

READING



Overall Performance in Reading Declines in Comparison to 1992

Performance of the nation's 12th-graders in reading has declined in comparison to 1992; however, it has shown no significant change from the last assessment in 2002. This was seen in overall scores and in scores for literary, informational, and functional reading contexts.

In 2005, scores for both White students and Black students were lower than in 1992, and there was no significant change in the performance gap. Female students outscored male students by a wider margin than in 1992.

Scores decline in comparison to 1992 across most of the performance distribution

As seen in figure 1, students in grade 12 scored lower in 2005 than in 1992, but their score was not significantly different compared to 2002.

Examining the scores at different percentiles on the reading scale (figure 2) shows lower scores in 2005 than in 1992 across most of the performance distribution. Only the score at the 90th percentile showed no significant change in comparison to 1992. The largest decline was seen among the lower-performing students at the 10th percentile.

The decline in scores across most of the distribution is reflected in the achievement-level results. As shown in figure 3, the percentage of students performing at or above *Basic* decreased from 80 percent in 1992 to 73 percent in 2005, and the percentage of students performing at or above the *Proficient* level decreased from 40 to 35 percent over the same period of time.

Figure 1

Trend in 12th-grade average NAEP reading scores

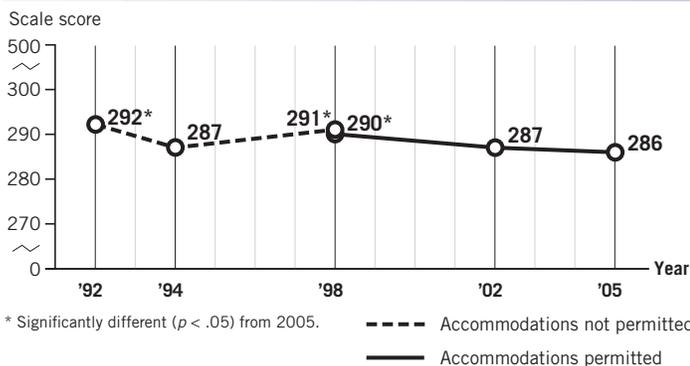


Figure 2

Trend in 12th-grade NAEP reading percentile scores

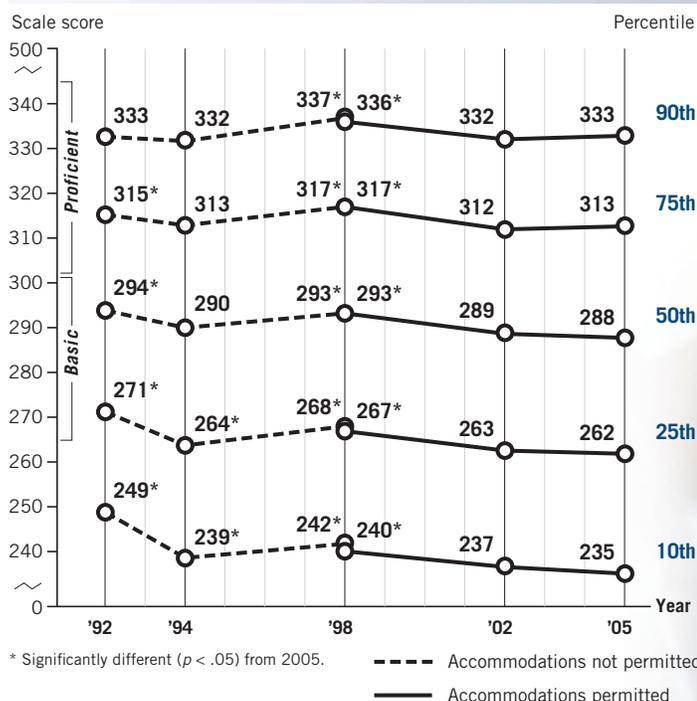
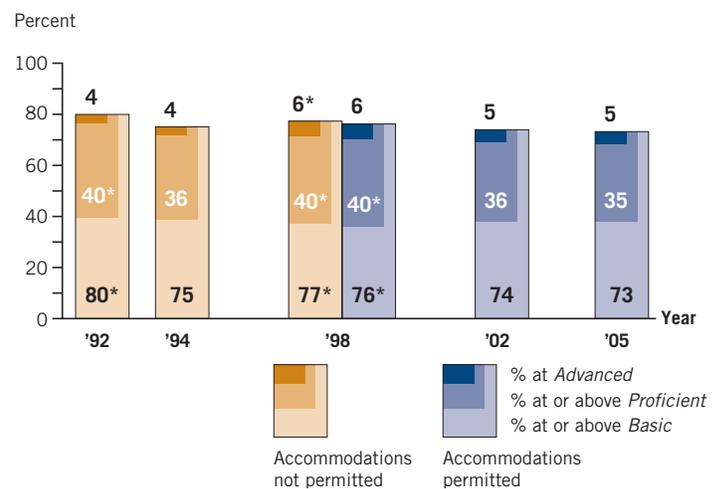


Figure 3

Trend in 12th-grade NAEP reading achievement-level results



* Significantly different ($p < .05$) from 2005.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2005 Reading Assessments.

Gaps between White and minority students unchanged

As shown in figure 4, scores for both White and Black students declined in comparison to 1992. Apparent declines over the same time period for other racial/ethnic groups were not statistically significant.

