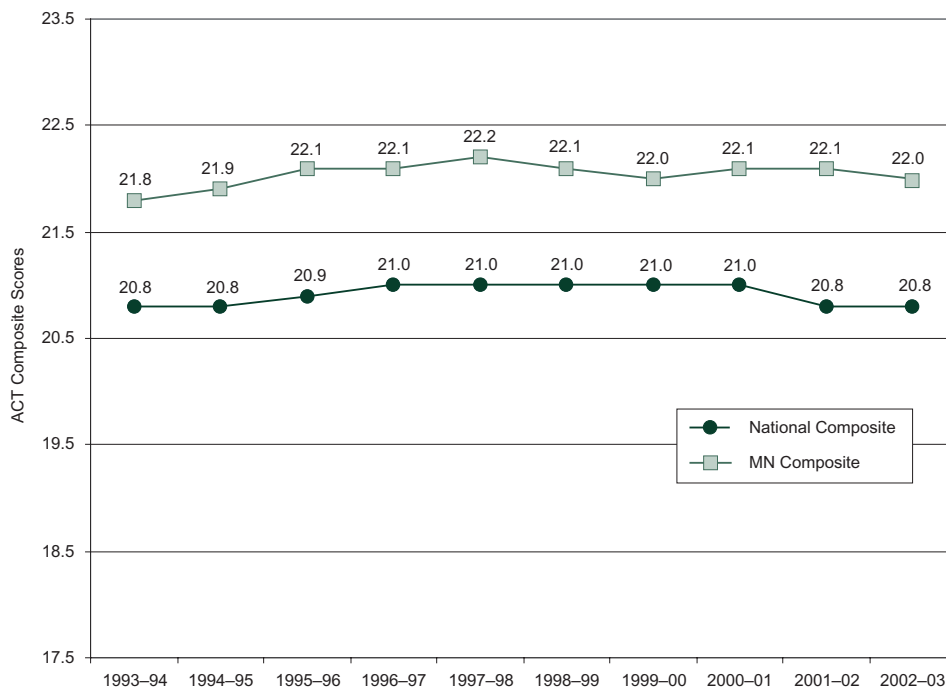


Figure 5.28 illustrates the association between scores on the *ACT* and completion of the *ACT*-recommended core courses. Minnesota students

taking the *ACT* who had completed the recommended courses had an average composite score of 22.8 in 2002–03. Those who had not completed the core had a composite score of 20.3. In the four content areas covered by the *ACT* (English, mathematics, reading, and science reasoning), students who had taken the recommended coursework had mean scores from 2.1 to 2.9 points higher than students who did not complete the suggested coursework. As shown in Figure 5.29 (p. 77), the association between

Figure 5.28 Average *ACT* Scores for Minnesota Students Who Are and Are Not Taking the *ACT* Recommended Core Coursework: 2002–03

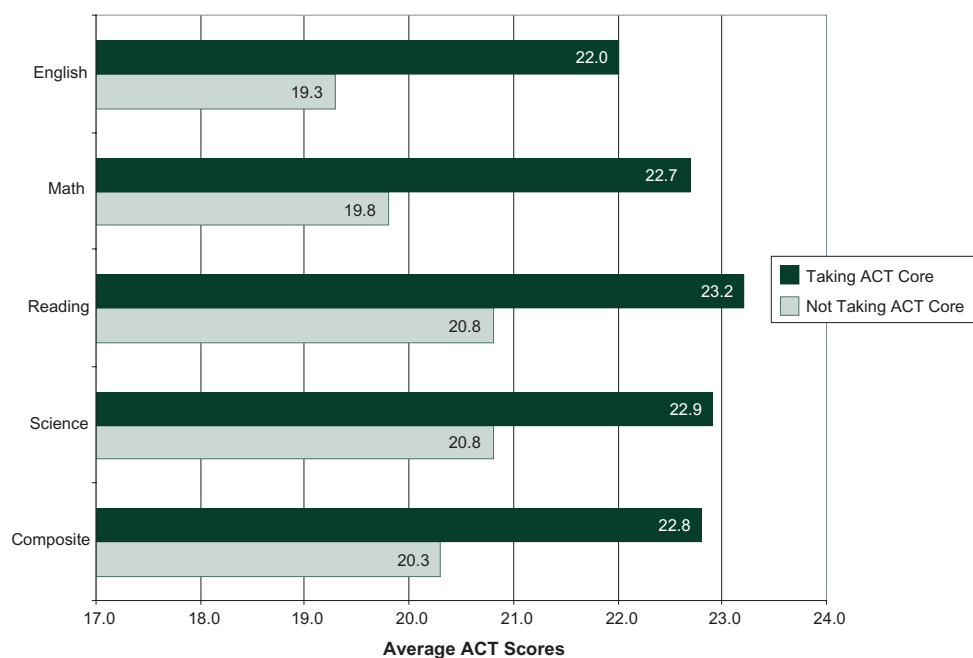
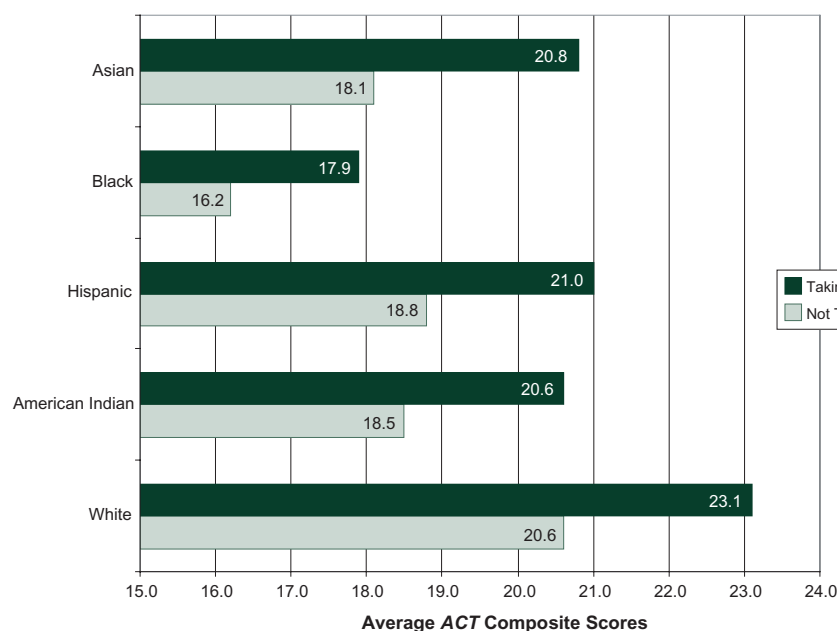


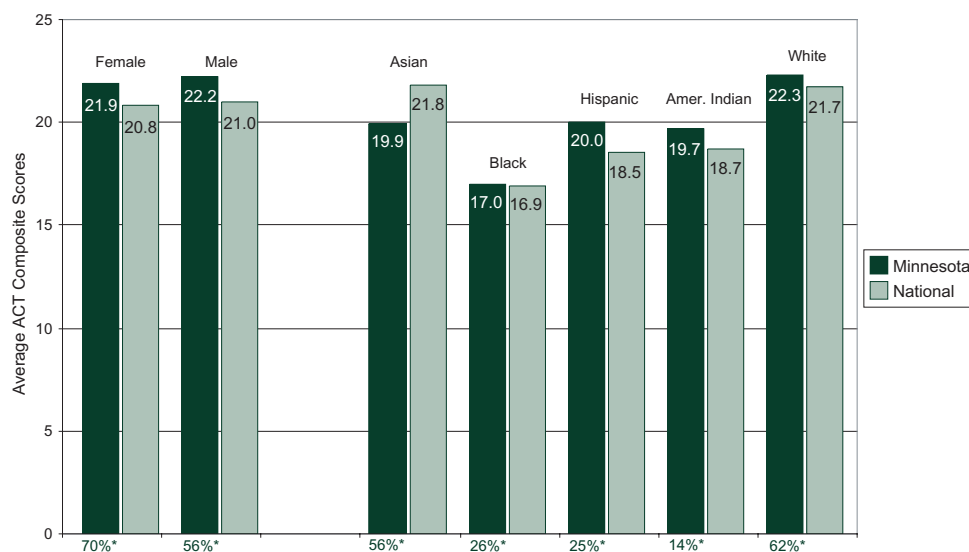
Figure 5.29 Average *ACT* Composite Scores for Minnesota Students Who Are and Are Not Taking the *ACT* Recommended Core Coursework, by Ethnicity: 2002–03



recommended course completion and composite *ACT* score holds for all five major ethnic groups. Completing the recommended coursework is associated with higher performance on the *ACT*, and unfortunately, as shown in Chapter 4, the percentage of test-takers completing the recommended coursework appears to be slowly declining. Minority test-takers are less likely than Whites to complete the coursework.

Figure 5.30 compares *ACT* composite scores by gender and ethnicity. Each Minnesota gender or ethnic group (darker bars) is compared to its national counterpart (lighter bar). There is a small difference with respect to gender that favors males. However, there are marked differences between the Minnesota ethnic groups. White students have the highest mean score (22.3), Black students the lowest (17.0), and the other ethnic groups have nearly equal mean composite scores midway between the Black and White means (Asians, 19.9; American Indians, 19.7; Hispanics, 20.0). In part, these achievement differences reflect ethnic differences in completion of recommended coursework shown in Figure 4.3 (p. 40). It seems unlikely that ethnic

Figure 5.30 Minnesota and National Average *ACT* Composite Scores, by Gender and Ethnicity: 2002–03



* These figures represent the number of Minnesota students taking the *ACT*, as a percentage of Minnesota's 11th grade public school enrollment.

differences in college admission scores will disappear until differences in high school coursework preparation also disappear.

Figure 5.30 (p. 77) also illustrates the number of students taking the test as a percentage of the number of juniors enrolled in Minnesota public schools. As shown in the figure, more females than males took the *ACT*. At least twice as many Asian and White students took the *ACT* as Black, Hispanic, or American Indian students. Of the five ethnic groups, Black, Hispanic, and American Indian students not only report the lowest scores on the test, but also the lowest percentage of students taking the exam.

Summary and Conclusions

In the 2003 legislative session, new high school graduation course requirements were adopted for students entering 9th grade in 2004. Research in mathematics and science achievement (Teitelbaum, 2003) seems to suggest that increased course requirements may only increase student achievement in core academic areas if: (1) districts consistently implement the requirement; (2) the requirements lead to an increase in the number of courses taken by students in those core academic areas; and, (3) at least in mathematics and science, the requirements also lead to an increase in the level of the highest coursework taken. Likewise, the literature (e.g., Davenport et al., 1998, Singham, 2003) seems to suggest that course requirements may lead to some closing of minority/majority achievement gaps if the requirements lead to greater equality in the amount and level of coursework successfully taken by majority and minority students. Achieving that equality will probably depend on reducing minority/majority differences in attendance in high school and differences in readiness for advanced coursework as reflected in minority/majority achievement levels on entry into high school. In short, increased course requirements alone do not necessarily increase student achievement.

Under NCLB, schools must achieve a 95% participation rate in student testing, both for the school as a whole and for specified subgroups. In Minnesota this year, this target took effect only for elementary schools. This participation target was achieved by the vast majority of elementary schools. In the future, the target will also apply to secondary schools that have historically had lower participation rates. A 95% participation rate in testing is particularly difficult for the high schools, because on a typical day, some of them do not have 95% of their students in attendance for the school as a whole and/or for subgroups. Therefore, the goal can only be reached through higher attendance on test day than on a typical day, by ensuring a sufficiently large test window, or by testing students during make-up days. This year saw promising increases in the percentages of students attempting the 10th and 11th grade reading and math tests, but the data suggest that high schools will need to expend extra effort to bring their participation rates up to the 95% target on the 11th grade mathematics test. Without successful efforts, some high schools will be labeled as underperforming for adequate yearly progress purposes, solely because too few students were tested.

In the elementary grades where NCLB student proficiency targets took effect

this year, most of the state's student groups met the proficiency targets. Notable exceptions were special education, limited English proficiency, Black, and Hispanic students who did not meet the target in either reading or math for both 3rd and 5th grades. However, none of the student groups in either public or private schools had all students scoring at Level IIb or above, as NCLB mandates for the year 2013–14. The achievement targets do not increase next year, but they will increase starting in 2004–05. Student achievement will need to improve if it is to stay ahead of those rising targets.

