

CHAPTER III

Illinois State Assessments

The results of international and national assessments yield insights into the competition that will be faced by the Illinois workforce of the future. If these results are predictive, then many of these students, one day voting citizens, will lack the basic knowledge needed to truly understand complex, scientific topics of the day. In this section, the results of the Illinois State Assessments compare how well students have achieved the minimum state standards.

In Illinois, a decade of reform efforts accelerated in 1997, when the Illinois State Board of Education established the *Illinois Learning Standards* for early elementary grades through high school. The *Illinois Learning Standards* represent what students should know and be able to do in order to prepare for both livable-wage jobs and postsecondary education. Students' progress on achieving the standards is measured by the Illinois Standards Achievement Test (ISAT) in grades 3 through 8 and the *Prairie State Achievement Exam* (PSAE) in grade 11.

The *Illinois Learning Standards* and the assessments have fared relatively well in external reviews by independent agencies. The standards, which have been supplemented by performance indicators and sample classroom assessments, are generally regarded as rigorous. Evaluators have found that the assessments are aligned with the standards. Implementation of the standards has proceeded slowly, according to studies by the University of Illinois.⁸⁶

From 1999 to 2005, students in 3rd, 5th, and 8th grades took the ISAT mathematics exam. Beginning in 2006, students in 3rd through 8th grades take the ISAT reading and mathematics tests annually. The ISAT science exam is administered to students in 4th and 7th grades. Students in 11th grade take the PSAE, which includes mathematics and science subtests as well as the full ACT.

According to the federal *No Child Left Behind* law, by 2014, all students in every state should meet that state's standards. In Illinois, that means 100% of students must at least meet the standards as measured by the ISAT and PSAE. The federal law reinforces a position taken by the Illinois State Board of Education—that this level of achievement is necessary if students are to be prepared for college and for jobs with livable wages.

Student performance on the ISAT and PSAE exams is reported by four levels:⁸⁷

- "Academic Warning" - limited knowledge and skills in subject; applies knowledge and skills ineffectively
- "Below Standards" - demonstrates basic knowledge and skills in subject; applies knowledge in limited ways
- "Meets Standards" - demonstrates proficient knowledge and skills in the subject; effectively applies knowledge and skills to solve problems
- "Exceeds Standards" - demonstrates advanced knowledge and skills in the subject; creatively applies knowledge and skills to solve problems and evaluate the results

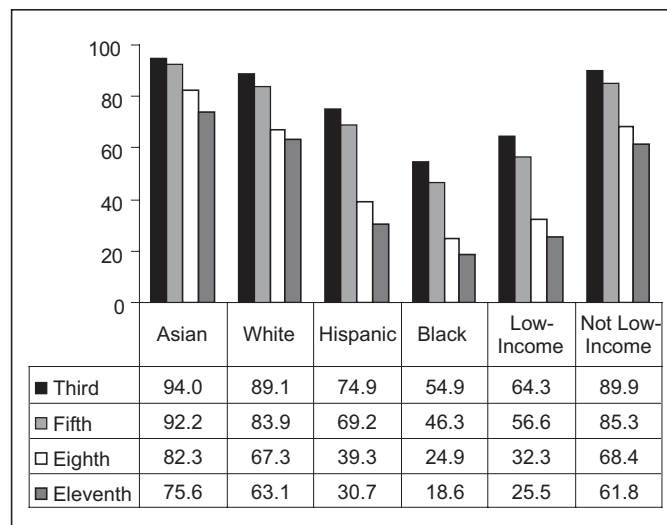
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Mathematics Achievement on Illinois State Assessments

As shown in the following figure, Illinois has three critical gaps in mathematics achievement that demand attention:

- **Decreasing Levels of Achievement from 3rd to 11th Grade.** From 3rd grade to 11th grade, the percentages of students meeting or exceeding standards decreases, especially between 5th and 8th grades (3rd grade - 79%, 5th grade - 73%, 8th grade - 54%, 11th grade - 53%). This decline in achievement holds true for all ethnic groups and income groups. By 11th grade, only slightly more than half of all students meet or exceed the state standards.
- **Low-income Students Lag Behind.** In 3rd grade, approximately 6 out of 10 low-income students meet or exceed standards; however, by 8th grade only 3 out of 10 meet the standards, and by 11th grade the number has decreased to fewer than 3 students in 10.
- **Hispanic and Black Students Lag Behind.** The academic achievement of Hispanic and black students lags behind that of their white peers. The white/Hispanic gap in mathematics is 15% in 3rd and 5th grades; however, the gap increases significantly in 8th and 11th grades until it doubles in size. The white/black gap begins at 32% in 3rd grade and increases to 45% by 11th grade. In 3rd grade, about 1 in 2 black students meet the state standards, and by 11th grade, only 1 in 5 meet the state standards.

Figure 20 Illinois State Assessments in Mathematics for 2005: Percentages of Students Meeting or Exceeding Standards⁸⁸



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The following figures show the trends in percentages of students meeting or exceeding the state standards from 2002 through 2005. During this period, black and Hispanic students' performance in mathematics improved substantially in 3rd and 5th grades.