Although not shown here, the percentages of students performing at or above *Proficient* were lower in 2005 than in 1992 for White students but showed no significant change for other racial/ethnic student groups.

There was no significant change in the gaps between White students and their Black or Hispanic counterparts in comparison to either 1992 or 2002 (figure 5).

Full achievement-level and gap information is available on the NAEP website at <http://nces.ed.gov/nationsreportcard/nde/>.

Figure 4

Trend in 12th-grade average NAEP reading scores, by race/ethnicity

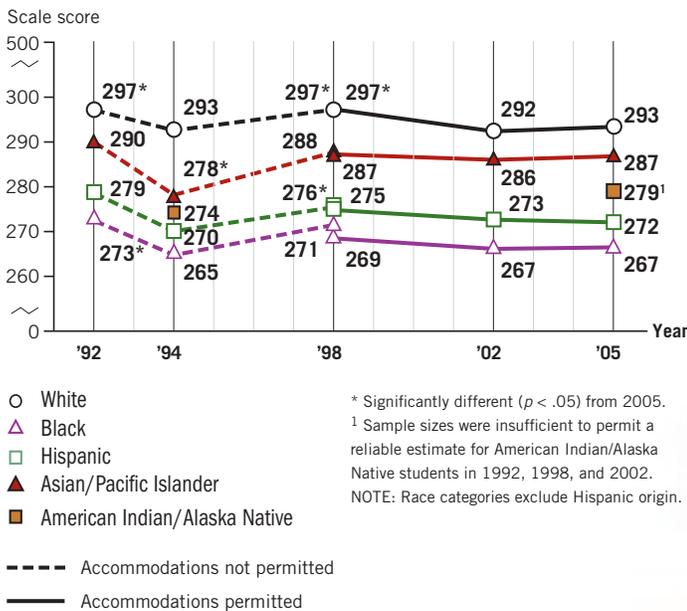
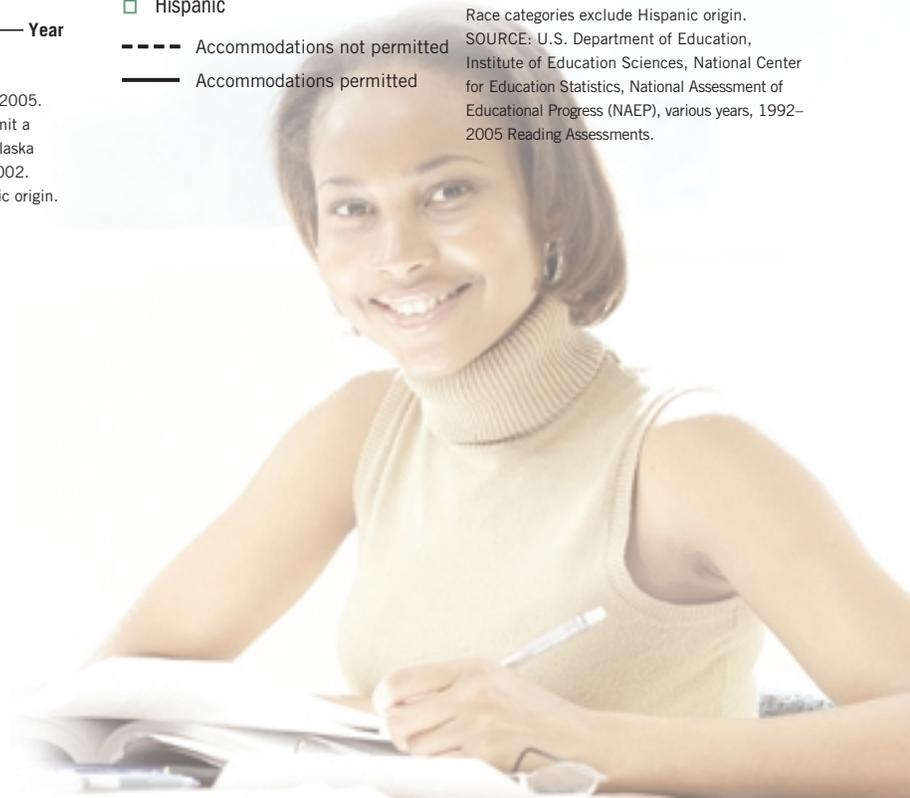
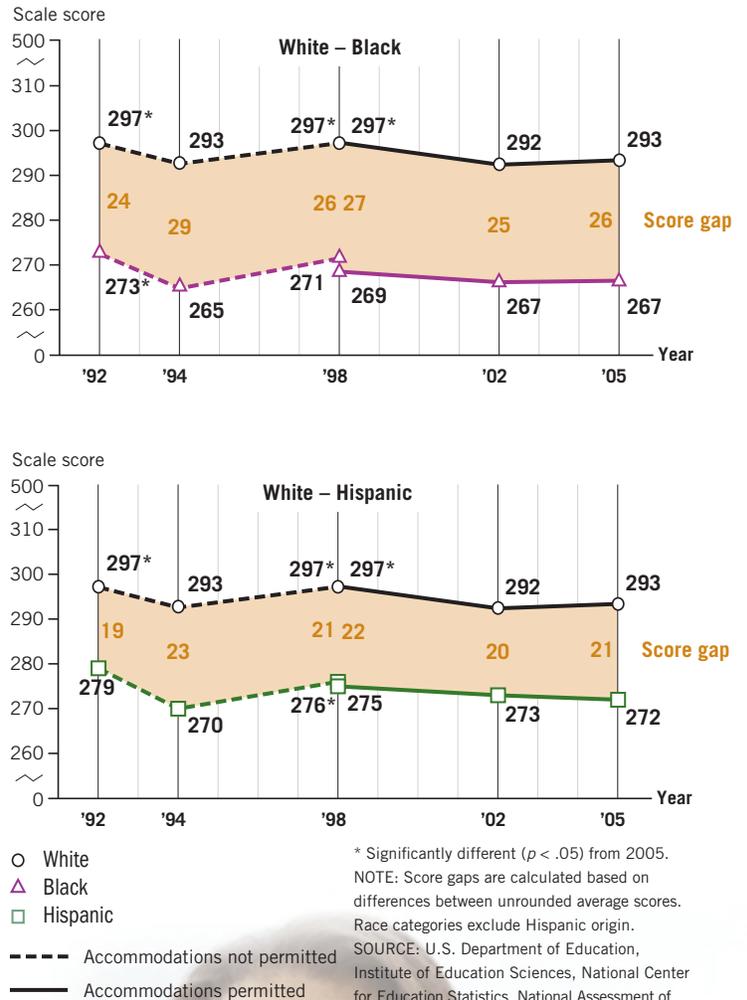


