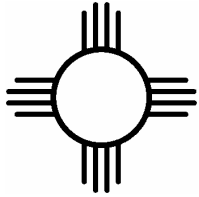


Spring 2008  
Executive Summary Report  
for the  
New Mexico  
High School Competency Exam  
(NMHSCE)

Produced by  
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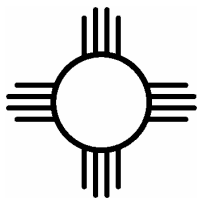


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## **The New Mexico High School Competency Exam (NMHSCE)**

### **Preface**

The New Mexico High School Competency Examination (NMHSCE) is a set of tests constructed to assess student performance in six content domains defined by the New Mexico Content Standards and Benchmarks. It supports the responsibility of New Mexico public schools to determine that students have attained adequate mastery of the New Mexico essential competencies.

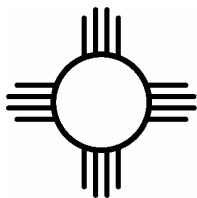
### **Background**

Beginning with the ninth-grade class of 1986-1987, New Mexico public high school students have been required to pass the New Mexico High School Competency Examination (NMHSCE) to receive a New Mexico high school diploma. The 1989-1990 school year was the first year that graduating seniors were required to pass the examination. Seniors who do not pass the examination, but fulfill the other course and credit requirements, are given the option of exiting with a certificate of completion or returning within the next five years to retake the examination, pass it, and receive a diploma. A student may receive an accommodation or waiver to the examination based on bilingual or special education program guidelines or unusual circumstances.

The NMHSCE assesses competencies in the content areas of Reading, Language Arts, Mathematics, Science, Social Studies, and Writing (Composition). Sophomores who fail any part of the NMHSCE have another chance in their junior year and two chances in their senior year to successfully complete the examination before graduation deadlines. All students participate; some participate through the standardized administration while others receive an accommodated administration as specified by their IEP. The remainder are administered the New Mexico Alternate Assessment. The NMHSCE may be taken in Spanish if the student qualifies to do so.

Test domain specifications, which describe the specific knowledge and skills that are assessed by the examination, were originally developed with the assistance and review of the Statewide Assessment Task Force and their colleagues and put into place with the first administration of the NMHSCE during the 1987-1988 school year.

The data from the tenth grade population tested that year were used to develop a New Mexico scale with a mean of 200 and a standard deviation of 40 for each of the following tests: Reading,



Language Arts, Mathematics, Science, and Social Studies. A standard setting committee met that year and recommended that a scale score of 150 would represent adequate performance on each of these tests. The New Mexico State Board of Education adopted that recommendation. The Composition (Writing) Test consists of a single prompt, different each year, and therefore not scaled. Instead, the scoring rubric provides the scale. This scale is a six-point rubric and uses the average of two reads. In the first few years of the program, a score of 2.5 was used as the passing score. In 1993-1994 the standard was raised to 3.0.

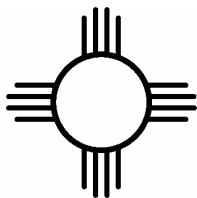
As the examination has evolved since 1986, new test items have been added, old ones replaced, and performance-based test items (open-ended and constructed response type items) have been piloted and included. These changes led to a revised examination, with new domain specifications, which was administered during the 1995-1996 school year. Individuals from the State Public Education Department, local school districts, institutions of higher education, and publisher's representatives were all involved in the development and review of the pool of new test items, as well as the new domain specifications for the 1995-1996 NMHSCE.

In 1996 a Standard Setting workshop using the Bookmark procedure was conducted to recommend the cut scores for passing. This Standard Setting workshop involved content specialists from the State Department of Education and teachers from local New Mexico schools utilizing the New Mexico Content Standards and Benchmarks. However the 150 scale score standard stayed in place until Spring 2001 at which time the standard was raised to 175. This change was in response to the recommendations of the 1996 standard setting committee.

### **Executive Summary of Results**

In Spring 2008, the New Mexico High School Competency Examination was administered to 29,715 tenth-grade students. The NMHSCE was also administered, in part or in its entirety, to those juniors and seniors who had not previously taken or passed one or more tests, as well as to students who had already completed all coursework, but had not passed the entire NMHSCE. The assessment was updated against the state Content Standards in 1995-1996, and the results, beginning in 1998-1999, have included most Special Education students in the standardized assessment.

Of the 19,672 tenth-grade students in the standardized administration attempting all six tests, 63.4% passed all of them. The overall percentage of students passing the NMHSCE has fluctuated over the years as shown by Figure 1 on page 7. On average, 85% of tenth-graders



passed all six subtests until the 2000-2001 school year. With the change to a passing score of 175 in 2001, a noticeable drop can be seen in the percentage passing all portions of the examination on the first attempt. For the past five years, the passing rate has averaged 63%.

All scores are associated with some measurement variability, as the scores are observed score and not true scores. A student's true score is the hypothetical average score that would result if the test could be administered repeatedly without the effect of practice or fatigue. The standard error of measurement gives the range within which the student's true score is likely to reside, and this value is shown in Figure 1. Thus the apparent change in passing rate over the past seven years is within the bounds of statistical variability, as also seen in the prior seven years.

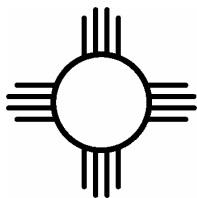
The overall mean scale scores have shown incremental changes over the years, decreasing slightly this year. The overall mean scale scores for the last four years presented in Table 1 below are slightly above the mean of 200 that was established in 1989. These trends are quite general and reflect performance on the separate tests of Reading, Mathematics, Science, and Social Studies.

Passing rates for each content area for grades 10, 11, and 12 are shown in Figures 2-4 on pages 8-10 and reflect the same general slight fluctuations in grade 10. Grade 11 and 12 results show improvement in all subtests in line with results from 2000-01 and 2001-02 results.

Table 1: New Mexico High School Competency Examination Mean Statewide Scale Scores\*

Year	Reading	Language Arts	Math	Science	Social Studies	Overall Mean Scale Score
2005	209.2	198.7	209.4	198.9	199.0	203.0
2006	212.0	198.7	208.6	195.8	199.4	202.9
2007	207.8	198.9	207.3	201.4	202.4	203.6
2008	204.5	198.2	206.0	207.4	200.5	203.3

\*composition test is not included



## Disaggregated Results

Disaggregated statewide Means Scale Scores are presented in detail in Table 4 on page 6. Graphical representations of the results for ethnicity, gender, ELL, special education and economic status are summarized in Figures 5-11.

### Results by Ethnicity

As shown in Table 2 below and Figures 5-6 on pages 11-12, it is evident that the groups continue to order themselves in essentially the same way that has held from the beginning of the program. One notable difference, however, is that, for the Spring 2008 administration, the Black and American Indian ethnic groups showed increases in passing rates, while the Asian group decreased by roughly 9%.