Some of the most important achievement data this year came from the *National Assessment of Educational Progress (NAEP)*. Scores on statewide tests have been generally increasing since their implementation in 1998. But are the gains limited to the content appearing on Minnesota's own tests, or is there a general gain in achievement that can be independently confirmed by other testing programs? *NAEP* provides the only independent testing program in which a representative sample of Minnesota students participate and that can be used to confirm or disconfirm achievement increases statewide. On the *NAEP* reading test administered to Minnesota 4th grade students, scores have been rising over the period from 1994 to 2002, a result which confirms the score increases seen in the statewide tests. The data indicate that 4th grade reading achievement levels in Minnesota are above the national average and have been rising since 1994.

NAEP writing data released this year were far less favorable. While Minnesota students scored above the national average, thirteen states had mean scores above that of Minnesota. Several of the highest scoring states were in New England. As Minnesota prepares to revise its standards in writing, it may be useful to consider the New England state standards to inform our own writing standards revision process. Minnesota should also keep in mind that these New England states have been using annual writing assessments since the 1980s or earlier.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

The year 2003 saw major changes in Minnesota's education policies. New standards have been adopted. New high school coursework graduation requirements have been approved by the legislature for students entering 9th grade in 2004. To comply with the No Child Left Behind Act, statewide assessments are now under development for 4th, 6th, 7th, and 8th grades that will bring Minnesota into compliance with the testing requirements of the federal legislation. Lastly, a new system of evaluating schools was implemented.¹³

With all of these new developments from the No Child Left Behind legislation, the Minnesota Legislature, and the Minnesota Department of Education, it seems a year for implementing the new policies, rather than launching bold new initiatives. Therefore, our major conclusions and recommendations will involve implementation of the new changes and possible consequences for which we should be alert.

It is difficult to predict the outcome of the No Child Left Behind Act of 2002. The Bush Administration has approved all state plans—contingent on numerous anticipated changes. However, as outcomes and results surface, changes from state to state will likely vary. Although only 7% of Minnesota schools were identified as in need of improvement, other states are finding a much larger percentage of their schools labeled as not making adequate yearly progress.

One major concern is the inconsistencies that exist in the system. Despite the efforts of many, comparisons cannot be made from one state to another because states are allowed to set their own standards for adequate yearly progress. What is considered academically proficient in one state may not be considered proficient in another. Therefore, even if all states do come into full compliance with the law as it stands, there is still no way in which states can be compared to each other based on outcomes reported.

It is important to recognize that in future years, Minnesota must steadily increase the proficiency index until it reaches 100 in 2013–14, when all students must be scoring at or above proficient. As the proficiency index rises, more and more schools will be identified as not making adequate yearly progress. As more and more schools are identified as in need of improvement, the number of schools to which students may transfer if their own school is listed will significantly diminish. Therefore, parents and students may in fact have very little school choice in the end. Also, if more and more schools are identified as the achievement proficiency expectations rise, we anticipate a vigorous debate on whether those targets are fair and reasonable.

¹³ The results of those evaluations can be seen in the school report cards available at <http://www.education.state.mn.us> by clicking on the Schools and Districts tab at the top of the home page.

Schools with fewer than the required number of students for reporting purposes will certainly benefit when it comes time to label schools as in need of improvement. On the other hand, schools with large populations of students overall, and more specifically, large populations of minority, LEP, special education, low income, or high mobility students will be more likely to be identified earlier under the NCLB guidelines. Although we have yet to see the consequences, it is possible that this will encourage a shift in how schools and districts are configured.

Enrollment, Finance, and Teacher Characteristics

Major enrollment trends of prior years have continued into the 2002–03 academic year. Overall, enrollments fell slightly, but by less than 1%. An increase in number of secondary students was more than offset by a decline in Kindergarten and the elementary grades. Over the next several years, as the larger numbers of students in grades 11 and 12 move on toward graduation and are replaced by smaller numbers of students entering kindergarten and first grade, enrollments can be expected to decline, if only modestly. If current enrollment trends continue, one can expect more new teachers to be hired in the metro area than in outstate and more new teachers to be hired at the secondary level than at the elementary level.

Despite the overall enrollment decline, however, some segments of the student population continue to grow in numbers: minority students, students in need of special education services, low income students, and students classified as having limited English proficiency. For several of these student populations, the schools provide additional services, such as compensatory services for low income students, special education services for students with disabilities, and English as second language (ESL) services for students with limited English proficiency. If the number of students needing additional services continues to rise, the per pupil cost of education can also be expected to rise. If the current trends continue, the need for special education and ESL teachers can be expected to grow.

In the last year for which final figures are available, 2001–02, per pupil funding rose by about 3% over that in 2000–01 to \$7,655. As compared to other states (*Quality Counts: If I Can't Learn From You*, 2003), Minnesota's per pupil funding was above the national average, adjusted for cost of living differences, and placed Minnesota 20th among the 50 states. This was a substantial drop in Minnesota's ranking compared to the previous two years. The average reported teacher salary was \$42,636. According to the American Federation of Teacher's salary survey, the average teacher salary in Minnesota was slightly below the national average and ranked 21st out of 50 states. The increase in salaries over 2000–01, \$77.00, was one of the smallest in several years.

Per pupil funding and teachers' salaries in 2001–02 raise a serious question: Can Minnesota maintain good schools and attract the highly qualified teachers envisioned in NCLB with per pupil funding levels and teacher salaries at or only slightly above the national average? While Minnesota does not have teacher salaries and per pupil expenditures competitive

with high flyers, such as Connecticut and Massachusetts, it does need to remain competitive with surrounding states, such as Iowa and Wisconsin. As compared to other states, it would appear that Minnesota's per pupil funding may have begun to erode even before the 2003 legislative session with its resolution of the \$4 billion dollar budget deficit.

While some of the increase may be due to improved reporting, the number of teachers in the state on licensure variances increased again this year. As the number of teachers on variances has increased, Minnesota is beginning to show some of the same patterns as other states: higher percentages of teachers on variances in urban schools, high poverty schools, and schools with larger proportions of special education students. There are several possible reasons why a school may have a higher percentage of teachers on licensure variance: (1) the school makes more extensive use of teachers on variance in core academic areas; (2) the school makes more extensive use of teachers assigned to non-core areas where licensure is considered less essential; or (3) the school has more of its staff assigned to areas where licensed teachers are in short supply. The data reported here do not indicate why some schools have more teachers on variance. However, our data tables on per pupil funding and teacher salaries suggest that the higher proportion of teachers on variances in urban schools, high poverty schools, and schools with high proportions of students in special education cannot be attributed simply to lower teacher salaries or per pupil funding.

Coursework, Attendance, and Graduation Rates

Will Minnesota's new high school coursework graduation requirements raise student achievement and close achievement gaps among Minnesota's ethnic minorities? In our judgment, it will depend on how the new requirements are implemented. In the data of Chapter 5, high school math scores increased as the amount and level of high school mathematics coursework increased. However, after studying states that had already required three years of mathematics and science coursework, Teitelbaum concluded that states with higher requirements did not exhibit greater gains in achievement, although their students did seem to take more courses in mathematics and science. He found that some districts did not seem to uphold the higher requirements and that some students did not take rigorous coursework in fulfilling the requirements. We conclude that if achievement is to rise as a result of the new requirements, at least in mathematics and science, students will need to increase not just the amount of coursework taken, but also the level of coursework completed. In other words, the extra credits must be earned by taking more advanced work.

Analyzing national mathematics course-taking patterns, Davenport et al. found only small differences between minority and majority students in the amount of high school mathematics being taken, but large differences in the kinds of mathematics being studied in those courses. We conclude that if the new high school course requirements are to close ethnic gaps in achievement, they must close gaps in the amount and level of coursework taken by Minnesota's minority and White students. All students must be held to the same high expectations. For minority students to succeed in rigorous

high school coursework, both their attendance in high school and their preparation prior to high school must improve.

In comparing the attendance data in Table 4.2 (p. 37) to the graduation rate data in Table 4.3 (p. 40), we found that high school student groups that had not met the state's attendance expectation of 90% through 11th grade had also not met the state's graduation expectation of 80%. While high schools will be evaluated on achievement and graduation rate, but not attendance, some high schools may need to increase their attendance rates in order to satisfy the graduation rate requirements. Ironically, even though attendance is used as an AYP indicator at the elementary level but not the high school level, there may be greater need to improve attendance at the high school level for purposes of satisfying NCLB requirements.

Achievement

This year brought new 4th grade writing data on Minnesota students from the *National Assessment of Educational Progress (NAEP)*. Minnesota students compared less favorably in writing to students nationwide than in other subjects, such as reading and mathematics. The mean writing score in Minnesota was above the national average, but only by a few points. When the ethnicity of students is held constant (for example, when American Indian students in Minnesota are compared to American Indian students around the country) Minnesota students scored virtually the same, or lower than, their ethnic peers across the nation. We see no reason why Minnesota students should not compare as favorably in writing as in other subjects. Since the highest scoring students are somewhat concentrated in the northeastern part of the United States, Minnesota must look beyond the upper Midwest for examples of writing standards, curricula, and instructional methods.

NAEP also provided important achievement data in 4th grade reading. The 4th grade reading data provided a means of evaluating whether the increases of recent years in scores on statewide reading tests can be confirmed by the independent evidence of the *NAEP* tests. On these *NAEP* reading assessments, Minnesota students scored above the national average. Scores have been increasing since 1994. Since this work was prepared, new 4th grade reading data have been released on students tested in 2003. The new data confirm increases in Minnesota reading achievement since 1994, but do not show as large a gain as the data from students tested in 2002. These data suggest that the improvements in reading scores on statewide tests are not narrowly confined to the content of the statewide tests.

In addition to setting academic achievement targets, federal regulations set standards for student participation on statewide assessments. Starting in 2004, high schools must test 95% of their students in order to meet NCLB test participation requirements. As compared to elementary schools, this requirement will be harder for high schools to reach, in part, because their attendance rates are lower. It is more difficult to test 95% of students if, on a typical day, only 90% attend. To reach the 95% target, some high schools

need either greater attendance on test day than on a typical day, or they need to test a somewhat larger number of students on “make-up” days. .

Schools and students are just beginning the process of adjusting to the new policies and demands for performance that have been placed on them. Demographic shifts in the student population are intensifying the new demands on schools as students seem to increasingly need additional services (e.g., ESL classes, special education services, etc.). These changes will most likely require additional resources that may or may not be available to schools. Only time will tell how well schools can meet the new demands for increased student achievement, improved graduation rates, attendance, safe schools, and teacher qualifications in the face of changing demographics and resource allocations.

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APPENDIX A

GLOSSARY OF TERMS

APPENDIX A: GLOSSARY OF TERMS

Achievement test: An examination that measures the extent to which a person has acquired certain information or mastered certain skills, usually as a result of specific instruction.

ACT Program: The ACT program measures educational development and readiness to pursue college-level coursework in English, mathematics, natural science, and social science. Student performance on the tests does not solely reflect innate ability and is influenced by a student's educational preparedness.

ACT Core Academic Courses: These are courses that the ACT program recommends that college-bound students complete prior to high school graduation. The courses include: four years of English, three years of science, three years of social studies and three years of mathematics. The English portion of the test consists of punctuation (13%), basic grammar (16%), and sentence structure (24%). Rhetorical skills include strategy (16%), organization (15%), and style (16%). The math portion consists of pre-algebra (23%), elementary algebra (17%), intermediate algebra (15%), coordinate geometry (15%), plane geometry (23%), and trigonometry (7%). The reading portion consists of passages from social studies (25%), natural sciences (25%), prose fiction (25%), and humanities (25%). The science portion consists of data representation (38%), research summary (45%), and conflicting viewpoints (17%). Web site: <http://www.act.org/>

Administration (Expenditure Category): Expenditures for the school board and for the office of the superintendent, principals, and any other line administrators who supervise staff.

Advanced Placement (AP): Advanced Placement gives highly motivated students an opportunity to take college-level courses and exams while still in high school. There are now 32 different AP courses to choose from, in 18 different subject areas, offered by approximately 14,000 high schools worldwide. In 1998, AP reached a milestone: more than a million exams were taken by about half a million students. The College Board administers the exams. AP examination grades are reported on a 5-point scale as follows: 5, extremely well qualified; 4, well qualified; 3, qualified; 2, possibly qualified; 1, no recommendation. A score of 3 or above will receive college credit or advanced placement. Web site: <http://www.collegeboard.org/ap>

Assurance of Mastery Revenue: Districts that have identified direct instructional services to assure that K–8 pupils master learner outcomes in communications and math are eligible for state aid. Other district revenue must match the state aid. This matching revenue, along with limited English proficiency revenue and assurance of mastery revenue, is included in the targeted need revenue category.