Figure 5

Trend in 12th-grade NAEP reading score gaps for White – Black and for White – Hispanic students



Changing student population

During the 13 years since the first reading assessment was administered, there have been significant shifts in the student population. As shown in table 1, White students made up a smaller proportion of the population in 2005 (67 percent) than they did in 1992 (74 percent). At the same time, the percentage of Hispanic students increased from 7 percent in 1992 to 14 percent in 2005.

Table 1

Percentage of 12th-grade students in the population, by race/ethnicity

	1992	1994	1998	2002	2005
○ White	74*	75*	72*	71*	67
△ Black	15*	13	14	12	13
□ Hispanic	7*	7*	10*	10*	14
▲ Asian/Pacific Islander	3*	4*	4*	5	5
■ American Indian/Alaska Native	#*	1	#*	‡	1

The estimate rounds to zero.

‡ Reporting standards not met. Sample size was insufficient to permit a reliable estimate for American Indian/Alaska Native students in 2002.

* Significantly different ($p < .05$) from 2005.

NOTE: Percentages for the unclassified race/ethnicity category are not included in this table. Race categories exclude Hispanic origin.

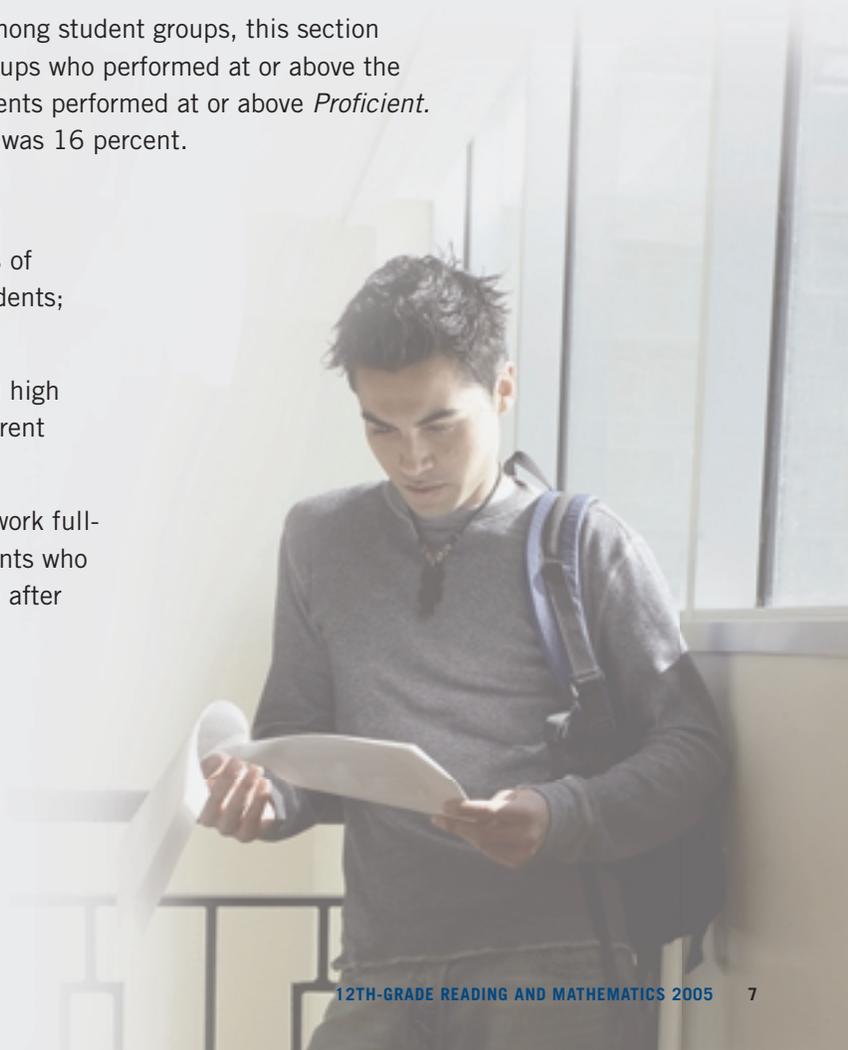
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2005 Reading Assessments.