Table 2: Percentage of 10<sup>th</sup> Grade Students Passing All Six Subtests, by Ethnicity

Year	Caucasian/White	Black	Hispanic	Asian	American Indian
2005	81.2%	53.9%	54.7%	75.3%	44.3%
2006	80.9%	52.6%	53.2%	79.0%	49.4%
2007	78.5%	50.6%	55.2%	81.0%	47.0%
2008	80.6%	56.4%	56.3%	71.7%	51.1%

### Results by Gender

In the Spring 2008 testing administration, the percentage of tenth grade male students passing all six tests was 62.6%, and the percentage of female students passing all six tests was 64.3%. A review of the gender-based results by content area presented in Table 3 below and graphically as Figure 7 on page 13 shows minor differences between male and female scores. The largest difference occurred in the Language Arts and Composition tests. For the Language Arts test 75.6% of male students passed, compared to 86.3% of the female students and 90.9% of male students passed the Composition test, compared to 96.7% of the female students. In Math, Science and Social Studies, the males outperformed the females by small differences. The mean scale scores shown in Table 4 are consistent with these results.

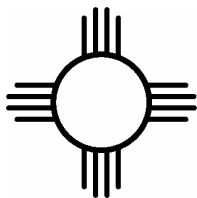


Table 3: Percentage of Grade 10 Students Passing Subtests, by Gender

Gender	Reading	Language Arts	Mathematics	Science	Social Studies	Composition
Total Male	83.4%	71.0%	79.4%	77.6%	81.7%	87.8%
Standardized Male	87.5%	75.6%	83.6%	81.8%	85.1%	90.9%
Total Female	87.5%	83.7%	79.8%	77.2%	79.2%	95.5%
Standardized Female	89.8%	86.3%	82.3%	79.6%	81.4%	96.7%

### Results for English Language Learners

The data portrayed by Figure 9 on page 15 show that English Language Learners passed each of the content areas at a lower rate than their non-ELL counterparts. Language Arts, Reading, and Science see the largest differences in passing rate, which are 39.8, 38.6, and 34.5 percentage points lower, respectively while the differences in Mathematics, Social Studies, and Composition are, respectively, 29.8, 27.8, and 18.3 percentage points lower.

### Results for Special Education Students

As shown in Figure 10 on page 16, fewer Special Education students passed each individual subtest on the first attempt than those in the non-Special Education category. More students passed the Reading content area than Language Arts, Mathematics, Science or Social Studies. The Composition passing rate was the highest, at 79.1%.

### Results for Economically Disadvantaged Students

Figure 11 on page 17 shows the performance levels for students in the economically disadvantaged category compared to their non-economically disadvantaged peers. The students with an economic disadvantage also demonstrated an academic disadvantage. That is, the percentage of students passing each subtest is lower for the economically disadvantaged population than for the non-economically disadvantaged population.

### Results for Spanish Language Test

Results for students who took the Spanish-language version of the test are presented in Figure 12 on page 18.

Table 4: Mean Statewide Scale Scores, by Disaggregation for Spring 2008

	Reading	L/A	Math	Science	Soc. St.	Overall	N	% Passing
Population								
Total Population	201.9	195.1	202.2	204.0	197.8	200.2	21152	59.7
Standardized Population	204.5	198.2	206.0	207.4	200.5	203.3	19672	63.4
Ethnicity								
Total White	214.1	207.5	218.6	223.8	212.3	215.3	6248	77.3
Standardized White	216.2	210.0	221.7	226.7	214.5	217.8	5924	80.6
Total Asian/Pacific Islander	211.0	210.6	226.5	220.3	205.7	214.8	301	70.8
Standardized Asian/Pacific Islander	211.5	211.6	227.1	221.0	206.7	215.6	293	71.7
Total Black	199.9	190.8	190.2	194.9	191.5	193.5	490	52.2
Standardized Black	203.1	194.4	195.6	199.0	194.8	197.4	450	56.4
Total Hispanic	196.9	190.0	195.4	196.1	191.3	193.9	10433	52.6
Standardized Hispanic	199.5	193.2	199.2	199.5	194.0	197.1	9632	56.3
Total American Indian	192.2	185.6	191.4	188.3	189.2	189.4	2379	47.0
Standardized American Indian	195.1	189.1	195.8	191.7	192.3	192.8	2166	51.1
Gender								
Total Male	199.9	188.5	203.0	206.6	200.4	199.7	10448	57.8
Standardized Male	203.2	192.3	207.8	211.1	204.0	203.7	9488	62.6
Total Female	204.1	201.8	201.6	201.6	195.2	200.9	10474	61.7
Standardized Female	205.9	203.9	204.4	204.0	197.2	203.1	9977	64.3
Disaggregations								
Total Special Ed.	190.0	179.0	184.9	189.7	186.1	185.9	1211	37.8
Standardized Special Ed.	191.5	181.3	187.7	192.1	188.5	188.2	1128	39.7
Total Non-Special Ed.	202.7	196.1	203.2	204.9	198.5	201.1	19941	61.0
Standardized Non-Special Ed.	205.3	199.2	207.1	208.4	201.2	204.2	18544	64.9
Total ELL	175.5	165.0	170.2	167.3	170.6	169.7	1336	16.2
Standardized ELL	177.0	167.5	173.2	169.2	172.4	171.9	1179	17.6
Total Economically Challenged	197.9	190.9	197.7	197.3	192.7	195.3	7690	53.6
Total Non-Economically Challenged	208.8	202.9	211.3	214.0	205.5	208.5	11982	69.8
Special Ed. W/Accommodations	166.8	152.5	150.1	157.7	161.1	157.6	1402	9.3
ELL W/Accommodations	167.9	159.3	159.0	159.2	158.6	160.8	136	12.5
Total 504 W/Accommodations	192.5	185.2	193.3	207.6	201.3	196.0	13	53.8
Total Migrant	177.7	154.5	189.3	159.4	172.1	170.6	17	11.8
Standardized Vocational	204.9	198.0	206.1	209.4	201.6	204.0	3274	65.2
White Special Ed. W/Accommodations	175.3	162.4	162.9	169.5	172.8	168.6	319	16.0
Asian Special Ed. W/Accommodations	184.4	165.4	199.0	188.2	176.0	182.6	5	20.0
Hispanic Special Ed. W/Accommodations	164.9	149.9	148.2	154.3	157.5	154.9	754	8.0
Black Special Ed. W/Accommodations	163.7	151.0	129.5	149.0	154.3	149.5	40	5.0
American Indian Special Ed. W/Accommodations	161.6	147.4	144.7	152.9	157.4	152.8	195	5.1
Female Special Ed. W/Accommodations	167.0	156.9	143.0	151.5	154.3	154.6	456	7.9
Male Special Ed. W/Accommodations	166.9	150.7	153.7	160.9	164.6	159.3	923	10.2

Figure 1: Percentage of 10<sup>th</sup> Grade Students Passing All Six Subtests  
*Statewide Summary, Standardized Administration*

