

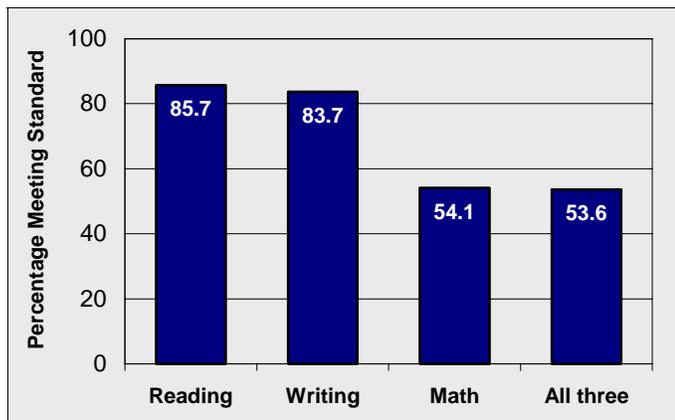
## Tenth-Grade WASL in Spring 2006: Summary Results

Beginning with the class of 2008, students must meet standard in reading, writing, and math on the 10th-grade Washington Assessment of Student Learning (WASL) to earn a Certificate of Academic Achievement (CAA), a prerequisite for graduation in Washington.<sup>1</sup> In order to “increase understanding of the students who did not meet the standard in one or more areas of assessment,” the 2006 Legislature directed the Washington State Institute for Public Policy (Institute) to conduct a “review and statistical analysis of Washington assessment of student learning data.”<sup>2</sup> In addition to an interim report due to the Legislature in December 2006 and a final report due in December 2007, the Institute will publish a series of single-topic reports analyzing student WASL performance.

### This report provides an overview of 10th-grade WASL results for spring 2006.

Records obtained from the Office of Superintendent of Public Instruction indicate that 65,362 10th graders completed the WASL in spring 2006.

*Exhibit 1*  
Percentage of Students Meeting Standard on  
10th-Grade WASL in Spring 2006



<sup>1</sup> To graduate, students must also complete a culminating project, satisfy class credit requirements, and craft a High School and Beyond Plan. See: <http://www.k12.wa.us/graduationrequirements/GradRequirements.aspx>.

<sup>2</sup> SSB 6618, Laws of 2006, chapter 352.

### Summary

This report provides an overview of 10th-grade WASL results for spring 2006.

- 85.7 percent of students who completed an assessment met standard in reading, 83.7 percent met standard in writing, and 54.1 percent met standard in math.
- 53.6 percent of students met standard in all three subject areas, 29.0 percent met standard in any two subjects, 10.0 percent met standard in any one subject, and 7.4 percent did not meet standard in any subject.
- 20.5 percent of students were “far misses” (Level 1) in math; an additional 25.4 percent were “near misses” (Level 2).

The percentage of students who met standard in each subject area is presented in Exhibit 1. Meeting standard “reflects what a hard-working, well-taught student should know and be able to do to demonstrate mastery of the state’s Essential Academic Learning Requirements (EALRs).”<sup>3</sup> Nearly 86 percent of students who completed a reading assessment in spring 2006 met standard. A comparable proportion (83.7 percent) met standard in writing. In contrast, just over half met standard in math (54.1 percent). Due largely to their relatively low performance in math, only 53.6 percent of students met the necessary standard in all three subject areas of the WASL.

<sup>3</sup> Office of Superintendent of Public Instruction, *Scale Scores for Levels on WASL Assessments*, <[http://www.k12.wa.us/assessment/TestAdministration/pubdocs/PerformanceLevel\\_CutScores\\_NewStds.pdf](http://www.k12.wa.us/assessment/TestAdministration/pubdocs/PerformanceLevel_CutScores_NewStds.pdf)>, August 2005.

Exhibit 2 further illustrates student performance on the WASL by charting the percentage of students who met standard for each combination of subject areas. Again, 53.6 percent of test takers met standard in reading, writing, and math. A total of 26.9 percent met standard in reading and writing but not math. A much smaller proportion of students met standard in reading only (5.4 percent), writing only (4.4 percent), reading and math but not writing (1.7 percent), and writing and math but not reading (0.4 percent). Likewise, a very small proportion of students—only 0.2 percent (n=125)—met standard in math but not reading or writing. This result suggests that students who are proficient in math tend also to be competent readers and writers. The converse, however, is not necessarily true: students proficient in reading or writing are not always proficient in math. An additional 7.4 percent of students did not meet standard in any subject.