Achievement-level profiles

To help in understanding differences in performance among student groups, this section shows the percentage of students in each of several groups who performed at or above the *Proficient* level. For example, 43 percent of White students performed at or above *Proficient*. The percentage of Black students at or above this level was 16 percent.

Percentage of students at or above *Proficient*

- 43% of White students; 16% of Black students; 20% of Hispanic students; 36% of Asian/Pacific Islander students; 26% of American Indian/Alaska Native students
- 17% of students who reported neither parent finished high school; 47% of students who reported at least one parent graduated from college
- 15% of students who reported that they expected to work full-time after graduating from high school; 48% of students who reported that they expected to attend a 4-year college after graduating from high school



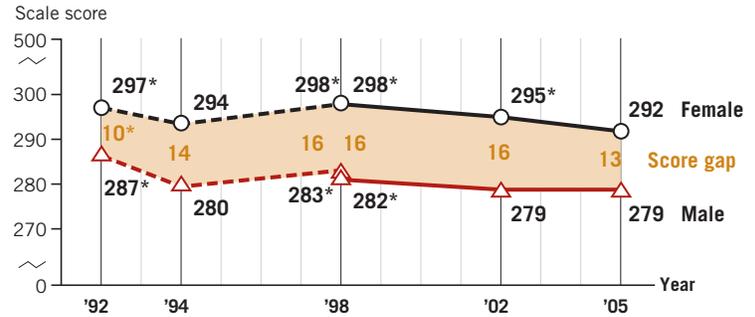
Female students outperform male students by a wider margin in 2005 than in 1992

In 2005, female students scored 13 points higher on average in reading than male students, as shown in figure 6. The average reading score for female students was lower in 2005 than in either 1992 or 2002. The score for male students, while lower than in 1992, was unchanged from 2002. The score for female students was 5 points lower in 2005 than in 1992, and the score for male students was 8 points lower, resulting in a widening of the gap between the two groups.

Though not shown here, female students outperformed male students in all three contexts for reading (reading for literary experience, for information, and to perform a task). Scores for male students showed declines in comparison to 1992 in all three contexts, while declines for female students were only significant in reading for literary experience. See the section on the reading framework on page 10 for more information on the contexts for reading.

Figure 6

Trend in 12th-grade average NAEP reading scores, by gender



* Significantly different ($p < .05$) from 2005.
NOTE: Score gaps are calculated based on differences between unrounded average scores.

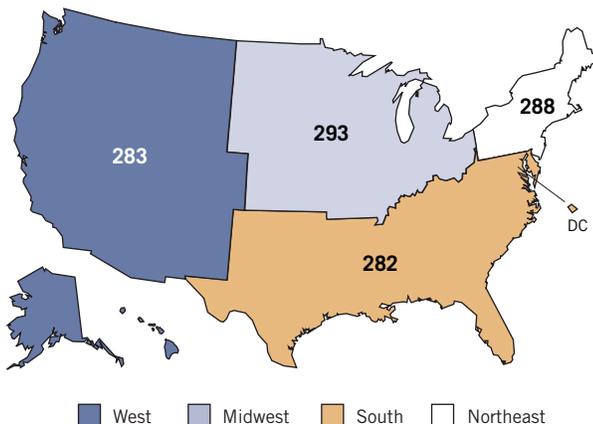
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Higher average reading scores in the Midwest

Average scores in 2005 by region show a higher score for students in the Midwest than in the Northeast and higher scores for both regions than for students in the South and West (figure 7). See page 23 for more information on how the regions were defined.

Figure 7

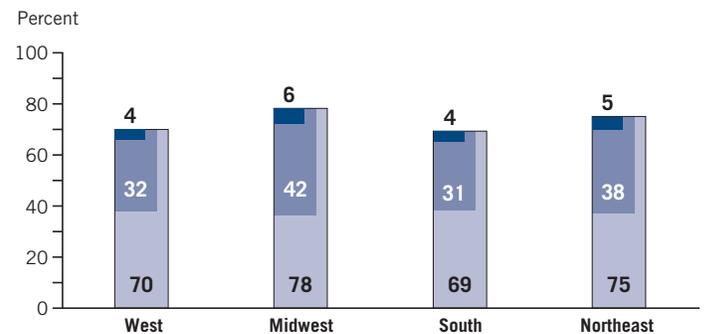
Twelfth-grade average NAEP reading scores in 2005, by region



Achievement-level results in figure 8 show similar patterns. The percentages of students both at or above *Basic* and at or above *Proficient* in the Midwest and Northeast were higher than in the West and South.

Figure 8

Twelfth-grade NAEP reading achievement-level results in 2005, by region



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2005 Reading Assessments.