At-risk Students: Those students in danger of failing to complete their education with the skills necessary for a modern technological society.

Average Daily Attendance: The aggregate student attendance of a school during a reporting period (normally a school year) divided by the number of days school is in session during this period. Only days on which the pupils are under the guidance and direction of teachers should be considered days in session.

Average Daily Membership: The aggregate student enrollment of a school during a reporting period (normally a school year) divided by the number of days school is in session during this period. Pupils need not be in attendance to be counted in ADM, but they must be in membership.

Bachelor's Degree: A degree granted for the successful completion of a baccalaureate program of studies, usually requiring at least 4 years (or equivalent) of full-time college-level study.

Basic Standards: These standards represent one of the two components of Minnesota's Graduation Rule, established in 1992. The Basic Standards represent the minimum skills required for a high school diploma in Minnesota.

Charter Schools: Publicly funded schools that are granted a high degree of autonomy from existing rules and regulations. Depending upon state law, teachers, parents, or other would-be educators can apply for permission to open a school. The "charter" may be granted by, for example, the local school board, the state board of education, or a public institution of higher education, depending upon the state. Some states also allow existing public or nonsectarian private schools to convert to charter status. Charter schools have the potential to control their own budget, staffing and curriculum, but their autonomy varies from state to state. They must attract students and achieve the results agreed to in their charters, or their contracts can be revoked.

Choice Options: Alternative and/or additional education opportunities available, at their choice, to students and their parents. School choice options in Minnesota include the Post-secondary Enrollment Option, open enrollment, and charter schools.

Class Size: The number of students a teacher has (enrolled) in his/her class at a given time.

Compensatory Funds (also known as "**Compensatory Education Revenue**"): Based on a complex formula which provides additional funding for districts with students eligible to receive free lunch and/or reduced-priced lunch based on October 1st enrollments of the previous fiscal year. Compensatory revenue increases as the percent of students eligible for free and reduced-price lunch increases. The percentage is capped, however.

Completion Rate: Refers to the percentage of students who complete high school in four years.

Content Standards: Content standards define what students should know and be able to do in key academic subjects at specific grades.

Continuous Improvement Program: An initiative introduced by the Minnesota Educational Effectiveness Program (MEEP) aimed at assisting building-level leadership teams with data analysis, planning, implementation and evaluation.

Curriculum: A school's master plan for selecting content and organizing learning experiences for the purpose of changing and developing learners' behaviors and insights. A curriculum is characterized by its scope (breadth of content) and sequence (organization of content).

Dropout Rate: The percentage of students that leave high school before receiving their diploma. Students who transfer to a non-public high school or to a public high school in another state are not counted as dropouts.

Educational Accountability: A systematic method for examining whether schools and students are moving toward desired goals. In Minnesota, it is a statewide system that is applicable, with appropriate assessment accommodations, to all students, including those with disabilities and limited proficiency in English.

Educational Attainment: The highest grade of regular school attended and completed.

Enrollment: The total number of students registered in a given school unit at a given time, generally in the fall of a year.

Equity: Refers to equal treatment, justice.

Ethnicity: Belonging to or relating to a particular religious, racial, or cultural heritage of a group.

Exceptional Instruction (Expenditure Category): Expenditures for instruction of students who, because of atypical characteristics or conditions, are provided with educational programs that are different from regular instructional programs. Includes expenditures for special instruction of students who are emotionally or psychologically disabled, or mentally retarded; for students with physical, hearing, speech, and visual impairments; and for students with special learning and behavior problems.

Federal Funding: The percentage of revenues from the federal government, whether paid directly or through another governmental unit. It includes all federal appropriations, grants, and contracts received by districts. The funds are typically targeted toward specific minority and disadvantaged student populations.

First Grade Preparedness Funds: For the 1996–97, 1997–98 and 1998–99 school years, certain school sites are eligible for funding to operate full-day kindergarten programs or half-day programs for four year olds to develop reading and other skills necessary to succeed in school. School sites with the

highest concentrations of pupils eligible for free and reduced-price lunch are eligible for funding. The funding is the amount equal to .53, times the number of pupils enrolled in the program, times the general education formula allowance.

Food Support (Expenditure Category): Expenditures for the preparation and serving of meals and snacks to students.

Foundation Formula (also known as the “**General Education funding program**”): The general education funding program is the method by which school districts receive the majority of their financial support. It is designed to provide a basic foundation of funding for all districts, irrespective of local resources. It also channels more state aid to districts with low residential and commercial tax bases.

Free or Reduced-price Lunch: Eligibility requirements for free or reduced-price lunch are based on household size and total household income. Household size includes every child and adult in the household, whether related or unrelated. Every person who shares housing and/or expenses is considered to be part of the household for this purpose. To qualify for reduced-price lunch, a total household income should not exceed the following amounts. Household size to total monthly household income: 1/\$1,385; 2/\$1,869; 3/\$2,353; 4/\$2,837; 5/\$3,321; 6/\$3,805; 7/\$4,289; 8/\$4,773. For each additional household member add \$485. (Income Eligibility Guidelines for School Meals Programs in 2003-04, USDA Food and Nutrition Service. Retrieved on November 21, 2003, from: <http://www.fns.usda.gov/cnd/governance/iegs/IEGs03-04.pdf>).

Full-time Equivalent (FTE): School staff members are counted using FTE values. For example, a full-time staff member is counted as 1.0 FTE; one employed only half time is counted as .5 FTE.

Graduation Rate: For the purposes of this report, graduation rate refers to the proportion of public school ninth graders who graduate from high school four years later. Ninth grade students who transfer to a non-public school or to a public school in another state are excluded from the calculations.

IDEA: Individuals with Disabilities Education Act, the federal law that oversees the provision of a free and appropriate public education to students with disabilities.

International Association for the Evaluation of Educational Achievement: An independent international cooperative of research centers and departments of education in more than 50 countries.

Instructional Alignment: The match between learning goals, learning activities, and assessment. Alignment is critical if teaching is to be effective and learning is to be maximized.

Instructional Support: Expenditures for activities intended to help teachers provide instruction, not including expenditures for principals or superintendents. Includes expenditures for assistant principals,

curriculum development, libraries, media centers, audiovisual support, staff development, and computer-assisted instruction.

International Baccalaureate Diploma Program (IB): The International Baccalaureate Diploma Program is a rigorous pre-university course of study, leading to examinations, that meets the need of highly motivated secondary school students between the ages of 16 and 19 years. Designed as a comprehensive two-year curriculum that allows its graduates to fulfill requirements of various national education systems, the diploma model is based on the pattern of no single country but incorporates the best elements of several. Each examined subject is graded on a scale of 1 (minimum) to 7 (maximum). The award of the diploma requires students to meet defined standards and conditions, including a minimum total of 24 points and the satisfactory completion of the extended essay, Theory of Knowledge course (TOK) and CAS (creativity, action, service) activities. The maximum score of 45 includes three points for the combination of the extended essay and work in TOK. IB diploma holders gain admission to selective universities throughout the world, including the University of Minnesota, Oxford, Yale, and the Sorbonne. Formal agreements exist between the International Baccalaureate Organization and many ministries of education and private institutions. Some colleges and universities may offer advanced standing or course credit to students with strong IB examination results. The program is available in English, French, and Spanish. Web site: <http://www.ibo.org>

Limited English Proficiency: A student with limited English proficiency is defined as one whose primary language is not English and whose score on an English reading or language arts test is significantly below the average score for students of the same age. (This definition is used by the Minnesota legislature; however, it may vary across school districts.)

Local Sources (Revenue Category): The percentage of revenues received by schools and districts originating from local sources, including property taxes, fees, county apportionment, etc.

Master's Degree: A degree awarded for successful completion of a program generally requiring 1 or 2 years of full-time college-level study beyond the bachelor's degree.

Mean Score: An average. The total of all scores in a group, divided by the number of scores.

Metro Area Schools: Refers to school districts located in Minneapolis, St. Paul, and the seven county metro area. Suburban schools are considered to be located in the seven county metro area.

Minnesota Comprehensive Assessments (MCAs): These tests are given at the 3rd, 5th, 10th, and 11th grade levels to evaluate student progress and measure the success of schools and districts in improving achievement over time.

Minnesota Test of Emerging Academic English (TEAE): A test designed to provide an assessment specifically for students with limited English

proficiency. The test results may also be used to evaluate the progress students are making in English as a Second Language (ESL) instructional programs.

Mobility: The number of times a student moves from school to school or district to district in a given year. This indicator measures frequent school or residence changes.

National Assessment of Educational Progress (NAEP): *NAEP* is often called the “nation’s report card.” It is the only regularly conducted survey of what a nationally representative sample of students in grades 4, 8, and 12 knows and can do in various subjects. The project is mandated by Congress and carried out by the National Center for Education Statistics at the U.S. Department of Education. Beginning in 1990, the survey was expanded to provide state-level results for individual states that choose to participate. The policy defines three *NAEP* achievement levels: basic, proficient and advanced. The definitions for each level follow.

- **Basic level:** denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.
- **Proficient level:** represents solid academic performance for each grade accessed. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter.
- **Advanced level:** signifies superior performance.

The *NAEP* scores have been tied to certain performance capabilities. In reading, a score of 300 implies an ability to find, understand, summarize and explain relatively complicated literary and informational material. A score of 250 implies an ability to search for specific information, interrelate ideas, and make generalizations about literature, science and social studies materials. A score of 200 implies an ability to understand, combine ideas, and make inferences based on short uncomplicated passages about specific or sequentially related information. A score of 150 implies an ability to follow brief written directions and carry out simple, discrete reading tasks.

The *NAEP* scoring scale for reading ranges from 0 to 500. In 1994, the *NAEP* reading achievement levels were as follows: For Grade 4, a score of 208–237 was classified as basic achievement, a score of 238–267 was classified as proficient achievement; and a score above 268 was classified as advanced achievement. For Grade 8, basic achievement required a score of 243–280, proficient achievement required a score of 281–322 and advanced achievement required a score above 323. For Grade 12, basic achievement required a score of a score of 265–301, proficient achievement required a score of 302–345, and advanced achievement required a score above 346.

The *NAEP* scores have been evaluated at certain performance levels. In math, performers at the 150 level know some basic addition and subtraction facts, and most can add two-digit numbers without regrouping. They

recognize simple situations in which addition and subtraction applies. Performers at the 200 level have considerable understanding of two digit numbers and know some basic multiplication and division facts. Performers at the 250 level have an initial understanding of the four basic operations. They can also compare information from graphs and charts, and are developing an ability to analyze simple logical relations. Performers at the 300 level can compute decimals, simple fractions and percents. They can identify geometric figures, measure lengths and angles, and calculate areas of rectangles. They are developing the skills to operate with signed numbers, exponents, and square roots. Performers at the 350 level can apply a range of reasoning skills to solve multi-step problems. They can solve routine problems involving fractions and percents, recognize properties of basic geometric figures, and work with exponents and square roots.

The *NAEP* scoring scale for math ranges from 0 to 500. In 1996, the NAEP mathematics achievement levels were as follows: For Grade 4, a score of 214–248 was classified as basic achievement; a score of 249–281 was classified as proficient achievement; and a score above 282 was classified as advanced achievement. For Grade 8, basic achievement required a score of 262–298; proficient achievement required a score of 299–332; and advanced achievement required a score above 333. For Grade 12, basic achievement required a score of a score of 288–335; proficient achievement required a score of 336–366; and advanced achievement required a score above 367.

No Child Left Behind Act: The name given to the education legislation signed into law by President George W. Bush on January 8, 2002. This legislation contains the President’s four basic education reform principles, aimed at improving accountability for education results by requiring states to set performance standards, implement statewide assessments, and report progress toward 100% student proficiency by 2013–14.

Open Enrollment: Public school choice programs allow families to choose the public schools their children attend. Intradistrict programs limit a family’s choice to some or all of the public schools in their own district. Open enrollment programs allow families to choose schools outside the district in which they live.

Operations and Maintenance (Expenditure Category): Expenditures for operation, maintenance, and repair of the district’s buildings, grounds and equipment. Includes expenditures for custodians, fuel for buildings, electricity, telephones and repairs.