Figure 21 ISAT 3rd Grade Mathematics: Students Meeting or Exceeding Standards⁸⁹

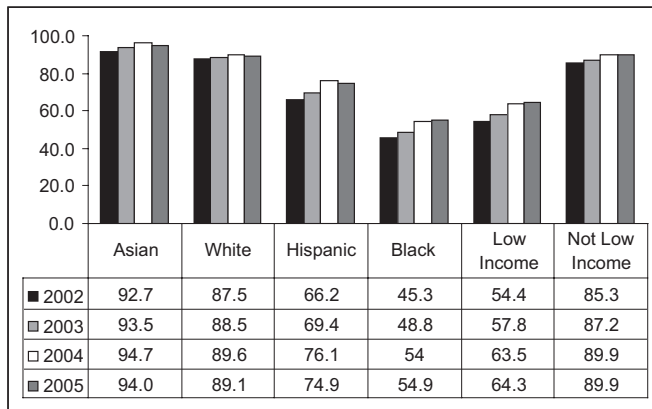


Figure 22 ISAT 5th Grade Mathematics Students Meeting or Exceeding Standards⁹⁰

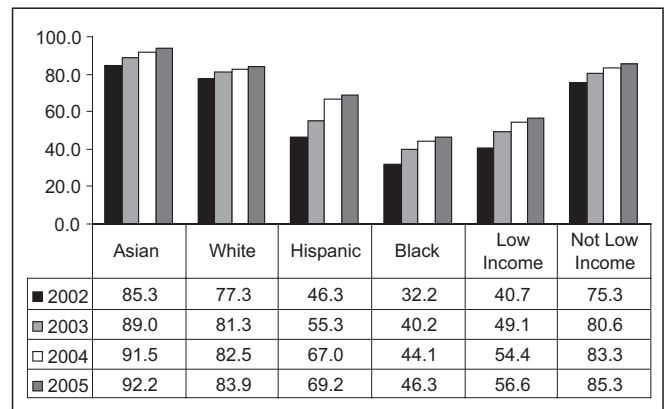


Figure 23 ISAT 8th Grade Mathematics: Students Meeting or Exceeding Standards⁹¹

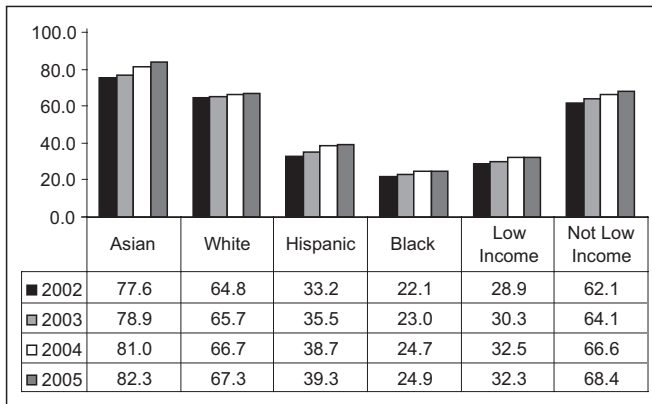
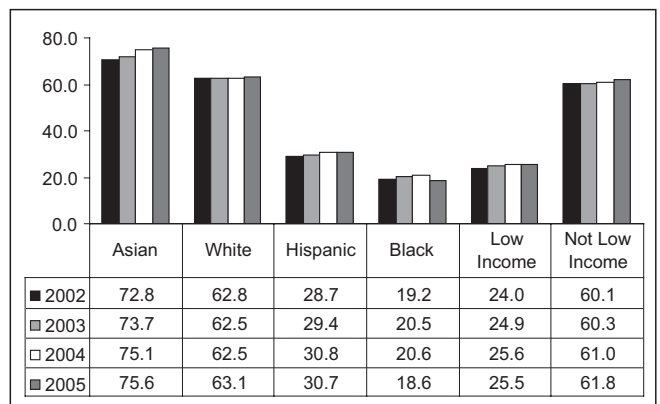


Figure 24 PSAE 11th Grade Mathematics: Students Meeting or Exceeding Standards⁹²



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Science Achievement on Illinois State Assessments

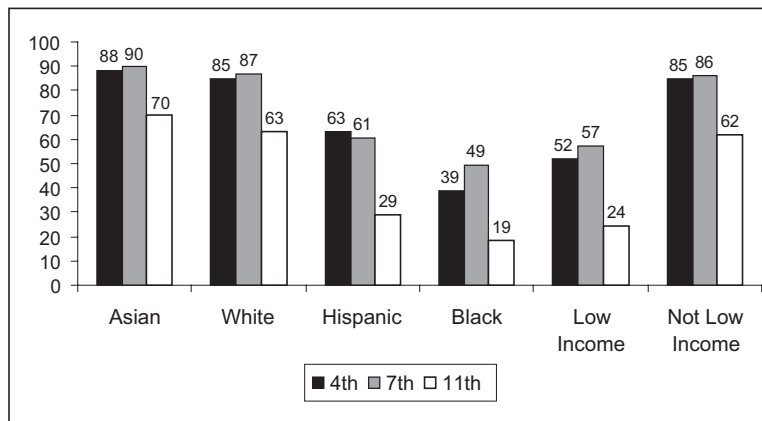
Students need a strong foundation in science to prepare them for a lifetime of rapid technological change; and Illinois needs a workforce that is able to function at the cutting edge in all occupations.