■ % at Advanced
■ % at or above Proficient
■ % at or above Basic

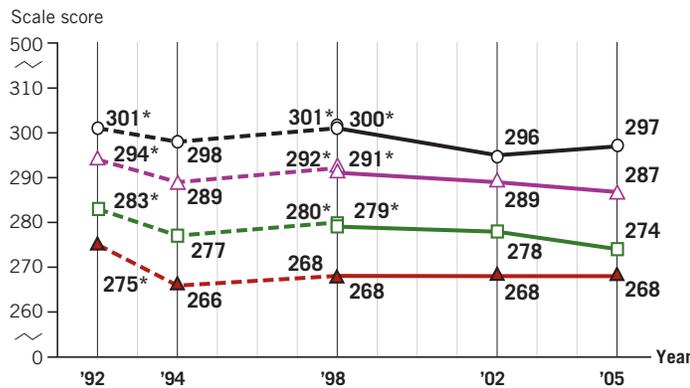
Average reading scores decline across all parental education levels

The reading results presented in figure 9 show that higher average reading scores were generally associated with higher levels of parental education. Students who reported that at least one parent graduated from college scored higher than students who reported lower levels of parental education.

Average reading scores were lower in 2005 than in 1992 regardless of the level of parental education students reported.

Figure 9

Trend in 12th-grade average NAEP reading scores, by highest level of parental education



- Graduated from college
- △ Some education after high school
- Graduated from high school
- ▲ Did not finish high school
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- Accommodations permitted

* Significantly different ($p < .05$) from 2005.

Percentage of students with parents graduating from college increasing

As shown in table 2, the percentage of students who reported that high school graduation was their parents' highest level of education was lower in 2005 than in 1992, while the percentage reporting that at least one parent graduated from college was higher in 2005 than in 1992.

Table 2

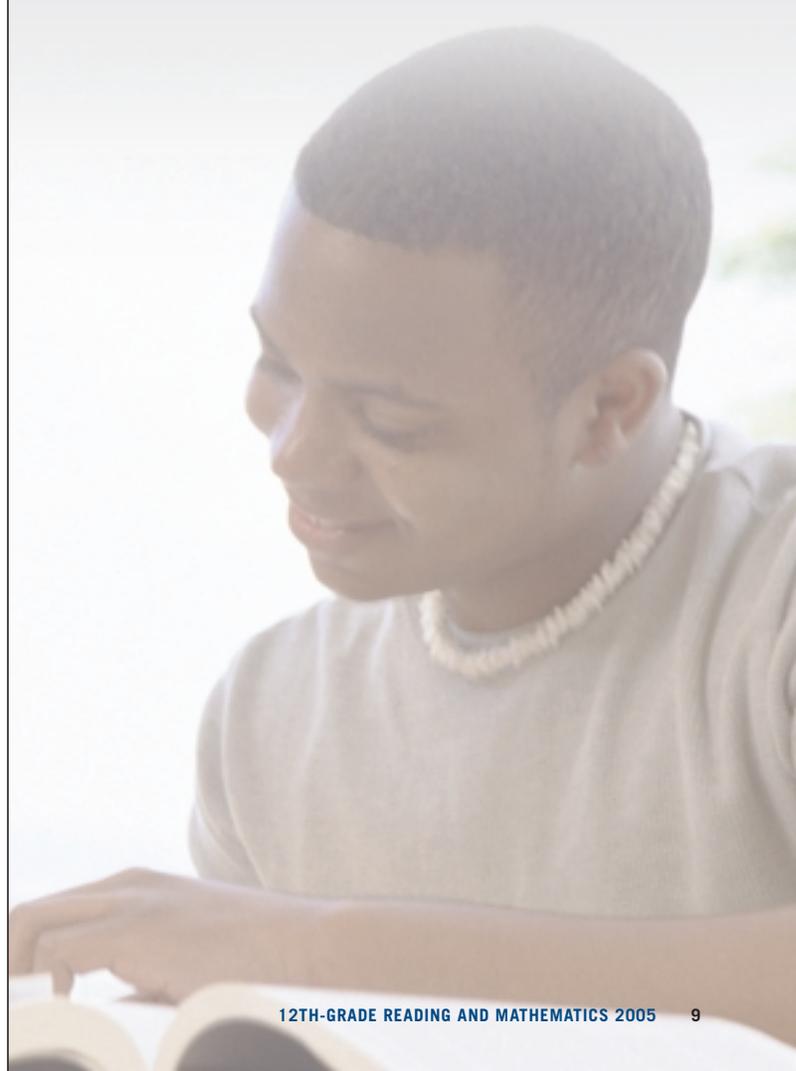
Percentage of 12th-grade students in the population, by highest level of parental education

	1992	1994	1998	2002	2005
Did not finish high school	8	7	7	7	8
Graduated from high school	22*	21*	19	18	18
Some education after high school	27*	26	25	24	24
Graduated from college	41*	44*	46	48	47

* Significantly different ($p < .05$) from 2005.

NOTE: Results are not shown for students who did not know the highest education level for either of their parents.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2005 Reading Assessments.



Reading Framework

The current NAEP reading framework describes in detail how reading should be assessed at grade 12, and has been the basis for developing the assessment content since 1992. It reflects current definitions of literacy by differentiating among three contexts for reading.

The contexts for reading provide guidance for the types of texts to be included in the assessment. The framework specifies that 35 percent of the assessment be devoted to reading for literary experience, 45 percent to reading for information, and 20 percent to reading to perform a task.