**Exhibit 2**  
**Combinations of Subject-Area Results on the 10th-Grade WASL in Spring 2006**

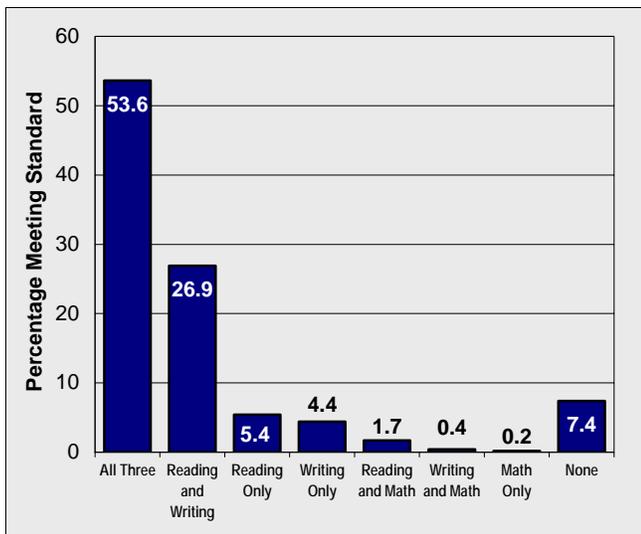
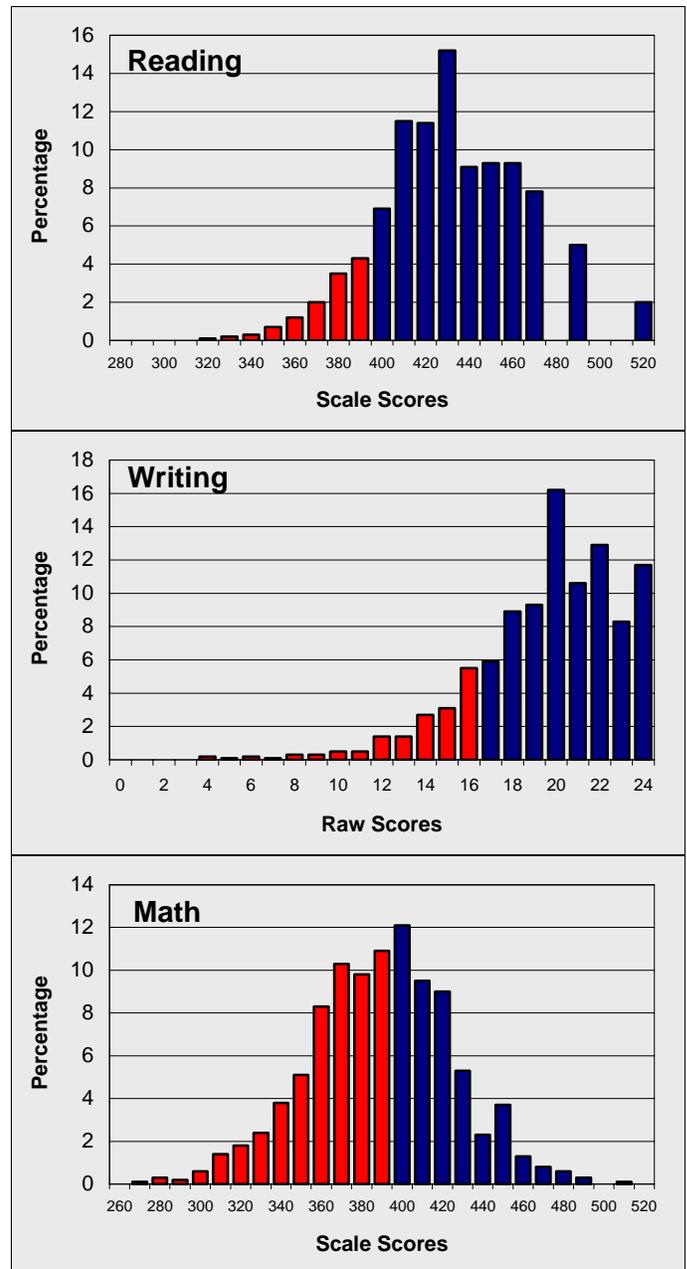


Exhibit 3 plots the distribution of scale scores in 10-point increments for reading and math, and the distribution of raw scores for writing. Students meet standard in reading and math when they achieve a score of 400 or greater, and writing when they receive at least 17 points. Red bars indicate below-standard scores and blue bars depict scores that meet or exceed standard.