Other Operations (Expenditure Category): Expenditures for general fund operating programs necessary to a district’s operations but not able to be assigned to other programs. These can include federally funded community education services for students, property and liability premiums, principal and interest on non-capital obligations, and nonrecurring costs such as judgements and liens.

Outcomes: The desired results of an educational system

Outcome-based Education (OBE): A structure at a school and district level that stresses clearly defined outcomes, criterion-referenced measures of success, and instructional strategies. These outcomes are directly related to student abilities and needs, flexible use of time and learning opportunities, recognition of student success, and modification of programs on the basis of student results. Web site: http://www.hrdc-drhc.gc.ca/hrdc/corp/stratpol/arbsite/research/r964sm_e.html

Outstate schools: Refers to the school districts located outside the seven county metro area. For some purposes, they are divided into districts that have enrollments of 2000 students or less (2000-), or enrollments of greater than 2000 students (2000+).

Performance Standards: Performance standards define what students must know (knowledge) and be able to do (skills) to be considered competent.

Per-pupil Expenditure or Per-pupil Spending (Expenditure Category): The State's annual total spending on public K–12 education divided by its total number of students. An adjusted amount makes the number comparable by taking into account how much it costs school districts in different regions to recruit and employ teachers with similar qualifications.

Post-secondary Enrollment Option (PSEO): This program allows high school juniors and seniors to enroll in classes at postsecondary institutions at public expense and receive both high school and college credit for their courses. The Minnesota program is twofold: To promote rigorous academic pursuits and to provide a variety of options to high school students.

Poverty: An indicator measured as the proportion of students eligible for free or reduced-price lunch. See also “Student Poverty.”

Proficiency Levels: There are four achievement levels that represent the expectations for academic success in Minnesota:

- **Level I:** Students at this level demonstrate evidence of limited knowledge and skills necessary for satisfactory work in the High Standards in the elementary grades.
- **Level II:** Students at this level demonstrate evidence of partial knowledge and skills necessary for satisfactory work in the High Standards in the elementary grades.
- **Level III:** Students at this level demonstrate evidence of solid academic performance and competence in the knowledge and skills necessary for satisfactory work in the High Standards in the elementary grades.
- **Level IV:** Students at this level demonstrate evidence of advanced academic performance, knowledge and skills that exceed the level necessary for satisfactory work in the High Standards in the elementary grades.

Pupil Support: Expenditures for all non-instructional services provided to students, not including transportation and food. Includes expenditures for

counseling, guidance, health services, psychological services, and attendance and social work services.

Pupil Transportation (Expenditure Category): Expenditures for transportation of students, including salaries, contracted services, fuel for buses, and other expenditures.

Pupil/Staff Ratios: Pupil/staff ratios are based on the total number of pupils in attendance (ADA) at a school, compared to the total number of licensed school personnel (FTE), e.g., administrators, counselors, teachers, media specialists, speech clinicians, psychologists, etc., in that school.

Pupil/Teacher Ratio: Pupil/teacher ratios are based on the total number of pupils in attendance (ADA) at a school, compared to the total number of licensed teaching staff (FTE) in that school.

Regular Instruction (Expenditure Category): Expenditures for elementary and secondary classroom instruction, not including vocational instruction and exception instruction. Includes salaries of teachers, classroom aides, coaches, and expenditures for classroom supplies and textbooks.

Results-oriented Educational System: A structure at the school and district level that stresses clearly defined outcomes, criterion-referenced measures of success, and instructional strategies. These outcomes are directly related to student abilities and needs, flexible use of time and learning opportunities, recognition of student success, and modification of programs on the basis of student results. Same as Outcome-based education.

Scale Score: A scale score provides a common scale for different forms of a test used at a given grade or across age/gender levels.

SAT: Formerly known as the *Scholastic Aptitude Test*, the SAT is commonly used as a college entrance exam.

School Accreditation Processes: The awarding of credentials to schools; in particular, the award of membership in one of the regional associations of educational institutions that attempt to maintain certain quality standards for membership.

School Climate: The social system and culture of the school, including the organizational structure, values, and expectations within it.

School Improvement Programs: Programs intended to improve school quality.

Site-based Management: Governance arrangements designed to give the people closest to students the ability to make decisions about their education. Typically, teachers, parents, and administrators at the school site are given more say over such matters as staffing, budgets, curriculum, and instructional materials. However, the level of autonomy granted to individual schools, and determinations of who is involved in making decisions and whether such decisions relate to student learning, vary widely.

Social Promotion: Promoting students to the next grade level in order for them to remain at the same social level as their peers, without regard to whether or not the student meets the academic standards needed to succeed at the next grade level.

Special Education: Direct instructional activities or special learning experiences designed primarily for students identified as having exceptional needs in one or more aspects of the cognitive process or as being underachievers in relation to general level or model of their overall abilities. Such services are usually directed toward students with physical, emotional, and/or cognitive learning disabilities, although programs for the mentally gifted and talented are also included in some special education programs.

Stakes: The terms “low stakes” and “high stakes” express the varying levels of risk being placed on those responsible for student learning. For example, high school exit examinations involve high stakes for the students taking the examination, since graduating from high school may be contingent on passing the test. In the context of Minnesota’s accountability system, “stakes” can refer to either positive and/or negative consequences for students, schools or districts.

Standards: The knowledge or skill level necessary for a particular rating or grade on a given dimension of achievement. A standard is used as a basis for comparison. See *content standards* and *performance standards*.

State Allocations: The percentage of revenues a school receives from the Minnesota state government.

State-funded Learning Readiness Program: The purpose of a Learning Readiness program is to provide all eligible children with adequate opportunities to participate in child development programs. Such programs are intended to ensure that those children enter school with the necessary skills and behavior, as well as the family stability, needed for them to progress and flourish. Learning Readiness is offered in 345 school districts in Minnesota. The cost per child for Learning Readiness varies depending on the level of participation.

Student Poverty: In most of this report, the student poverty indicator is based on the percentage of students in a school or district who are eligible for free or reduced-price lunch. Other indicators are possible (for example, the term sometimes, in other publications, refers to students from families receiving aid for Families with Dependent Children).

Support Services (Expenditure Category): Expenditures for central office administration and central office operations not included in district and school administration. Includes expenditures for business services, data processing, legal services, personnel office, printing, and the school census.

Teacher Education: The amount of education a teacher has. The major distinction is between teachers having Bachelor’s Degrees and those having Master’s Degrees.

Teacher Experience: A teacher's number of years in the teaching profession.

Teacher Salary: Refers to the annual pay received by teachers.

Title I (Federally Funded Program): Title I of the Elementary and Secondary Education Act (ESEA), as restructured by the Improving America's Schools Act (IASA) of 1994, has as its primary focus to help disadvantaged students acquire the same knowledge and skills in challenging academic standards expected of all children. Title I required that, by the beginning of the 2000–01 school year, each State would have developed or adopted a set of high-quality yearly assessments to measure student performance in at least mathematics and reading/language arts. Such assessments are to be aligned with each state's content standards and used to monitor progress toward achievement goals for accountability purposes. In a key change (since the passage of the No Child Left Behind Act) states now use the same assessment for all children to measure whether students served by Title I are achieving the state standards. There is no longer any requirement for a separate assessment for Title I students. Web page: <http://www.ed.gov/legislation/ESEA/TitleI> and <http://www.ed.gov/nclb/landing.jhtml>

Total Operating Expenditures (Expenditure Category): The total of the following categories: administration, support services, regular instruction, vocational instruction, exceptional instruction, instructional support, pupil support, operations and maintenance, food support, pupil transportation and other operations. This figure includes all expenditures incurred for the benefit of elementary and secondary education during the school year, except for capital and debt service expenditures.

Vocational Instruction: Expenditures in secondary schools for instruction related to job skills and career exploration. Includes expenditures for home economics, as well as industrial, business, agriculture, and distributive education.

Vouchers: Vouchers enable families to use public tax dollars to pay for their children's education at a public or private school of their choice. Voucher programs may or may not include private religious schools.

APPENDIX B

MCA AND BASIC SKILLS TEST RESULTS, BY CATEGORY

Tables B.1 through B.24 show results on the *Minnesota Comprehensive Assessments* and the *Basic Skills Tests* for the state as a whole, for various groups of students, and for various categories of schools, after removing either students with limited English proficiency, students new to their district after January 1, 2001, or students in special education.

The effect of removing such students from results can be seen by comparing the results in Tables B.1 through B.24 with corresponding results for all students in Tables 5.1 through 5.8.

Table B.1 2003 Grade 3: *Minnesota Comprehensive Assessment* Results in Reading for Public School Students Tested, except those with Limited English Proficiency

		No. Tested	% At or Above Level III	% At or Above Level IIb	% At or Above Level IIa	Mean Proficiency Index	Mean Scale Score	% Enr. Students Tested	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		53,440	63	80	92	84	1,533	97	13	3	27
GENDER	Female	26,203	67	83	94	87	1,552	98	9	3	27
	Male	27,184	59	77	90	81	1,515	97	17	3	27
ETHNICITY	Asian	1,211	69	86	95	89	1,553	94	7	4	35
	Black	4,029	31	50	73	59	1,391	95	16	10	73
	Hispanic	1,146	47	66	86	74	1,464	93	14	8	56
	Am. Indian	1,100	43	62	84	68	1,444	93	18	8	68
	White	45,624	67	83	94	87	1,549	98	13	2	21
SPECIAL ED		6,091	31	47	66	50	1,378	86	—	4	40
NEW TO DISTRICT		1,547	43	62	80	67	1,442	93	15	—	56
MIGRANTS		42	38	57	83	57	1,428	78	18	7	91
F/R LUNCH		13,974	45	64	83	71	1,452	95	19	7	—
ATTENDANCE RATE	95-100%	37,650	66	82	93	87	1,545	98	12	1	22
	90-94%	10,746	60	77	90	81	1,517	97	15	3	34
	0-89%	2,583	49	66	83	70	1,468	92	23	8	58
MIDYEAR SCHOOL TRANSFERS	0	48,491	65	81	93	85	1,540	98	13	2	25
	1	2,195	47	64	83	70	1,459	94	21	8	56
	2 or more	296	26	44	69	52	1,370	89	28	20	82
STRATA	Mpls/St. Paul	4,362	45	62	80	69	1,454	95	14	5	59
	TC Suburbs	23,534	67	83	93	87	1,552	98	12	3	15
	Outstate 2000+	11,870	63	81	93	85	1,533	97	14	3	27
	Outstate 2000-	12,946	63	81	93	85	1,529	97	14	3	36
CHARTER		726	44	60	79	68	1,443	97	13	6	54
ALCs		102	46	74	87	78	1,460	96	8	32	58

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.2 2003 Grade 3: *Minnesota Comprehensive Assessment* Results in Reading for Public School Students Tested, except those New to their District Since October 1, 2002

		No. Tested	% At or Above Level III	% At or Above Level IIb	% At or Above Level IIa	Mean Proficiency Index	Mean Scale Score	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% F/R Students
TOTAL		55,061	61	78	91	83	1,525	96	8	13	30
GENDER	Female	26,936	65	81	93	86	1,544	96	7	8	31
	Male	28,072	58	75	89	80	1,506	95	8	17	30
ETHNICITY	Asian	2,656	41	61	82	70	1,447	83	61	8	62
	Black	3,980	31	50	73	60	1,391	92	12	15	75
	Hispanic	2,164	32	51	74	60	1,399	80	58	12	74
	Am. Indian	1,029	43	64	85	70	1,449	93	1	18	68
	White	44,902	67	83	94	87	1,550	98	1	13	21
LEP		3,168	20	40	67	52	1,351	73	—	8	82
SPECIAL ED		6,111	31	47	66	50	1,376	85	5	—	41
MIGRANTS		158	19	41	61	47	1,333	72	77	12	94
F/R LUNCH		15,729	41	60	81	68	1,436	91	21	17	—
ATTENDANCE RATE	95-100%	39,382	63	80	92	85	1,536	96	7	12	26
	90-94%	11,009	58	75	89	80	1,510	95	7	15	36
	0-89%	2,550	48	66	83	69	1,467	90	9	22	58
MIDYEAR SCHOOL TRANSFERS	0	50,272	63	80	92	84	1,532	96	7	12	28
	1	2,389	43	60	79	67	1,441	91	19	18	60
	2 or more	283	24	42	68	51	1,364	87	18	24	84
STRATA	Mpls/St. Paul	5,655	38	56	77	64	1,426	90	31	12	69
	TC Suburbs	23,747	66	82	93	86	1,548	96	6	12	17
	Outstate 2000+	12,018	62	80	92	84	1,529	97	5	14	29
	Outstate 2000-	12,804	62	80	93	85	1,528	97	2	14	36
CHARTER		835	38	55	76	64	1,423	93	22	11	61
ALCs		73	36	66	82	73	1,432	97	3	8	76