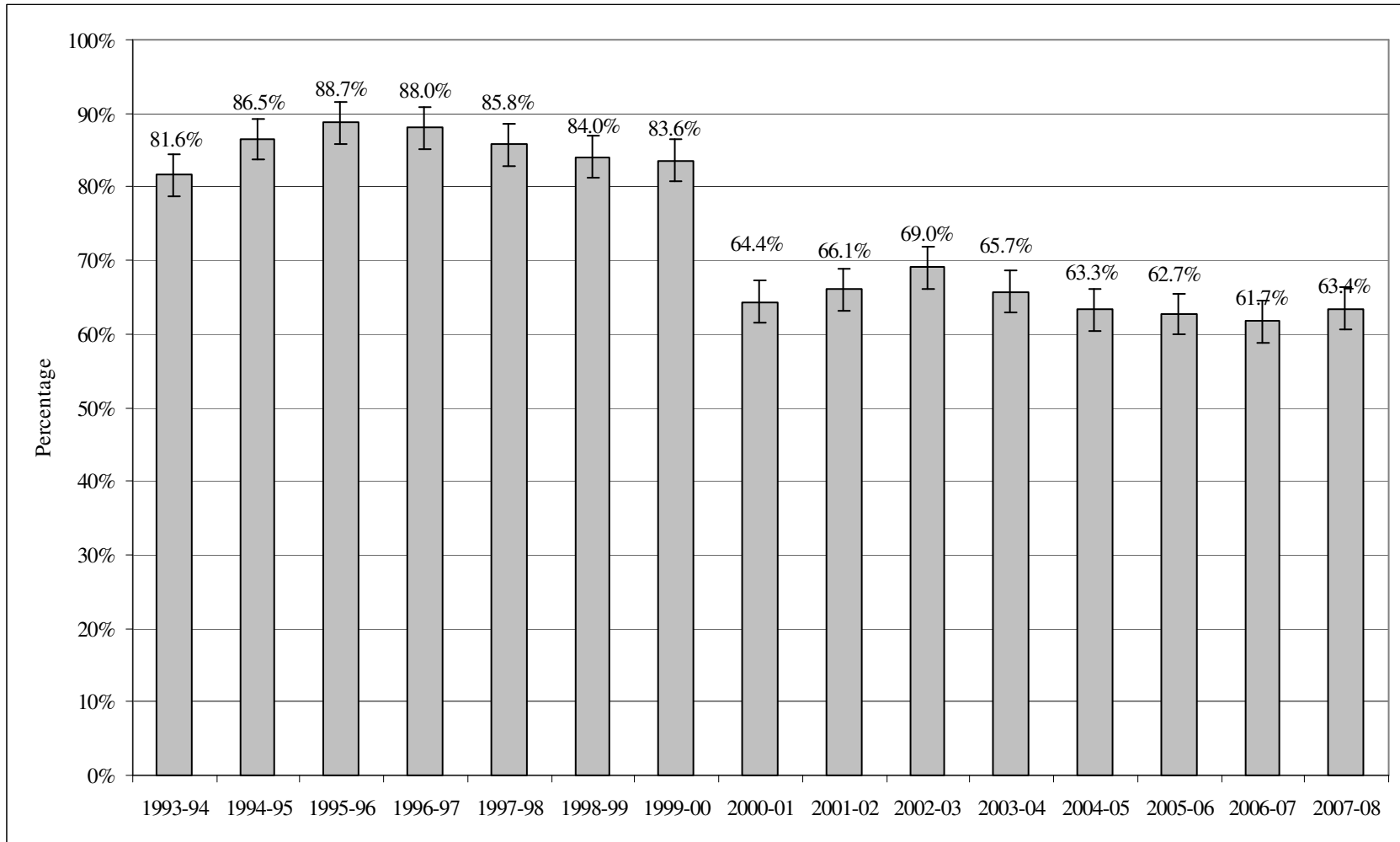


Figure 2: Performance on Individual Subtests: 10<sup>th</sup> Grade  
*Percentage of Students Passing by Subtest, Standardized Administrations*

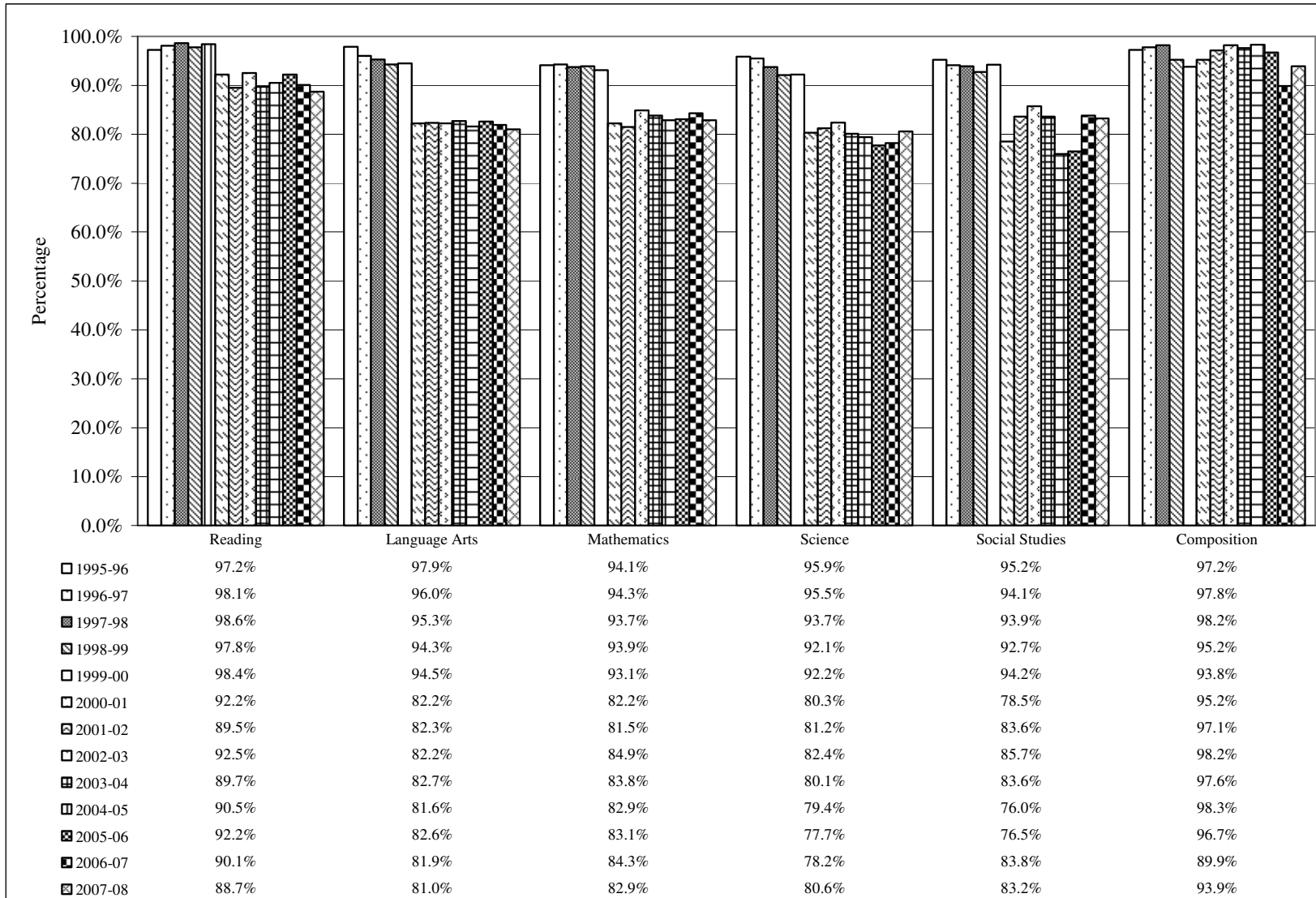


Figure 3: Performance on Individual Subtests: 11<sup>th</sup> Grade  
*Percentage of Students Passing by Subtest, Standardized Administrations*