Illinois state assessments in science measure performance in the 4th, 7th, and 11th grades. The 2005 results show that students perform similarly in 4th and 7th grades. The middle school declines evident in mathematics do not seem to occur in science. Unfortunately, in 11th grade the percentages of students at this level have decreased significantly. In fact, 75% of the students met or exceeded the science standards in 7th grade, and only 53% reached this level in 11th grade.

Similar to the findings for mathematics, fewer than one-fourth of the low-income 11th grade students meet or exceed the standards, a significant decrease from the 57% meeting or exceeding standards in 7th grade.

The percentages of 11th grade Hispanic (29%) and black students (19%) meeting or exceeding the science standards in 2005 are lagging far behind their white peers (63%).

Figure 25 Illinois State Assessments in Science for 2005: Percentages of Students Meeting or Exceeding Standards⁹³



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The following figures show the trends from 2002 to 2005 in science. The performance of students at each grade level remained rather stable, except for the increase in percentage of Hispanic students in 4th grade who met or exceeded the standards.

Figure 26 ISAT 4th Grade Science: Students Meeting or Exceeding Standards⁹⁴

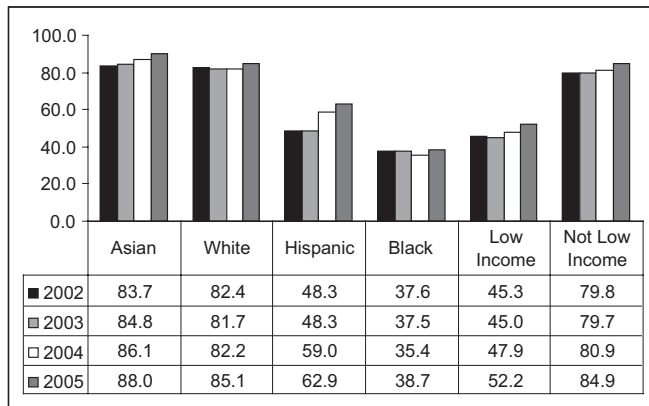


Figure 27 ISAT 7th Grade Science: Students Meeting or Exceeding Standards⁹⁵

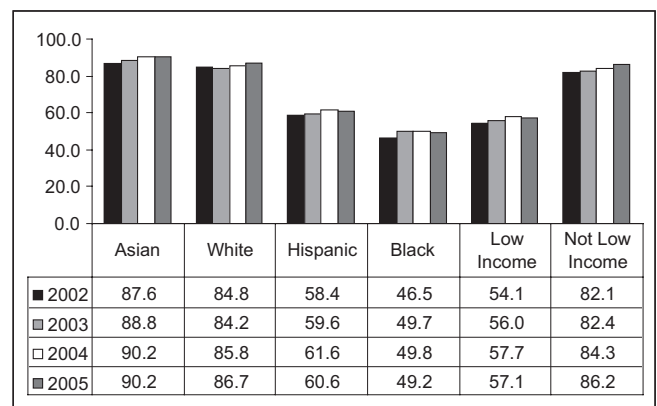
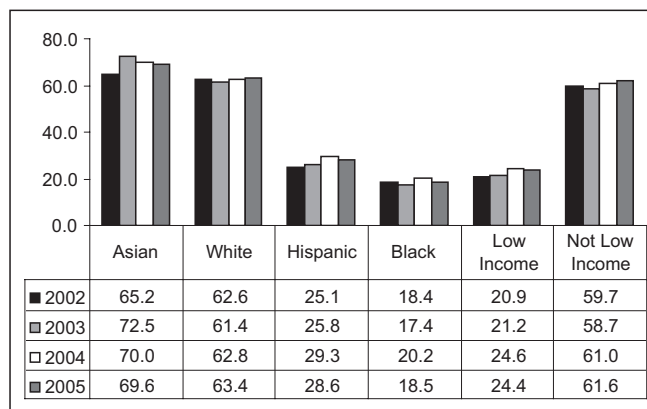


Figure 28 PSAE 11th Grade Science: Students Meeting or Exceeding Standards⁹⁶



Summary of Illinois State Assessments

According to *No Child Left Behind*, all students are to meet or exceed state standards by 2014 as measured by state assessments. Flat or slightly improved scores in recent years make achieving that goal problematic. Based on students' performance on the 2005 state assessments, only slightly more than half of all 11th graders met or exceeded the standards. Illinois needs to address the general level of performance, as well as the decreases from 3rd grade to 11th grade and the low performance of low-income, black, and Hispanic students.