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.3 2003 Grade 3: *Minnesota Comprehensive Assessment* Results in Reading for Public School Students Tested, except those in Special Education

		No. Tested	% At or Above Level III	% At or Above Level IIb	% At or Above Level IIa	Mean Proficiency Index	Mean Scale Score	% Enr. Students Tested	% LEP Students	% New Students	% F/R Students
TOTAL		50,497	64	81	93	87	1,541	97	8	3	30
GENDER	Female	25,821	67	83	94	88	1,554	97	8	4	30
	Male	24,623	61	79	92	85	1,527	97	9	3	29
ETHNICITY	Asian	2,566	43	63	84	73	1,456	84	61	4	63
	Black	3,843	34	53	77	65	1,409	94	13	10	73
	Hispanic	2,105	34	54	76	63	1,408	81	60	9	74
	Am. Indian	952	45	67	88	75	1,462	97	1	7	66
	White	40,701	71	87	96	91	1,568	99	1	2	19
LEP		3,148	20	41	69	54	1,356	74	—	7	82
NEW TO DISTRICT		1,547	43	62	81	69	1,445	91	17	—	57
MIGRANTS		157	19	41	65	50	1,338	74	79	9	94
F/R LUNCH		14,223	44	64	85	74	1,456	93	23	7	—
ATTENDANCE RATE	95-100%	35,738	67	84	95	89	1,551	97	8	2	25
	90-94%	9,875	62	80	92	86	1,531	97	7	3	35
	0-89%	2,307	52	70	88	77	1,488	95	10	8	58
MIDYEAR SCHOOL TRANSFERS	0	45,477	66	83	94	88	1,549	98	7	2	27
	1	2,172	47	64	83	73	1,461	92	22	8	60
	2 or more	274	28	47	74	58	1,386	91	21	19	86
STRATA	Mpls/St. Paul	5,336	40	58	79	68	1,439	92	32	5	68
	TC Suburbs	21,913	69	85	95	90	1,563	97	6	3	18
	Outstate 2000+	10,904	66	83	95	89	1,546	99	5	3	27
	Outstate 2000-	11,546	66	85	96	90	1,547	99	2	3	35
CHARTER		796	41	58	79	68	1,437	94	23	6	62
ALCs		96	45	73	88	78	1,462	96	2	32	56

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.4 2003 Grade 3: *Minnesota Comprehensive Assessment* Results in Mathematics for Public School Students Tested, except those with Limited English Proficiency

		No. Tested	% At or Above Level III	% At or Above Level IIb	% At or Above Level IIa	Mean Proficiency Index	Mean Scale Score	% Enr. Students Tested	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		53,434	59	77	95	85	1,555	97	13	3	27
GENDER	Female	26,131	60	78	96	85	1,562	98	9	3	27
	Male	27,262	58	77	95	84	1,549	97	17	3	27
ETHNICITY	Asian	1,206	69	84	98	89	1,609	94	7	4	35
	Black	4,026	28	46	81	61	1,387	95	16	11	73
	Hispanic	1,141	42	62	91	74	1,470	92	14	8	56
	Am. Indian	1,108	37	59	89	70	1,444	93	18	8	68
	White	45,620	63	81	97	87	1,574	98	13	2	21
SPECIAL ED		6,203	32	50	82	59	1,411	87	—	4	40
NEW TO DISTRICT		1,586	37	57	87	68	1,444	93	15	—	56
MIGRANTS		43	23	47	86	59	1,391	83	18	7	91
F/R LUNCH		14,008	41	61	90	73	1,461	95	19	7	—
ATTENDANCE RATE	95-100%	37,652	62	80	97	87	1,573	98	12	1	22
	90-94%	10,729	54	73	94	81	1,529	96	15	3	34
	0-89%	2,586	42	63	89	71	1,464	92	23	8	58
MIDYEAR SCHOOL TRANSFERS	0	48,462	61	79	96	86	1,564	98	13	2	25
	1	2,210	42	61	89	72	1,464	95	21	8	56
	2 or more	298	23	44	79	57	1,363	90	28	20	82
STRATA	Mpls/St. Paul	4,364	44	60	86	71	1,476	94	14	5	59
	TC Suburbs	23,487	64	81	97	87	1,582	97	12	3	15
	Outstate 2000+	11,882	58	78	96	85	1,549	97	14	3	27
	Outstate 2000-	12,962	57	77	96	85	1,547	98	14	3	36
CHARTER		733	37	54	85	68	1,431	97	13	6	54
ALCs		104	40	64	91	76	1,461	97	8	32	58

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.5 2003 Grade 3: *Minnesota Comprehensive Assessment* Results in Mathematics for Public School Students Tested, except those New to their District Since October 1, 2002

		No. Tested	% At or Above Level III	% At or Above Level IIb	% At or Above Level IIa	Mean Proficiency Index	Mean Scale Score	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% F/R Students
TOTAL		55,009	58	76	95	84	1,549	96	8	13	30
GENDER	Female	26,855	59	77	96	85	1,556	96	7	8	31
	Male	28,113	57	75	95	83	1,543	95	8	17	30
ETHNICITY	Asian	2,653	47	65	93	77	1,499	84	61	8	62
	Black	3,981	29	47	81	62	1,391	92	12	15	75
	Hispanic	2,139	32	51	86	65	1,417	79	58	12	74
	Am. Indian	1,035	38	60	90	71	1,449	93	1	18	68
	White	44,868	63	81	97	87	1,575	98	1	13	21
LEP		3,161	27	46	84	62	1,389	73	—	8	82
SPECIAL ED		6,220	32	50	82	59	1,410	86	5	—	41
MIGRANTS		163	24	41	78	56	1,353	74	77	12	94
F/R LUNCH		15,745	39	59	89	71	1,450	91	21	17	—
ATTENDANCE RATE	95-100%	39,363	61	79	96	86	1,565	96	7	12	26
	90-94%	10,976	53	72	94	80	1,523	95	7	15	36
	0-89%	2,559	42	63	89	71	1,465	90	9	21	58
MIDYEAR SCHOOL TRANSFERS	0	50,227	59	78	96	85	1,557	96	7	12	28
	1	2,390	40	59	87	70	1,452	90	19	18	59
	2 or more	284	24	44	79	57	1,365	87	18	24	84
STRATA	Mpls/St. Paul	5,651	40	57	86	69	1,457	90	31	12	69
	TC Suburbs	23,699	64	81	97	87	1,580	96	6	12	17
	Outstate 2000+	12,000	57	77	96	84	1,544	97	5	14	29
	Outstate 2000-	12,814	57	77	96	85	1,546	97	2	14	36
CHARTER		839	34	51	84	66	1,417	93	22	11	61
ALCs		75	36	59	89	74	1,432	99	3	8	76

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.6 2003 Grade 3: *Minnesota Comprehensive Assessment* Results in Mathematics for Public School Students Tested, except those in Special Education

		No. Tested	% At or Above Level III	% At or Above Level IIb	% At or Above Level IIa	Mean Proficiency Index	Mean Scale Score	% Enr. Students Tested	% LEP Students	% New Students	% F/R Students
TOTAL		50,371	60	79	96	87	1,563	97	8	4	30
GENDER	Female	25,733	61	79	97	87	1,565	97	8	4	30
	Male	24,597	60	79	96	87	1,562	97	9	3	29
ETHNICITY	Asian	2,569	48	66	94	79	1,507	84	61	4	63
	Black	3,830	30	49	84	66	1,405	94	13	10	73
	Hispanic	2,079	34	53	87	67	1,426	80	60	9	74
	Am. Indian	952	39	63	91	75	1,462	97	1	7	66
	White	40,608	66	84	98	91	1,592	99	1	2	19
LEP		3,140	28	47	85	64	1,394	74	—	7	82
NEW TO DISTRICT		1,582	38	58	88	70	1,451	91	17	—	57
MIGRANTS		160	25	41	82	58	1,365	75	79	9	94
F/R LUNCH		14,187	41	62	91	76	1,467	92	23	7	—
ATTENDANCE RATE	95–100%	35,674	64	82	97	89	1,579	97	8	2	25
	90–94%	9,820	56	76	96	85	1,542	97	7	3	35
	0–89%	2,292	45	66	92	77	1,484	95	10	8	58
MIDYEAR SCHOOL TRANSFERS	0	45,357	62	81	97	88	1,573	97	7	2	27
	1	2,163	43	62	90	75	1,470	92	22	8	60
	2 or more	269	28	48	84	63	1,394	90	21	18	86
STRATA	Mpls/St. Paul	5,325	41	59	88	72	1,469	92	32	5	68
	TC Suburbs	21,854	66	83	98	90	1,593	96	6	3	18
	Outstate 2000+	10,876	60	80	97	88	1,559	98	5	3	27
	Outstate 2000-	11,516	61	80	98	88	1,563	98	2	3	35
CHARTER		794	36	53	86	68	1,428	94	23	6	62
ALCs		98	41	64	93	77	1,464	97	2	32	56

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.7 2003 Grade 5: *Minnesota Comprehensive Assessment* Results in Reading for Public School Students Tested, except those with Limited English Proficiency

		No. Tested	% At or Above Level III	% At or Above Level IIb	% At or Above Level IIa	Mean Proficiency Index	Mean Scale Score	% Enr. Students Tested	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		57,229	70	83	94	87	1,581	97	15	3	28
GENDER	Female	27,983	74	87	96	90	1,606	98	10	3	28
	Male	29,212	67	80	93	84	1,558	97	19	3	27
ETHNICITY	Asian	1,391	73	88	97	91	1,603	92	7	5	43
	Black	4,274	37	55	80	65	1,422	95	20	9	75
	Hispanic	1,175	56	74	90	78	1,513	92	17	10	56
	Am. Indian	1,300	45	66	87	73	1,468	95	22	7	69
	White	48,788	74	87	96	90	1,600	98	14	2	21
SPECIAL ED		7,284	35	51	73	55	1,404	86	—	4	42
NEW TO DISTRICT		1,545	52	68	85	71	1,479	91	19	—	55
MIGRANTS		41	46	66	90	68	1,466	85	7	9	94
F/R LUNCH		15,271	51	69	88	75	1,489	95	22	6	—
ATTENDANCE RATE	95-100%	40,531	73	86	95	89	1,595	98	13	1	23
	90-94%	11,395	68	81	93	85	1,566	97	16	3	34
	0-89%	2,952	54	70	87	74	1,499	93	25	6	55
MIDYEAR SCHOOL TRANSFERS	0	52,261	72	85	95	88	1,589	98	14	2	25
	1	2,305	51	69	87	75	1,490	94	22	8	60
	2 or more	312	32	52	76	59	1,395	91	33	17	85
STRATA	Mpls/St. Paul	4,798	50	66	84	72	1,484	94	18	5	62
	TC Suburbs	24,651	75	87	96	90	1,610	98	13	3	16
	Outstate 2000+	12,828	71	84	95	87	1,579	97	16	3	27
	Outstate 2000-	14,291	69	83	95	87	1,571	97	15	3	35
CHARTER		657	50	63	83	70	1,474	96	16	7	52
ALCs		60	50	70	92	75	1,479	91	13	51	46

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.8 2003 Grade 5: *Minnesota Comprehensive Assessment* Results in Reading for Public School Students Tested, except those New to their District Since October 1, 2002