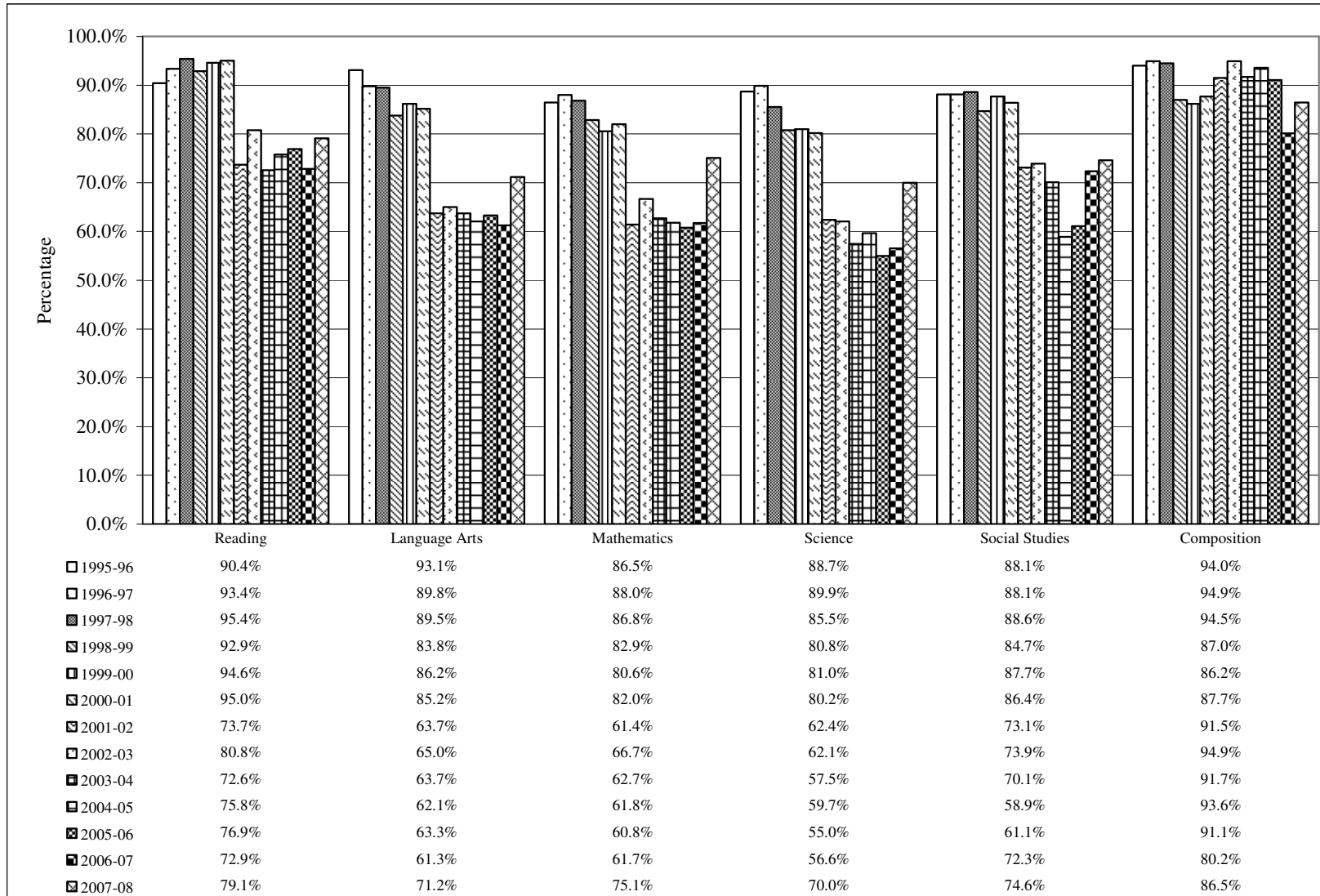


Figure 4: Performance on Individual Subtests: 12<sup>th</sup> Grade  
*Percentage of Students Passing by Subtest, Standardized Administrations*