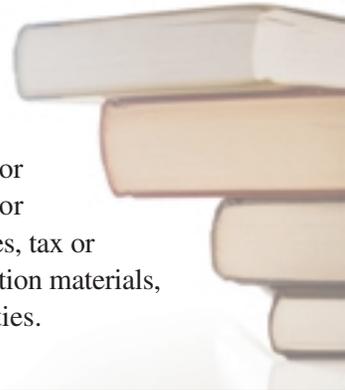
Twelfth-grade students who participated in the NAEP reading assessment were asked to read passages and answer a series of comprehension questions. At least one-half of the questions required written answers. The reading passages used in the NAEP assessment were drawn from the types of books and publications that students might encounter in school, in the library, or at home. Selections ranged from 500 to 1,500 words.

Contexts for reading

Reading for literary experience involves the reader in exploring themes, events, characters, settings, and the language of literary works. Various types of texts are associated with reading for literary experience, including short stories, poems, legends, myths, folktales, and biographies.

Reading for information engages the reader with aspects of the real world. Reading for information is most commonly associated with textbooks, primary and secondary sources, newspaper and magazine articles, essays, and speeches.

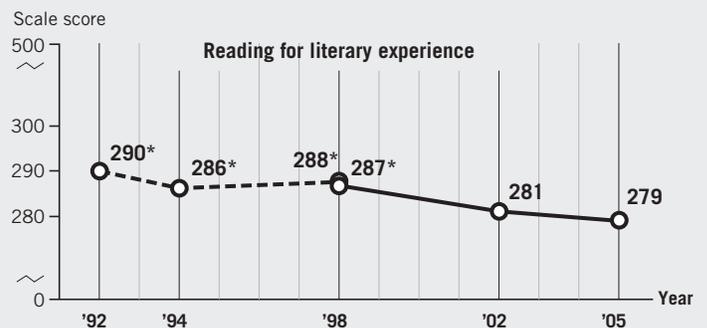
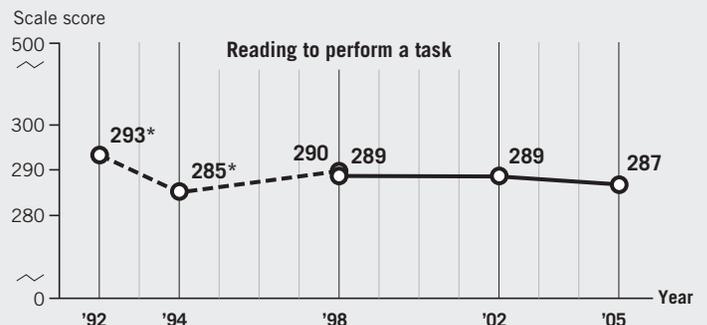
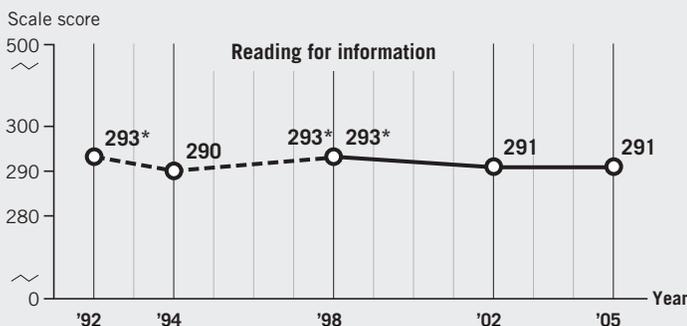
Reading to perform a task involves reading to accomplish something. Practical texts may include charts, bus or train schedules, directions for games or repairs, classroom or library procedures, tax or insurance forms, recipes, voter registration materials, maps, referenda, or consumer warranties.



Declines evident in all reading contexts

Scores declined from 1992 to 2005 in each of the three reading contexts. There was a 2-point decrease in reading for information, a 6-point decrease in reading to perform a task, and a 12-point decrease in reading for literary experience over the same time period. (Note that these score point differences are calculated based on the difference between unrounded average scores rather than on the rounded scores shown in the figure.)

Figure 10
Trend in 12th-grade average NAEP reading scores, by context for reading



--- Accommodations not permitted
— Accommodations permitted

* Significantly different ($p < .05$) from 2005.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2005 Reading Assessments.

Reading achievement levels at grade 12

The reading achievement levels represent what 12th-graders should know and be able to do in reading at each level. The following are excerpts of the reading achievement-level descriptions with the corresponding minimum cut scores noted in parentheses. The full descriptions can be found at <http://www.nagb.org/pubs/pubs.html>.

Basic (265): Twelfth-grade students performing at the *Basic* level should be able to demonstrate an overall understanding and make some interpretations of the text. When reading text appropriate to twelfth grade, they should be able to identify and relate aspects of the text to its overall meaning, extend the ideas in the text by making simple inferences, recognize interpretations, make connections among and relate ideas in the text to their personal experiences, and draw conclusions. They should be able to identify elements of an author's style.