		No. Tested	% At or Above Level III	% At or Above Level IIb	% At or Above Level IIa	Mean Proficiency Index	Mean Scale Score	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% F/R Students
TOTAL		58,462	69	82	94	86	1,574	96	6	14	30
GENDER	Female	28,584	72	85	95	89	1,598	96	6	10	31
	Male	29,844	65	79	92	83	1,551	95	6	18	30
ETHNICITY	Asian	2,693	49	67	89	77	1,497	83	56	8	66
	Black	4,198	36	55	79	65	1,420	93	9	20	77
	Hispanic	1,977	42	59	82	67	1,445	82	52	15	73
	Am. Indian	1,223	46	67	87	74	1,472	95	1	22	68
	White	48,070	74	87	96	90	1,600	98	1	14	21
LEP		2,778	24	44	76	58	1,373	74	—	11	85
SPECIAL ED		7,310	34	50	73	54	1,400	86	5	—	43
MIGRANTS		151	25	43	72	56	1,363	80	75	9	97
F/R LUNCH		16,789	48	66	86	73	1,473	91	17	20	—
ATTENDANCE RATE	95–100%	42,029	71	84	95	88	1,586	96	6	13	26
	90–94%	11,576	66	80	93	85	1,561	96	5	16	36
	0–89%	2,919	53	70	86	74	1,496	92	6	24	55
MIDYEAR SCHOOL TRANSFERS	0	53,785	70	83	94	87	1,581	96	6	14	28
	1	2,448	48	66	85	73	1,477	90	17	20	63
	2 or more	291	31	51	75	59	1,392	92	9	33	85
STRATA	Mpls/St. Paul	5,977	43	60	83	69	1,458	90	27	16	70
	TC Suburbs	24,712	75	87	96	90	1,607	96	4	13	17
	Outstate 2000+	12,887	70	84	94	87	1,576	97	4	15	29
	Outstate 2000-	14,151	69	83	94	87	1,569	97	2	14	36
CHARTER		731	45	59	80	67	1,453	92	19	16	58
ALCs		32	31	63	88	71	1,412	94	3	15	82

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.9 2003 Grade 5: *Minnesota Comprehensive Assessment* Results in Reading for Public School Students Tested, except those in Special Education

		No. Tested	% At or Above Level III	% At or Above Level IIb	% At or Above Level IIa	Mean Proficiency Index	Mean Scale Score	% Enr. Students Tested	% LEP Students	% New Students	% F/R Students
TOTAL		52,603	73	86	96	91	1,596	97	7	3	29
GENDER	Female	26,964	75	88	97	92	1,613	97	7	3	30
	Male	25,605	70	84	96	89	1,578	97	7	3	28
ETHNICITY	Asian	2,583	51	71	92	80	1,511	84	55	4	65
	Black	3,835	40	60	85	72	1,449	95	11	10	75
	Hispanic	1,873	44	63	85	72	1,461	82	53	11	73
	Am. Indian	1,053	51	72	91	80	1,496	98	1	7	66
	White	42,958	79	91	98	94	1,623	99	1	2	19
LEP		2,658	26	47	79	62	1,387	74	—	7	84
NEW TO DISTRICT		1,451	54	70	88	74	1,490	89	15	—	55
MIGRANTS		150	27	47	76	56	1,382	77	76	14	96
F/R LUNCH		14,554	53	71	91	80	1,502	93	20	6	—
ATTENDANCE RATE	95–100%	37,588	75	88	97	92	1,607	98	7	1	25
	90–94%	10,195	72	86	96	90	1,588	98	6	3	34
	0–89%	2,469	59	76	92	83	1,531	97	6	6	53
MIDYEAR SCHOOL TRANSFERS	0	47,841	75	88	97	92	1,604	98	6	2	27
	1	2,171	53	71	90	79	1,504	92	19	7	63
	2 or more	240	38	59	85	69	1,439	93	11	18	85
STRATA	Mpls/St. Paul	5,387	47	65	87	75	1,482	92	28	5	69
	TC Suburbs	22,450	78	90	98	93	1,626	97	5	3	17
	Outstate 2000+	11,456	75	88	97	92	1,600	99	4	3	27
	Outstate 2000-	12,643	74	88	97	92	1,594	99	2	3	34
CHARTER		663	49	63	85	72	1,475	93	19	6	59
ALCs		52	50	71	92	73	1,494	90	2	51	48

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.10 2003 Grade 5: *Minnesota Comprehensive Assessment* Results in Mathematics for Public School Students Tested, except those with Limited English Proficiency

		No. Tested	% At or Above Level III	% At or Above Level IIb	% At or Above Level IIa	Mean Proficiency Index	Mean Scale Score	% Enr. Students Tested	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		57,113	60	79	95	85	1,544	97	15	3	28
GENDER	Female	27,888	59	79	95	85	1,542	97	10	3	28
	Male	29,189	61	80	95	85	1,547	97	19	3	27
ETHNICITY	Asian	1,399	67	85	97	89	1,579	93	7	5	43
	Black	4,264	23	44	79	59	1,379	94	20	9	75
	Hispanic	1,181	42	65	91	75	1,469	92	17	10	56
	Am. Indian	1,294	33	58	87	69	1,435	95	22	7	69
	White	48,659	64	83	97	88	1,563	97	14	2	21
SPECIAL ED		7,317	29	49	79	57	1,403	87	—	4	42
NEW TO DISTRICT		1,562	37	59	86	67	1,437	91	19	—	55
MIGRANTS		42	29	52	91	65	1,413	88	7	9	94
F/R LUNCH		15,248	39	62	89	72	1,454	95	22	6	—
ATTENDANCE RATE	95–100%	40,462	63	82	96	88	1,560	98	13	1	23
	90–94%	11,334	55	77	94	83	1,525	96	16	3	34
	0–89%	2,940	41	63	88	71	1,459	92	25	6	55
MIDYEAR SCHOOL TRANSFERS	0	52,127	62	81	96	87	1,552	97	14	2	25
	1	2,298	38	61	87	71	1,452	94	22	8	60
	2 or more	311	21	39	74	52	1,362	90	33	17	85
STRATA	Mpls/St. Paul	4,773	40	59	85	69	1,455	94	18	5	62
	TC Suburbs	24,629	67	84	96	89	1,575	98	13	3	16
	Outstate 2000+	12,795	59	80	96	86	1,543	97	16	3	27
	Outstate 2000-	14,259	56	79	96	85	1,528	97	15	3	35
CHARTER		653	36	56	84	67	1,426	95	16	7	52
ALCs		58	28	50	85	61	1,402	88	13	51	46

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.11 2003 Grade 5: *Minnesota Comprehensive Assessment* Results in Mathematics for Public School Students Tested, except those New to their District Since October 1, 2002

		No. Tested	% At or Above Level III	% At or Above Level IIb	% At or Above Level IIa	Mean Proficiency Index	Mean Scale Score	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% F/R Students
TOTAL		58,334	58	78	95	84	1,539	96	6	14	30
GENDER	Female	28,474	58	77	94	84	1,536	96	6	10	31
	Male	29,824	59	79	95	85	1,542	95	6	18	30
ETHNICITY	Asian	2,707	45	66	92	77	1,492	83	56	8	66
	Black	4,172	23	43	79	59	1,379	92	9	20	77
	Hispanic	1,989	30	52	84	65	1,415	82	52	15	73
	Am. Indian	1,216	34	59	88	70	1,439	95	1	22	68
	White	47,934	64	84	97	88	1,564	97	1	14	21
LEP		2,783	20	41	80	59	1,374	74	—	11	85
SPECIAL ED		7,341	29	48	78	56	1,400	86	5	—	43
MIGRANTS		152	11	32	76	53	1,338	81	75	9	97
F/R LUNCH		16,762	36	59	88	71	1,444	91	17	20	—
ATTENDANCE RATE	95–100%	41,952	62	81	96	87	1,553	96	6	13	26
	90–94%	11,517	54	75	94	82	1,520	95	5	16	36
	0–89%	2,907	40	63	88	71	1,458	92	6	24	55
MIDYEAR SCHOOL TRANSFERS	0	53,648	60	80	95	86	1,547	96	6	14	28
	1	2,436	36	59	86	69	1,443	90	17	20	63
	2 or more	292	19	39	75	53	1,360	92	9	33	85
STRATA	Mpls/St. Paul	5,963	35	55	85	67	1,438	90	27	16	70
	TC Suburbs	24,672	66	84	96	89	1,574	96	4	13	17
	Outstate 2000+	12,841	59	79	95	85	1,540	96	4	15	29
	Outstate 2000-	14,125	56	78	95	85	1,527	97	2	14	36
CHARTER		729	33	51	82	65	1,412	92	19	16	58
ALCs		32	13	34	81	56	1,348	94	3	15	82

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.12 2003 Grade 5: *Minnesota Comprehensive Assessment* Results in Mathematics for Public School Students Tested, except those in Special Education

		No. Tested	% At or Above Level III	% At or Above Level IIb	% At or Above Level IIa	Mean Proficiency Index	Mean Scale Score	% Enr. Students Tested	% LEP Students	% New Students	% F/R Students
TOTAL		52,452	62	82	97	88	1,556	97	7	3	29
GENDER	Female	26,870	60	80	96	87	1,548	97	7	3	30
	Male	25,546	64	84	97	90	1,564	97	7	3	28
ETHNICITY	Asian	2,596	47	69	94	80	1,504	84	55	4	65
	Black	3,819	25	47	84	64	1,397	95	10	10	75
	Hispanic	1,881	32	55	87	70	1,429	83	53	11	73
	Am. Indian	1,044	37	64	92	76	1,460	97	1	7	66
	White	42,796	68	88	99	92	1,582	99	1	2	19
LEP		2,656	21	44	83	62	1,384	74	—	7	84
NEW TO DISTRICT		1,459	38	61	88	71	1,447	90	15	—	55
MIGRANTS		151	14	38	79	54	1,354	77	76	14	96
F/R LUNCH		14,507	40	64	91	77	1,465	93	20	6	—
ATTENDANCE RATE	95–100%	37,498	65	84	97	90	1,570	97	7	1	25
	90–94%	10,130	59	80	96	87	1,541	97	6	3	34
	0–89%	2,450	45	68	93	79	1,483	96	6	6	53
MIDYEAR SCHOOL TRANSFERS	0	47,677	64	84	97	90	1,565	98	6	2	27
	1	2,160	40	63	89	74	1,463	92	19	7	63
	2 or more	241	24	46	83	62	1,396	93	11	18	85
STRATA	Mpls/St. Paul	5,382	38	59	88	73	1,456	92	28	5	69
	TC Suburbs	22,410	69	87	98	92	1,588	97	5	3	17
	Outstate 2000+	11,402	63	84	98	90	1,559	98	4	3	27
	Outstate 2000-	12,597	60	83	98	89	1,546	98	2	3	34
CHARTER		657	36	55	86	68	1,429	93	19	6	59
ALCs		50	32	52	84	60	1,409	86	2	51	48

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.13 2003 Grade 5: *Minnesota Comprehensive Assessment* Results in Writing for Public School Students Tested, except those with Limited English Proficiency

		No. Tested	% At or Above Level III	% At or Above Level IIb	% At or Above Level IIa	Mean Scale Score	% Enr. Students Tested	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		57,791	60	70	91	1,598	97	15	3	28
GENDER	Female	28,242	70	78	95	1,693	97	10	3	28
	Male	29,478	50	61	87	1,507	96	19	3	27
ETHNICITY	Asian	1,421	71	80	96	1,709	94	7	4	43
	Black	4,308	37	46	77	1,365	95	20	9	75
	Hispanic	1,184	51	61	88	1,502	91	17	9	57
	Am. Indian	1,301	37	48	79	1,377	94	22	7	69
	White	48,772	62	72	92	1,624	97	14	2	21
SPECIAL ED		7,385	28	37	68	1,274	87	—	4	42
NEW TO DISTRICT		1,525	44	53	81	1,427	88	19	—	54
MIGRANTS		48	36	45	81	1,385	89	7	9	94
F/R LUNCH		15,370	43	53	83	1,434	95	22	6	—
ATTENDANCE RATE	95–100%	40,554	62	72	92	1,622	98	13	1	23
	90–94%	11,387	57	66	89	1,567	96	16	3	34
	0–89%	2,957	45	55	82	1,448	92	25	6	55
MIDYEAR SCHOOL TRANSFERS	0	52,254	61	71	91	1,610	97	14	2	25
	1	2,322	44	54	82	1,447	94	22	8	60
	2 or more	322	29	37	71	1,277	91	33	16	85
STRATA	Mpls/St. Paul	4,839	45	54	82	1,452	93	18	5	62
	TC Suburbs	24,876	67	76	93	1,670	97	13	3	16
	Outstate 2000+	12,885	60	70	91	1,590	97	16	3	27
	Outstate 2000-	14,501	53	64	89	1,538	96	15	3	35
CHARTER		686	40	49	80	1,402	95	16	6	52
ALCs		67	31	37	75	1,341	88	11	49	48

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.14 2003 Grade 5: *Minnesota Comprehensive Assessment* Results in Writing for Public School Students Tested, except those New to their District Since October 1, 2002