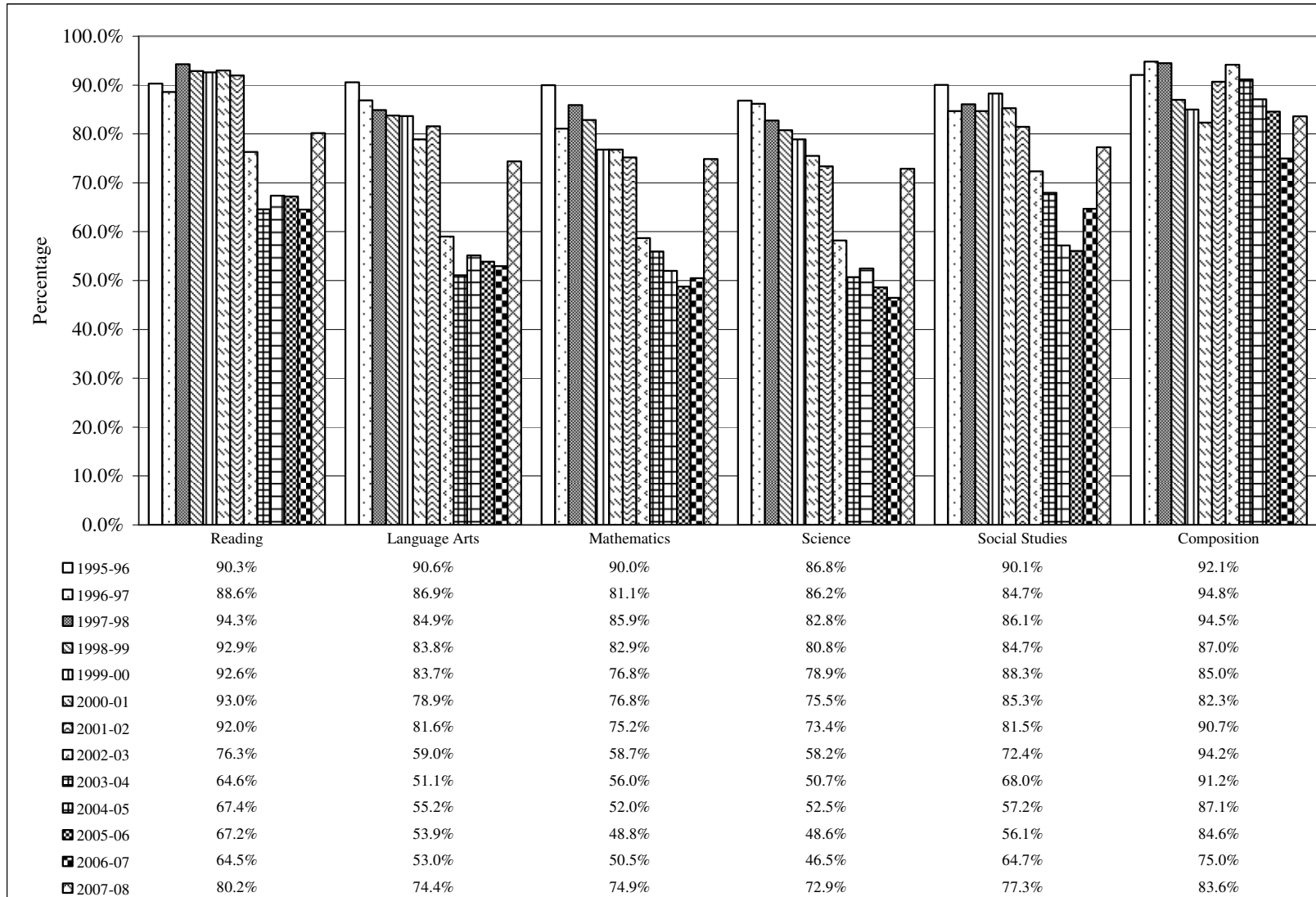


Figure 5: 2007-08 Results by Ethnicity, Grade 10  
*Percentage of Students Passing All Six Subtests on First Attempt, Standardized Administration*

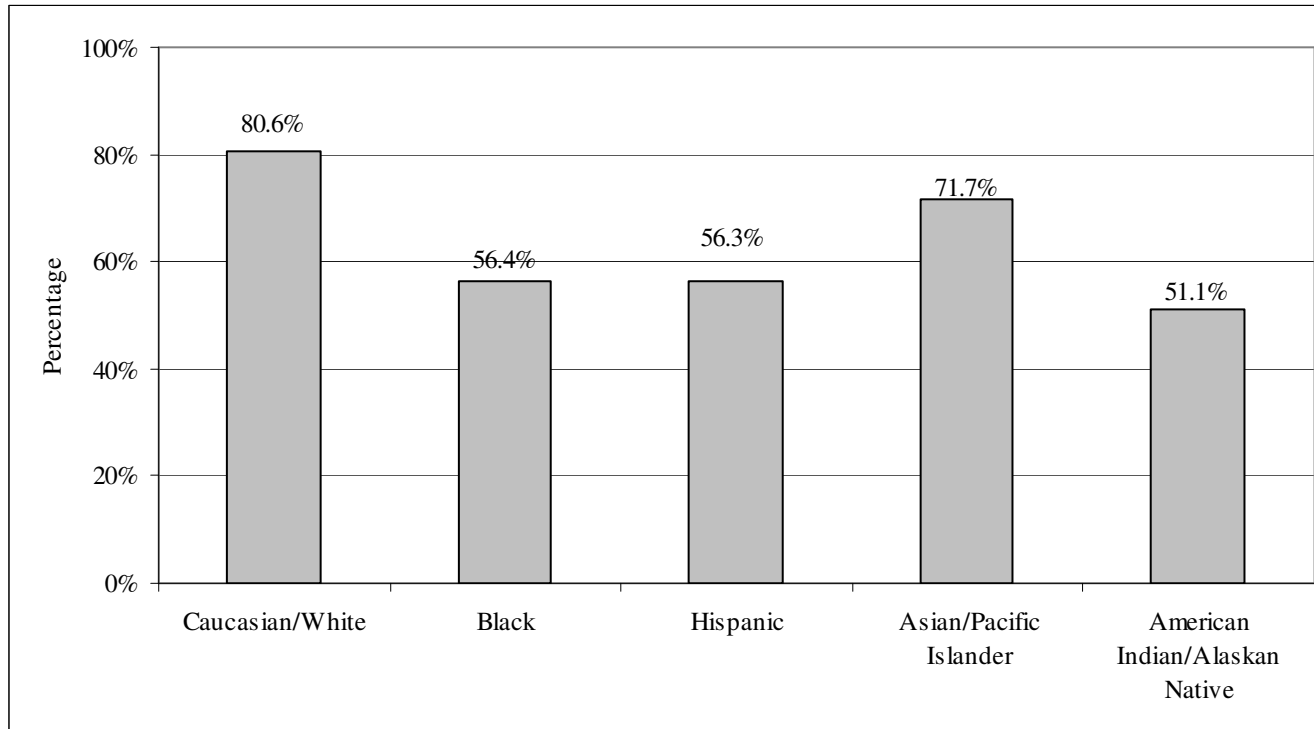


Figure 6: 2007-08 Percentage of 10<sup>th</sup> Grade Students Passing All Six Subtests  
*Statewide Summary, Standardized Administration*