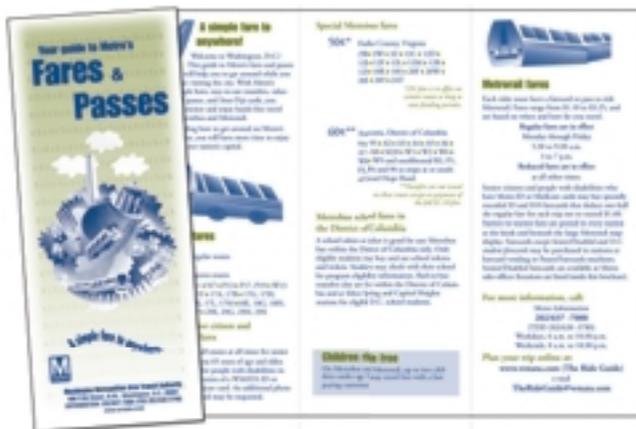
Proficient (302): Twelfth-grade students performing at the *Proficient* level should be able to show an overall understanding of the text, which includes inferential as well as literal information. When reading text appropriate to twelfth grade, they should be able to extend the ideas of the

text by making inferences, drawing conclusions, and making connections to their own personal experiences and other readings. Connections between inferences and the text should be clear, even when implicit. These students should be able to analyze the author's use of literary devices.

Advanced (346): Twelfth-grade students performing at the *Advanced* level should be able to describe more abstract themes and ideas in the overall text. When reading text appropriate to twelfth grade, they should be able to analyze both the meaning and the form of the text and explicitly support their analyses with specific examples from the text. They should be able to extend the information from the text by relating it to their experiences and to the world. Their responses should be thorough, thoughtful, and extensive.

Sample Multiple-Choice Reading Question

As part of the 2005 reading assessment, 12th-graders were presented with a Metro Guide to a city's transit system.



The multiple-choice question presented below required students to make a simple inference based on explicit information in the Metro Guide.

According to the guide, at which of the following times of day would the reduced Metrorail fare be in effect?

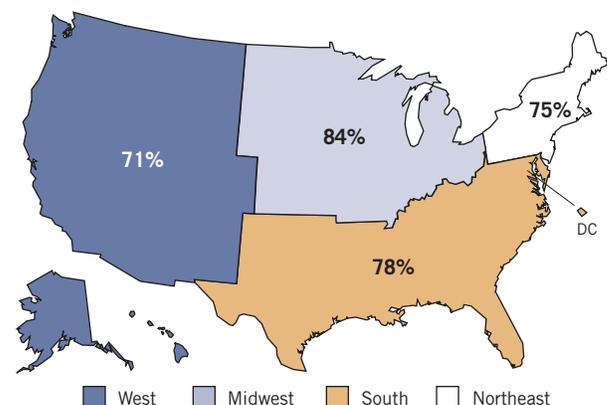
- (A) 5:30 a.m. (C) 3:00 p.m.
 (B) 6:00 a.m. (D) 7:30 p.m.

In addition to the overall percentage of students who answered the question correctly, the percentage of students at each achievement level who answered correctly is presented.

Percentage correct overall and at achievement levels in 2005

Overall	Below <i>Basic</i>	At <i>Basic</i>	At <i>Proficient</i>	At <i>Advanced</i>
77	48	81	93	98

Percentage of correct 12th-grade student responses in 2005, by region



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Reading Assessment.

Full information, including reading passages, is available for NAEP reading questions of various types and difficulty levels at <http://nces.ed.gov/nationsreportcard/itmrls>.

Sample Short Constructed-Response Reading Question

The following is a short constructed-response question which asked students to interpret document information in relation to a real-life situation. Responses to this task were rated according to a three-level scoring guide:

“Evidence of full comprehension” for responses that selected a place where Metro passes could be purchased and described both a convenience and an inconvenience of buying passes at that location.

“Evidence of partial comprehension” for responses that selected a place where Metro passes could be purchased but described only a convenience or only an inconvenience of buying passes at that location.

“Evidence of little or no comprehension” for responses that selected a place where Metro passes could be purchased but described neither a convenience nor an inconvenience of buying passes at that location.

The sample student response below was rated as “Evidence of full comprehension.” Examples of partial responses to this question and other information about NAEP questions can be found at <http://nces.ed.gov/nationsreportcard/itmrls>.

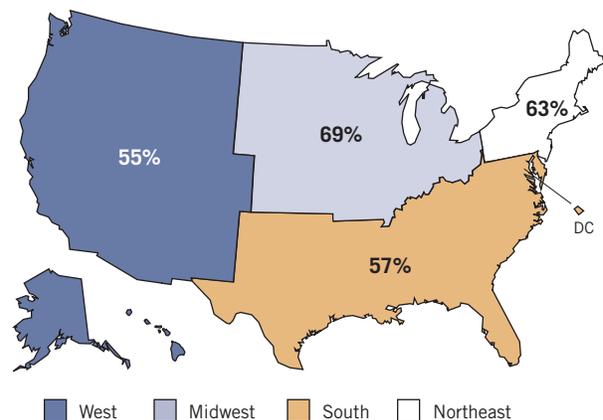
Choose one of the locations listed in the guide where Metro passes can be purchased. Describe one convenience and one inconvenience of buying passes at that location.

Metro passes can be purchased online with smartlink. It is a convenient way to purchase passes in the comfort of your own home. You don't have to leave your house or wait in line. However you do have to have a credit card and charge the passes.