		No. Tested	% At or Above Level III	% At or Above Level IIb	% At or Above Level IIa	Mean Scale Score	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% F/R Students
TOTAL		59,284	59	69	90	1,589	96	6	14	30
GENDER	Female	28,954	69	77	94	1,683	96	6	10	31
	Male	30,259	49	60	86	1,498	95	6	18	30
ETHNICITY	Asian	2,857	52	62	88	1,538	87	56	9	66
	Black	4,245	36	46	76	1,360	93	9	20	77
	Hispanic	2,071	39	49	80	1,398	85	52	15	74
	Am. Indian	1,229	38	49	79	1,382	94	1	22	68
	White	48,077	63	72	92	1,625	98	1	14	21
LEP		3,018	30	41	75	1,328	79	—	11	85
SPECIAL ED		7,450	27	37	68	1,273	87	5	—	43
MIGRANTS		169	19	29	66	1,245	85	75	9	97
F/R LUNCH		17,114	41	52	81	1,419	92	17	20	—
ATTENDANCE RATE	95–100%	42,235	61	71	91	1,610	97	6	13	26
	90–94%	11,609	56	66	88	1,560	96	5	16	36
	0–89%	2,939	44	55	81	1,444	92	6	24	55
MIDYEAR SCHOOL TRANSFERS	0	53,976	60	70	91	1,601	96	6	14	28
	1	2,506	42	51	80	1,427	92	17	20	63
	2 or more	301	28	36	71	1,269	92	9	32	85
STRATA	Mpls/St. Paul	6,131	41	51	81	1,422	91	27	16	70
	TC Suburbs	24,998	66	76	93	1,667	96	4	13	17
	Outstate 2000+	12,992	59	69	91	1,586	97	4	15	29
	Outstate 2000-	14,374	53	64	89	1,537	96	2	15	36
CHARTER		785	36	46	78	1,377	95	19	16	58
ALCs		42	24	32	74	1,287	93	3	15	82

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.15 2003 Grade 5: *Minnesota Comprehensive Assessment* Results in Writing for Public School Students Tested, except those in Special Education

		No. Tested	% At or Above Level III	% At or Above Level IIb	% At or Above Level IIa	Mean Scale Score	% Enr. Students Tested	% LEP Students	% New Students	% F/R Students
TOTAL		53,283	63	73	93	1,629	97	7	3	29
GENDER	Female	27,286	71	80	96	1,708	97	7	3	30
	Male	25,926	54	65	90	1,546	97	7	3	28
ETHNICITY	Asian	2,737	54	65	90	1,563	88	55	4	65
	Black	3,865	40	51	82	1,416	95	10	10	75
	Hispanic	1,950	42	52	83	1,432	85	53	10	73
	Am. Indian	1,051	43	54	84	1,435	97	1	7	66
	White	42,875	67	77	95	1,667	99	1	2	19
LEP		2,877	32	43	78	1,352	79	—	7	84
NEW TO DISTRICT		1,449	48	57	86	1,479	87	15	—	55
MIGRANTS		170	20	29	69	1,255	82	76	13	96
F/R LUNCH		14,791	46	57	87	1,473	94	20	6	—
ATTENDANCE RATE	95–100%	37,698	65	75	94	1,649	98	7	1	25
	90–94%	10,187	61	70	92	1,609	97	6	2	34
	0–89%	2,481	49	61	87	1,506	96	6	6	53
MIDYEAR SCHOOL TRANSFERS	0	47,909	64	74	94	1,642	98	6	1	27
	1	2,208	47	57	85	1,481	93	19	7	63
	2 or more	249	33	43	82	1,381	94	11	16	85
STRATA	Mpls/St. Paul	5,520	45	56	85	1,468	93	28	5	69
	TC Suburbs	22,693	70	79	95	1,702	97	5	3	17
	Outstate 2000+	11,506	64	74	94	1,630	98	4	3	27
	Outstate 2000-	12,852	57	68	92	1,578	98	2	3	34
CHARTER		708	40	50	83	1,431	95	19	6	59
ALCs		62	33	41	78	1,377	89	2	51	48

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.16 2003 Grade 8: *Basic Skills Test* Results in Reading for Public School Students Tested, except those with Limited English Proficiency

		No. Tested	% Meeting Minimum Standard	Mean Number Correct	Mean Scale Score	% Enr. Students Tested	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		61,609	83	34	651	97	13	3	24
GENDER	Female	30,353	85	35	655	97	8	3	24
	Male	31,193	82	34	647	97	18	3	24
ETHNICITY	Asian	1,625	85	35	651	97	6	2	42
	Black	3,807	52	28	602	94	23	7	74
	Hispanic	1,189	71	32	629	96	16	6	53
	Am. Indian	1,375	59	29	610	93	24	9	64
	White	52,861	87	35	656	98	12	2	18
SPECIAL ED		7,505	44	27	592	90	—	5	43
NEW TO DISTRICT		1,515	62	30	619	92	27	—	53
MIGRANTS		38	42	27	591	95	15	15	85
F/R LUNCH		14,288	66	31	620	95	24	6	—
ATTENDANCE RATE	95–100%	38,245	88	35	658	98	11	1	18
	90–94%	14,848	82	34	647	97	15	2	26
	0–89%	5,895	67	31	625	92	26	7	49
MIDYEAR SCHOOL TRANSFERS	0	56,177	86	35	654	98	12	2	22
	1	2,341	61	30	615	94	28	11	57
	2 or more	479	44	27	592	89	52	19	79
STRATA	Mpls/St. Paul	4,564	63	30	620	95	18	4	60
	TC Suburbs	25,996	88	35	658	98	12	2	14
	Outstate 2000+	14,359	84	35	651	97	14	3	24
	Outstate 2000-	16,071	83	34	648	97	13	3	30
CHARTER		619	67	32	630	96	20	6	43
ALCs		481	47	27	596	91	17	16	60

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.17 2003 Grade 8: *Basic Skills Test* Results in Reading for Public School Students Tested, except those New to their District Since October 1, 2002

		No. Tested	% Meeting Minimum Standard	Mean Number Correct	Mean Scale Score	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% F/R Students
TOTAL		63,201	82	34	648	97	5	13	26
GENDER	Female	31,034	84	35	652	98	5	8	26
	Male	32,104	80	34	644	97	5	17	27
ETHNICITY	Asian	3,221	62	31	621	98	51	9	64
	Black	4,026	50	28	599	95	11	21	75
	Hispanic	1,912	55	29	608	95	42	14	66
	Am. Indian	1,272	60	30	612	94	0+	23	63
	White	52,018	87	35	657	98	0+	12	18
LEP		3,107	36	26	584	96	—	10	85
SPECIAL ED		7,425	43	26	591	91	4	—	43
MIGRANTS		118	31	25	580	93	73	10	93
F/R LUNCH		16,117	61	30	615	95	16	21	—
ATTENDANCE RATE	95–100%	39,766	86	35	655	98	5	10	21
	90–94%	15,198	80	34	645	97	4	14	28
	0–89%	5,826	66	31	624	92	6	25	50
MIDYEAR SCHOOL TRANSFERS	0	57,934	84	35	651	98	4	12	24
	1	2,433	58	29	610	94	14	23	60
	2 or more	431	41	26	590	89	9	46	80
STRATA	Mpls/St. Paul	6,088	56	29	611	95	28	16	68
	TC Suburbs	26,226	87	35	657	98	3	12	15
	Outstate 2000+	14,407	83	34	650	97	3	13	25
	Outstate 2000-	15,853	83	34	648	97	1	13	30
CHARTER		627	65	31	629	96	7	19	45
ALCs		454	43	27	593	92	11	16	63

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out). 0+ indicates less than one-half of one percentage point.

Table B.18 2003 Grade 8: *Basic Skills Test* Results in Reading for Public School Students Tested, except those in Special Education

		No. Tested	% Meeting Minimum Standard	Mean Number Correct	Mean Scale Score	% Enr. Students Tested	% LEP Students	% New Students	% F/R Students
TOTAL		57,022	86	35	655	98	5	2	25
GENDER	Female	29,477	87	35	657	98	5	3	25
	Male	27,482	86	35	654	98	6	2	24
ETHNICITY	Asian	3,036	65	31	625	98	49	3	63
	Black	3,451	56	29	608	96	14	6	74
	Hispanic	1,761	59	30	613	94	44	6	66
	Am. Indian	1,062	67	31	620	94	0	8	62
	White	46,960	92	36	664	99	1	2	16
LEP		2,918	38	26	587	95	—	5	84
NEW TO DISTRICT		1,246	68	32	626	92	11	—	52
MIGRANTS		114	32	25	583	90	73	10	94
F/R LUNCH		13,625	68	32	623	97	18	5	—
ATTENDANCE RATE	95–100%	36,293	90	36	661	99	5	1	20
	90–94%	13,423	85	35	652	98	5	2	26
	0–89%	4,769	75	33	636	94	7	6	47
MIDYEAR SCHOOL TRANSFERS	0	52,134	89	35	658	99	5	1	22
	1	2,074	64	31	619	95	17	9	58
	2 or more	280	48	28	601	91	15	15	80
STRATA	Mpls/St. Paul	5,344	62	31	620	96	29	3	67
	TC Suburbs	23,925	90	36	663	98	4	2	14
	Outstate 2000+	12,938	88	35	657	98	3	2	22
	Outstate 2000-	14,271	88	35	655	98	1	2	28
CHARTER		544	71	32	636	96	8	6	48
ALCs		451	47	28	597	91	12	15	62

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.19 2003 Grade 8: *Basic Skills Test* Results in Mathematics for Public School Students Tested, except those with Limited English Proficiency

		No. Tested	% Meeting Minimum Standard	Mean Number Correct	Mean Scale Score	% Enr. Students Tested	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		61,647	74	55	632	97	13	3	24
GENDER	Female	30,382	73	55	632	98	8	3	24
	Male	31,202	74	55	633	97	18	3	24
ETHNICITY	Asian	1,619	80	57	643	97	6	2	42
	Black	3,803	35	44	583	94	23	7	74
	Hispanic	1,197	56	51	609	96	16	6	53
	Am. Indian	1,358	43	47	593	92	24	9	64
	White	52,907	78	56	638	98	12	2	18
SPECIAL ED		7,490	31	43	578	90	—	5	43
NEW TO DISTRICT		1,531	46	47	597	93	27	—	53
MIGRANTS		39	49	47	590	98	15	15	85
F/R LUNCH		14,303	52	49	604	95	23	6	—
ATTENDANCE RATE	95–100%	38,237	80	57	641	98	11	1	18
	90–94%	14,848	71	54	627	97	15	2	26
	0–89%	5,885	52	49	604	92	26	7	49
MIDYEAR SCHOOL TRANSFERS	0	56,178	76	56	636	98	12	2	22
	1	2,324	45	47	596	93	28	11	57
	2 or more	477	25	41	573	89	51	19	79
STRATA	Mpls/St. Paul	4,558	50	48	603	94	18	4	60
	TC Suburbs	25,967	77	56	637	98	12	2	14
	Outstate 2000+	14,372	76	56	635	97	14	3	24
	Outstate 2000-	16,116	74	55	631	98	13	3	30
CHARTER		634	58	51	614	98	20	6	43
ALCs		492	27	42	576	93	17	16	60

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.20 2003 Grade 8: *Basic Skills Test* Results in Mathematics for Public School Students Tested, except those New to their District Since October 1, 2002

		No. Tested	% Meeting Minimum Standard	Mean Number Correct	Mean Scale Score	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% F/R Students
TOTAL		63,225	73	55	631	97	5	13	26
GENDER	Female	31,057	72	55	630	98	5	8	26
	Male	32,105	73	55	631	97	5	17	27
ETHNICITY	Asian	3,223	61	52	618	98	51	9	64
	Black	4,027	34	43	582	95	11	21	75
	Hispanic	1,908	44	47	594	94	42	14	66
	Am. Indian	1,250	46	47	596	92	0+	23	62
	White	52,054	78	57	638	98	0+	12	18
LEP		3,109	34	44	583	96	—	10	85
SPECIAL ED		7,405	31	42	578	90	4	—	43
MIGRANTS		117	32	44	580	92	73	10	93
F/R LUNCH		16,136	50	49	602	95	16	21	—
ATTENDANCE RATE	95–100%	39,768	78	57	638	98	5	10	21
	90–94%	15,201	69	54	625	97	4	14	28
	0–89%	5,799	51	49	603	92	6	25	50
MIDYEAR SCHOOL TRANSFERS	0	57,931	75	56	634	98	4	12	24
	1	2,416	43	47	594	93	14	23	60
	2 or more	429	27	42	575	89	9	46	79
STRATA	Mpls/St. Paul	6,092	46	47	598	95	28	16	68
	TC Suburbs	26,195	76	56	636	98	3	12	15
	Outstate 2000+	14,409	75	56	634	97	3	13	25
	Outstate 2000-	15,887	74	55	632	98	1	13	30
CHARTER		642	59	51	615	98	7	19	45
ALCs		458	25	42	573	92	11	15	63

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out). 0+ indicates less than one-half of one percentage point.