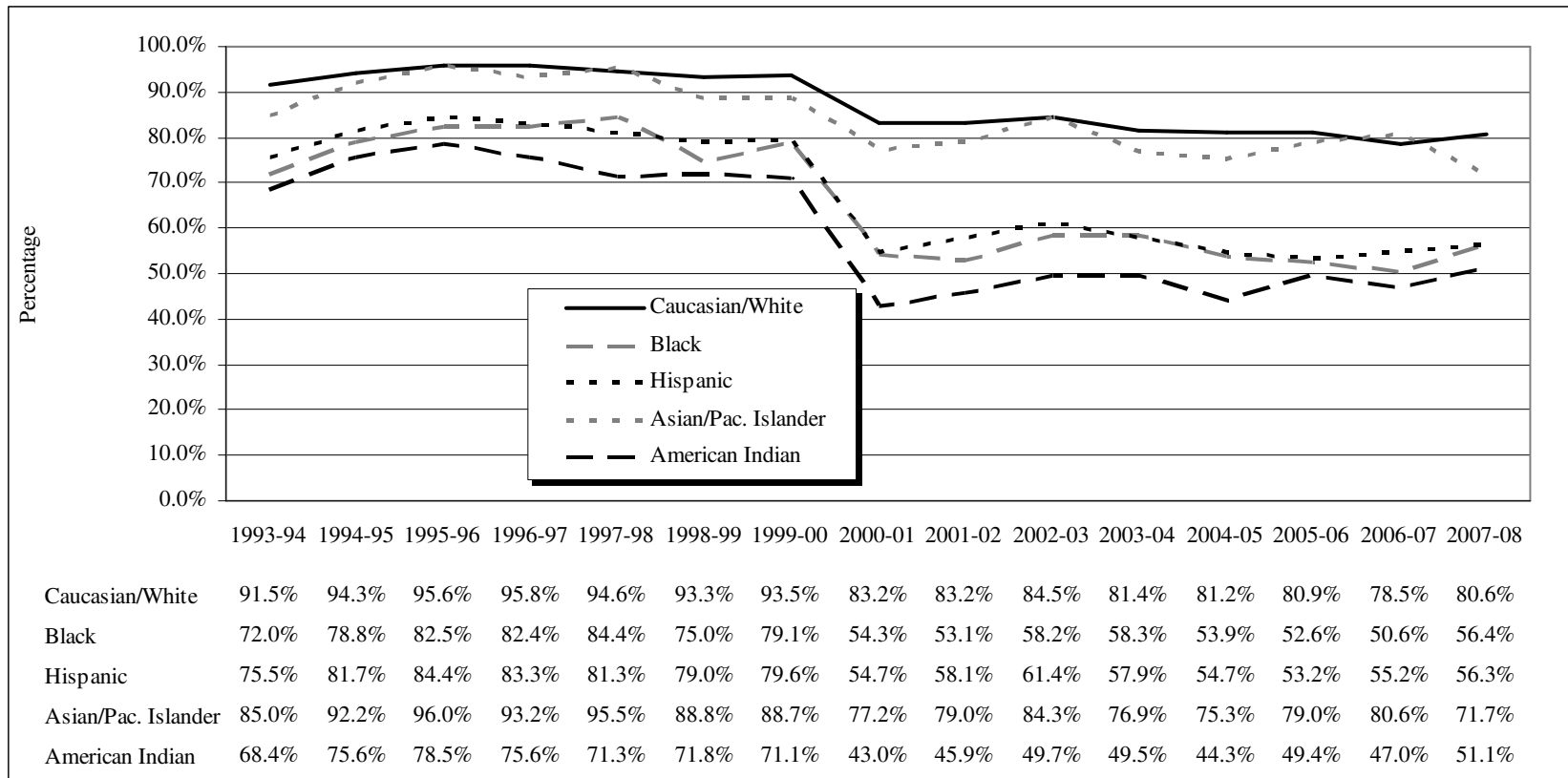


Figure 7: 2007-08 Results by Gender, Grade 10  
*Percentage of Students Passing by Content Area, Standardized Administration*

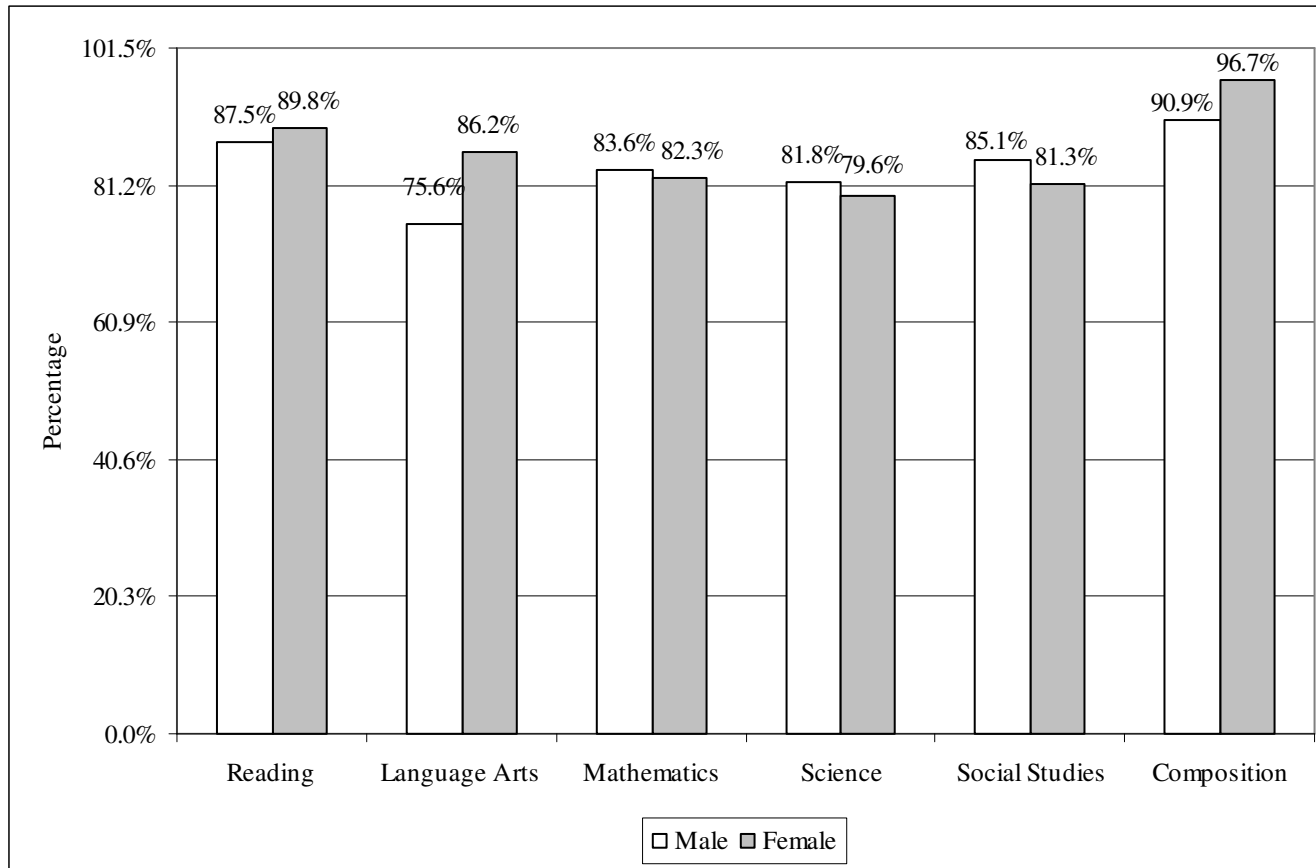


Figure 8: 2007-08 Disaggregations, Grade 10  
*Percentage of Students Passing All Six Subtests on First Attempt, Standardized Administration*