Percentage rated as “Evidence of full comprehension” overall and at achievement levels in 2005

Overall	Below Basic	At Basic	At Proficient	At Advanced
60	24	62	84	92

Percentage of 12th-grade student responses rated “Evidence of full comprehension” in 2005, by region



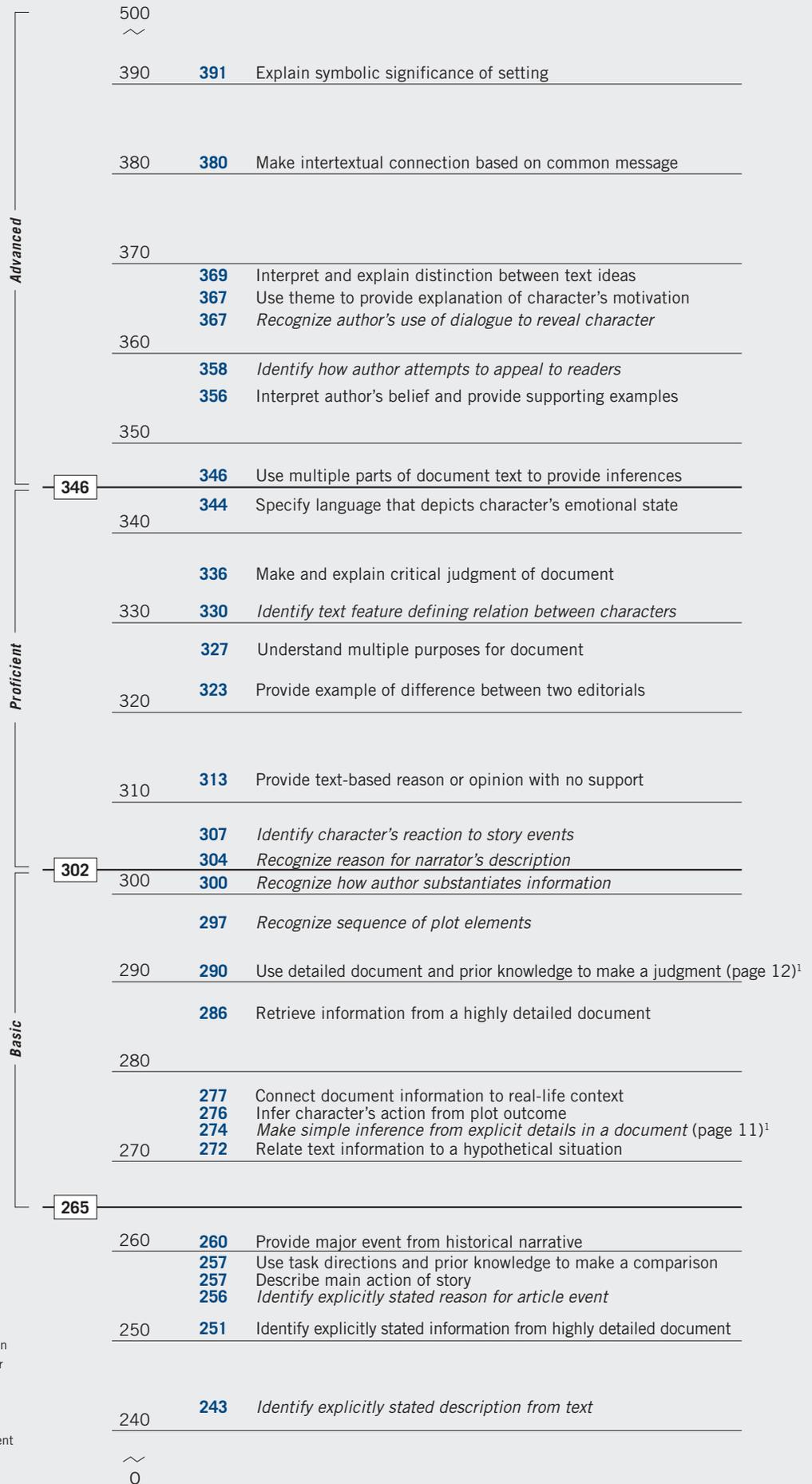
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Reading Assessment.



Range of Reading Performance

The item map is a useful tool for better understanding what it means to perform at different levels on the reading scale. The left side of the map shows the scores that define the lower boundaries of the *Basic*, *Proficient*, and *Advanced* achievement levels. The right side lists descriptions of some selected assessment questions that fall at various levels on the 0–500 scale. Retrieving information from a highly detailed document (286 on the scale) is an example of the knowledge and skills associated with performance at the *Basic* achievement level. Making a critical judgment about a detailed document and explaining their reasoning (336) is an example of the skills and knowledge demonstrated by students performing at the *Proficient* level. Note that several examples of performance below the *Basic* level are included. For example, students who perform below *Basic* are likely to be able to identify explicitly stated information from a highly detailed document (251) and to describe the main action of a story (257).

NAEP Reading Item Map



¹ Page numbers refer to the location in the report where the question described is presented.

NOTE: The position of a question on the scale represents the average scale score attained by students who had a 65 percent probability of correctly answering a constructed-response question, or a 74 percent probability of correctly answering a four-option multiple-choice question. For constructed-response questions, the question description represents students' performance rated as completely correct. Regular type denotes a constructed-response question. *Italic* type denotes a multiple-choice question.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Reading Assessment.