Table B.21 2003 Grade 8: *Basic Skills Test* Results in Mathematics for Public School Students Tested, except those in Special Education

		No. Tested	% Meeting Minimum Standard	Mean Number Correct	Mean Scale Score	% Enr. Students Tested	% LEP Students	% New Students	% F/R Students
TOTAL		57,085	77	56	637	98	5	2	25
GENDER	Female	29,500	76	56	635	98	5	3	25
	Male	27,522	80	57	640	98	6	2	24
ETHNICITY	Asian	3,042	64	53	622	98	49	3	63
	Black	3,456	39	46	590	97	14	6	74
	Hispanic	1,762	47	48	598	94	44	6	66
	Am. Indian	1,049	51	50	603	93	0+	8	62
	White	47,013	83	58	644	99	0+	2	16
LEP		2,928	36	45	586	96	—	5	84
NEW TO DISTRICT		1,265	52	49	604	94	11	—	52
MIGRANTS		113	34	45	584	89	73	10	94
F/R LUNCH		13,651	57	51	610	97	18	5	—
ATTENDANCE RATE	95–100%	36,309	83	58	644	99	5	1	20
	90–94%	13,427	74	56	632	98	5	2	26
	0–89%	4,743	60	52	614	94	7	6	47
MIDYEAR SCHOOL TRANSFERS	0	52,135	80	57	640	99	5	1	22
	1	2,068	49	49	602	95	17	9	58
	2 or more	279	34	45	585	91	15	15	80
STRATA	Mpls/St. Paul	5,357	52	50	606	96	29	3	67
	TC Suburbs	23,908	80	57	641	98	4	2	14
	Outstate 2000+	12,947	81	57	641	98	3	2	22
	Outstate 2000-	14,315	80	57	638	99	1	2	28
CHARTER		558	65	53	621	98	8	6	48
ALCs		459	27	43	577	92	12	15	62

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out). 0+ indicates less than one-half of one percentage point.

Table B.22 2003 Grade 10: *Basic Skills Test* Results in Writing for Public School Students Tested, except those with Limited English Proficiency

		No. Tested	% Meeting Minimum Standard	Mean Scale Score	% Enr. Students Tested	% Sp. Ed Students	% New Students	% F/R Students
TOTAL		62,030	93	3.25	97	13	3	20
GENDER	Female	30,269	96	3.38	97	8	3	20
	Male	31,706	90	3.13	97	17	3	21
ETHNICITY	Asian	1,836	92	3.27	98	4	3	39
	Black	3,115	73	2.81	94	22	9	66
	Hispanic	1,077	83	3.01	94	16	7	48
	Am. Indian	1,130	81	2.93	91	24	12	58
	White	54,076	95	3.29	97	12	2	16
SPECIAL ED		7,092	64	2.65	90	—	7	38
NEW TO DISTRICT		1,641	77	2.87	92	29	—	54
MIGRANTS		32	72	2.78	89	17	14	78
F/R LUNCH		12,101	82	2.99	94	23	7	—
ATTENDANCE RATE	95–100%	37,504	95	3.32	98	10	1	15
	90–94%	14,138	93	3.24	97	13	2	22
	0–89%	7,215	84	3.04	92	24	9	40
MIDYEAR SCHOOL TRANSFERS	0	55,406	94	3.29	98	11	2	18
	1	2,650	81	2.96	92	27	11	49
	2 or more	814	71	2.78	86	43	26	65
STRATA	Mpls/St. Paul	4,005	81	2.97	94	15	5	53
	TC Suburbs	25,798	94	3.30	97	11	3	12
	Outstate 2000+	14,583	93	3.27	96	13	3	20
	Outstate 2000-	16,860	93	3.25	98	13	3	25
CHARTER		784	78	2.93	96	19	15	46
ALCs		1,445	75	2.79	88	20	23	50

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out).

Table B.23 2003 Grade 10: *Basic Skills Test* Results in Writing for Public School Students Tested, except those New to their District Since October 1, 2002

		No. Tested	% Meeting Minimum Standard	Mean Scale Score	% Enr. Students Tested	% LEP Students	% Sp. Ed Students	% F/R Students
TOTAL		62,962	91	3.23	97	4	12	22
GENDER	Female	30,686	95	3.35	97	4	7	22
	Male	32,221	88	3.11	97	5	16	23
ETHNICITY	Asian	2,995	80	3.02	97	41	7	58
	Black	3,435	67	2.71	93	18	18	70
	Hispanic	1,605	66	2.74	91	40	14	60
	Am. Indian	1,004	82	2.95	92	0+	23	56
	White	53,127	95	3.30	97	0+	12	15
LEP		2,573	49	2.44	92	—	8	83
SPECIAL ED		6,821	63	2.64	90	3	—	37
MIGRANTS		75	51	2.47	88	64	9	86
F/R LUNCH		13,363	78	2.91	94	16	20	—
ATTENDANCE RATE	95–100%	38,534	94	3.29	98	4	9	17
	90–94%	14,346	91	3.22	97	4	13	24
	0–89%	7,021	82	3.01	92	7	23	41
MIDYEAR SCHOOL TRANSFERS	0	56,503	93	3.27	98	3	11	19
	1	2,745	74	2.86	92	15	23	52
	2 or more	664	66	2.72	86	10	38	65
STRATA	Mpls/St. Paul	5,277	74	2.85	95	28	13	63
	TC Suburbs	25,805	94	3.28	97	3	11	13
	Outstate 2000+	14,612	93	3.25	96	3	13	20
	Outstate 2000-	16,568	93	3.25	98	1	12	25
CHARTER		700	78	2.94	96	4	17	47
ALCs		1,236	72	2.75	86	11	19	54

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out). 0+ indicates less than one-half of one percentage point.

Table B.24 2003 Grade 10: *Basic Skills Test* Results in Writing for Public School Students Tested, except those in Special Education

		No. Tested	% Meeting Minimum Standard	Mean Scale Score	% Enr. Students Tested	% LEP Students	% New Students	% F/R Students
TOTAL		57,453	94	3.29	98	5	3	21
GENDER	Female	29,308	96	3.39	98	4	3	21
	Male	28,090	92	3.19	98	5	3	21
ETHNICITY	Asian	2,902	82	3.05	97	40	3	58
	Black	3,117	72	2.78	94	21	8	69
	Hispanic	1,492	69	2.78	91	41	8	60
	Am. Indian	879	89	3.05	94	0+	10	53
	White	48,267	98	3.36	98	0+	2	14
LEP		2,515	50	2.45	91	—	6	83
NEW TO DISTRICT		1,312	80	2.92	91	12	—	52
MIGRANTS		77	53	2.50	90	65	11	85
F/R LUNCH		11,610	83	3.00	95	19	6	—
ATTENDANCE RATE	95–100%	35,524	96	3.35	99	4	1	16
	90–94%	12,871	95	3.29	98	4	2	23
	0–89%	6,031	88	3.11	94	7	8	40
MIDYEAR SCHOOL TRANSFERS	0	51,507	96	3.33	99	4	1	18
	1	2,380	79	2.93	93	17	9	51
	2 or more	544	74	2.82	88	13	22	69
STRATA	Mpls/St. Paul	4,831	78	2.91	95	30	4	62
	TC Suburbs	23,709	96	3.34	98	3	2	12
	Outstate 2000+	13,250	96	3.32	97	3	2	18
	Outstate 2000-	14,983	96	3.32	98	1	2	23
CHARTER		680	82	2.99	96	5	14	48
ALCs		1,287	76	2.80	87	11	22	53

Note: LEP = limited English proficiency; Sp. Ed = special education; F/R = eligible for free or reduced-price lunch; New = enrolled since 1/1/02; Midyear School Transfers = the number of times a student transfers into a new school (does not include transfers out). 0+ indicates less than one-half of one percentage point.

APPENDIX C

HOW AYP TARGETS WERE DERIVED

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The initial starting points for AYP targets in 3rd and 5th grades were derived using *MCA* test results at grades three and five from 2000, 2001, and 2002.

Each record was evaluated to determine whether the student scored at or above achievement level IIb. If so, the student was given a “proficiency score” of 1.0. If the student scored at level IIa, the student was given a “proficiency score” of 0.5. Students scoring below achievement level IIa were given a score of 0. These proficiency scores were averaged across all students to obtain a school proficiency index. Technically, the index can range between 0 and 1, although they are usually written without decimals (e.g., 75 instead of .75 or 54 instead of .54).

Each school then had two proficiency indices, one for grade three and one for grade five. The school record also included the number of students tested at each of the two grades. This information was used to calculate the initial AYP target for each grade.

Next, the total number of students tested in the state was computed for each grade and subject. These statewide totals were then multiplied by .20 to determine the number of students corresponding to 20% of the total (e.g., if there were 1,200 students tested, as shown in Table C.1, 20% would be 240 students. Each school was then ranked by proficiency index from low (0) to high (100) for each grade/subject. Table C.1 shows 10 schools ranked from low to high based on their proficiency indices.

Starting from the bottom of this list, each school is assigned a cumulative total, i.e., the number of students in that school plus the number of students in all schools lower in the list. For example, the first school in Table C.1 has a proficiency index of 50, with 40 students. The cumulative column shows the number, “40.” The next school, with a proficiency index of 55 and 37 students, shows “77” as the cumulative total (37 + 40). The third school, with 150 students, had 197 written as the cumulative total (37 + 40 + 120).

Once the cumulative totals have been calculated, then one uses the 240 (20% of the total number of students) to find the initial target estimate. Starting from the school with the lowest cumulative total, one scans the list until

Table C.1: Hypothetical Calculation of an Initial Proficiency Index Target Estimate, where School G’s Proficiency Index (65) becomes the Initial Target Estimate

School	Proficiency Index	Number of Students	Cumulative Number of Students
A	95	123	1200
B	90	177	1077
C	85	201	900
D	80	199	699
E	75	53	500
F	70	200	447
G	65	50	247
H	60	120	197
I	55	37	77
J	50	40	40
Total		1200	
20% of Total		240	

Note: Taken from NCLB System Requirements/Business Rules DRAFT – Minnesota Department of Education.

arriving at the first school with a cumulative total equal to or greater than 240. The proficiency index of that school becomes the estimated target. In Table A.1, school G, which has a cumulative total of 247, is the school whose proficiency index (65) would become the estimated target.

This process was repeated three times for each grade and subject, once with academic year 2000 data, once with 2001 data, and once with 2002 data. Each grade/subject then had three estimated statewide starting points that were averaged to provide the initial starting point for that grade and subject. These starting points are shown in Table C.2, below. As shown in Table C.2, the AYP for each grade and subject will remain constant for three years and then will rise in equal increments to 100 in 2014. A school can achieve an index of 100 only if all students are scoring at or above the proficient level.

According to current plans, the same process will be used to determine the initial targets for new tests that will be added in 4th, 6th, 7th, and 8th grades.

Table C.2 Annual Measurable Objectives Expressed in Index Points

2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
3rd Grade Reading												
62.8	62.8	62.8	66.5	70.2	74.0	77.7	81.4	85.1	88.8	92.6	96.3	100
5th Grade Reading												
69.9	69.9	69.9	72.9	75.9	78.9	81.9	85	88.0	91.0	94.0	97.0	100
3rd Grade Mathematics												
66.2	66.2	66.2	69.6	73.0	76.3	79.7	83.1	86.5	89.9	93.2	96.6	100
5th Grade Mathematics												
65.4	65.4	65.4	68.9	72.3	75.8	79.2	82.7	86.2	89.6	93.1	96.5	100

Note: Annual Measurable Objectives for each grade and subject remain the same in the first three years. Information taken from NCLB System Requirements/Business Rules DRAFT – Minnesota Department of Education.