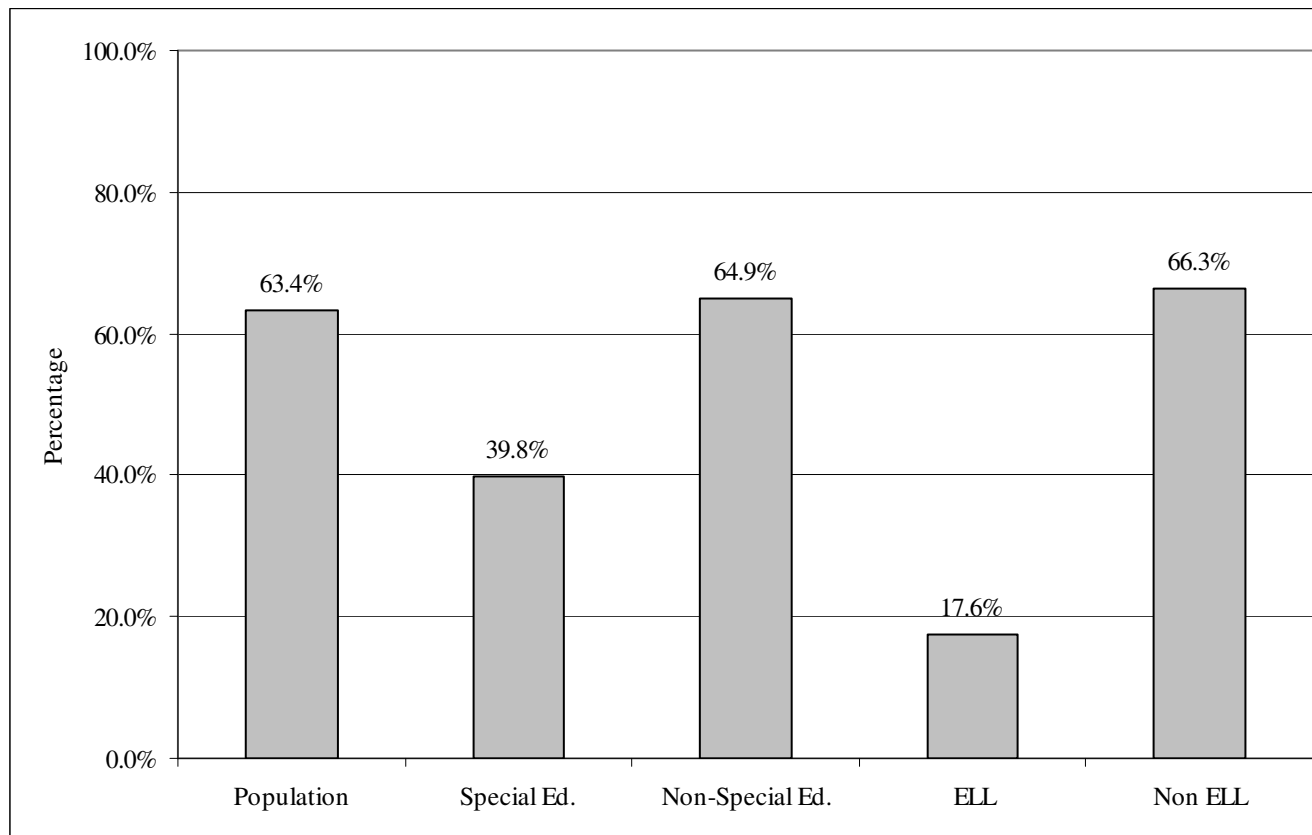


Figure 9: 2007-08 Results by ELL Status, Grade 10  
*Percentage of Students Passing Individual Subtests, Standardized Administration*

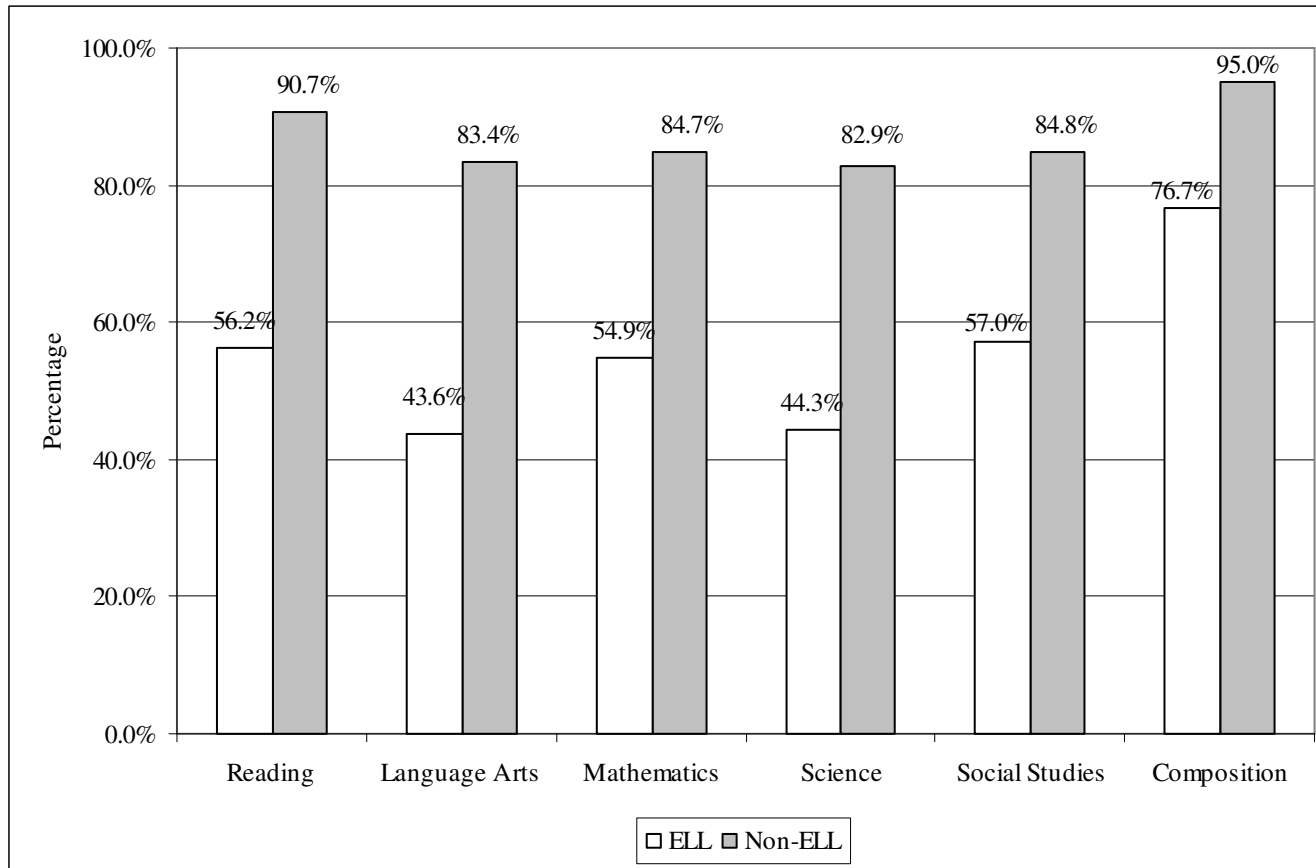


Figure 10: 2007-08 Results by Special Education Status, Grade 10  
*Percentage of Students Passing Individual Subtests, Standardized Administration*

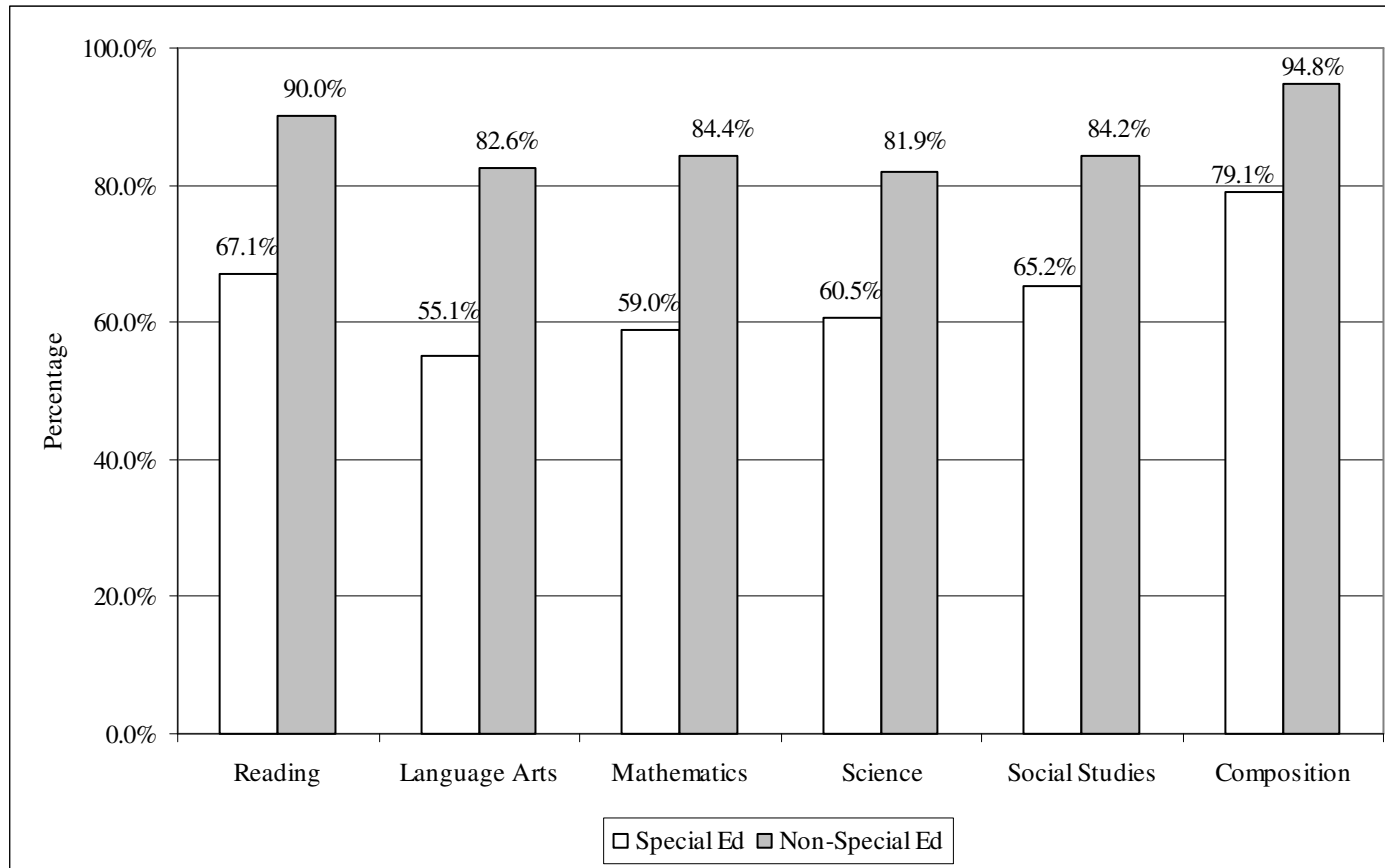


Figure 11: 2007-08 Results by Economic Status Status, Grade 10  
*Percentage of Students Passing Individual Subtests, Standardized Administration*

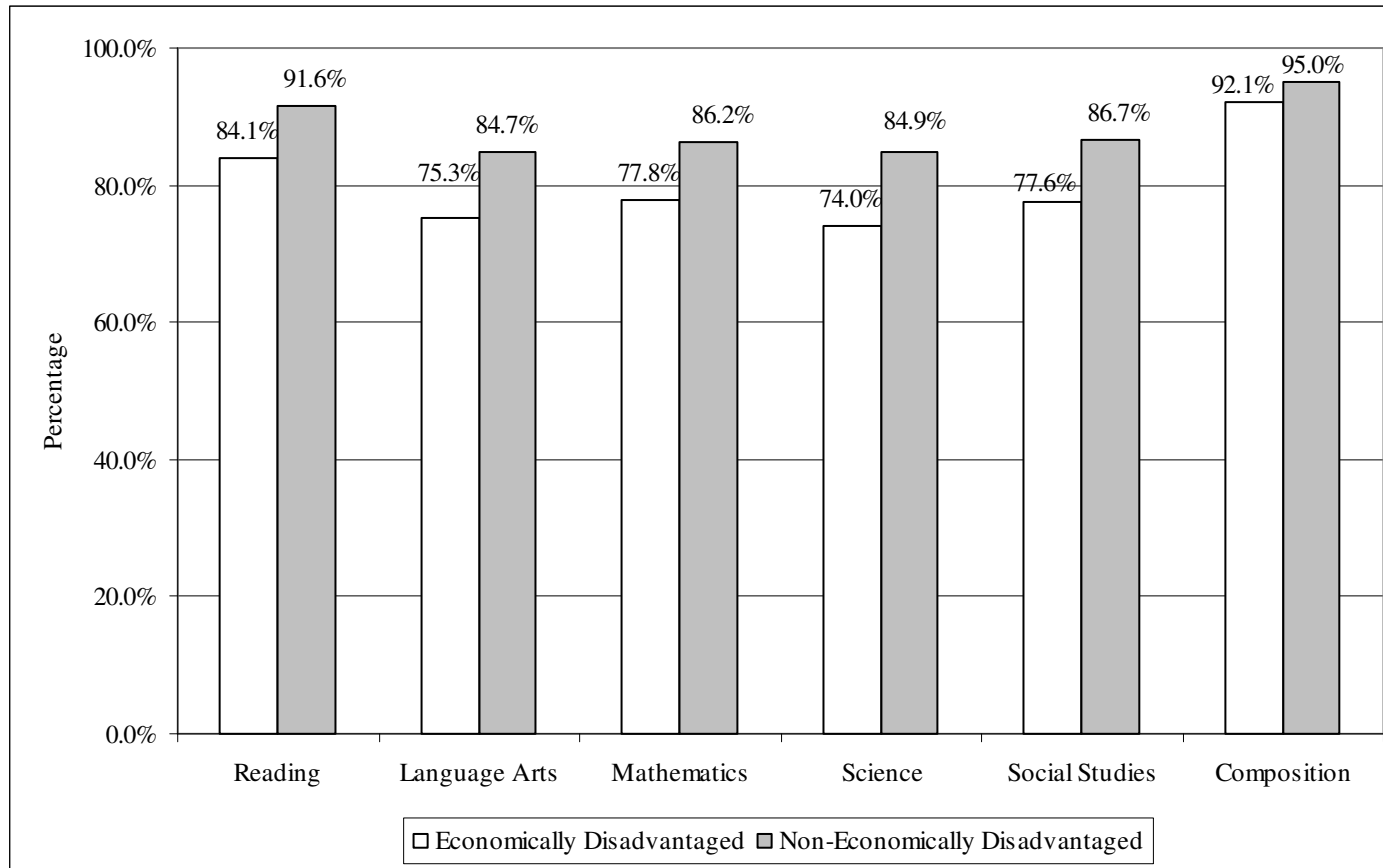


Figure 12: Results for Spanish-Language Test, Grade 10  
*Percentage of Students Passing Individual Subtests, Standardized Administrations*