Nearly half the bars for math are colored red, whereas the predominant color for reading and writing is blue. Put differently, the distribution of reading and writing scores is skewed—comparatively few students score below standard—while the distribution of math scores is roughly symmetrical.

How far from proficiency are students who do not meet standard in reading, writing, or math? Level 2 (Basic) scores range between 375 and 399 points for reading and math, and between 13 and 16 points for writing.<sup>4</sup> Level 1 (Below Basic) scores fall below these thresholds. Level 2 scores are characterized as “near misses,” whereas Level 1 scores are considered “far misses.”

**Exhibit 3**  
**Distribution of Scores in Reading, Writing, and Math, 10th-Grade WASL, Spring 2006**



<sup>4</sup> Standards and cut scores on the WASL were established by the Academic Achievement and Accountability (A+) Commission, based on recommendations from standard-setting committees for each content area and grade level.

As reported in Exhibit 4, 10.5 percent of students who took the reading WASL in spring 2006 received scores that were between 1 and 25 points below standard (i.e., Level 2). Approximately 3.4 percent of students were within 5 points of meeting standard, 5.8 percent were within 10 points, 7.8 percent were within 15 points, and 9.4 percent were within 20 points. An additional 3.8 percent of students were more than 25 points below standard (Level 1).

The results for writing are comparable to those for reading. Fewer than 13 percent of students received a Level 2 in writing, while another 3.6 percent earned scores in the Level 1 range. Note that 5.5 percent of students missed proficiency in writing by only 1 point. However, it is important to remember that a 1-point difference on the condensed writing scale is much more significant than a similar difference on the reading and math scales.

A much larger percentage of students fell below standard in math: one in four students (25.4 percent) were within 25 points of meeting standard, and an additional one in five students (20.5 percent) received Level 1 scores. Nearly 12 percent of students missed standard in math by 10 or fewer points.

**Exhibit 4**  
**“Near” and “Far” Misses in Reading, Writing, and Math, 10th-Grade WASL, Spring 2006**

Points Below Standard		Reading	
		Percentage	Cumulative Percentage
Level 2	1–5	3.4%	3.4%
	6–10	2.4%	5.8%
	11–15	2.0%	7.8%
	16–20	1.6%	9.4%
	21–25	1.1%	10.5%
Level 1	More than 25	3.8%	14.3%

Points Below Standard		Writing	
		Percentage	Cumulative Percentage
Level 2	1	5.5%	5.5%
	2	3.1%	8.6%
	3	2.6%	11.2%
	4	1.5%	12.7%
Level 1	More than 4	3.6%	16.3%

Points Below Standard		Math	
		Percentage	Cumulative Percentage
Level 2	1–5	7.5%	7.5%
	6–10	4.4%	11.9%
	11–15	4.2%	16.1%
	16–20	5.7%	21.8%
	21–25	3.6%	25.4%
Level 1	More than 25	20.5%	45.9%

## SUMMARY OF FINDINGS

Tenth-grade WASL results from spring 2006 are as follows:

- Of the students who completed the WASL, **85.7 percent met standard in reading, 83.7 percent met standard in writing, and 54.1 percent met standard in math.**
- Overall, **53.6 percent of students met standard in all three subject areas**, 29.0 percent met standard in any two subjects, 10.0 percent met standard in any one subject, and 7.4 percent did not meet standard in any subject.
- Approximately one in ten students received Level 2 or “near miss” scores in reading, compared with one in eight students for writing and one in four students for math. Less than 4 percent of students received a Level 1 or “far miss” in reading or writing, compared with 20.5 percent for math.

Meeting standard on the WASL became a graduation requirement for the class of 2008. As of spring 2006, nearly half of all students in the class of 2008 will not graduate unless their WASL scores, especially in math, can be improved. The Legislature appropriated funds for Promoting Academic Success (PAS) to provide extended learning activities for 10th grade students who did not meet state learning standards on the spring 2006 WASL. In addition, students now have the opportunity to retake the WASL up to four times in each subject.

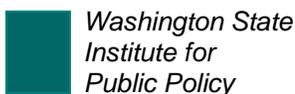
In future reports, the Institute will examine the overall effectiveness of PAS and the relative effectiveness of different PAS programs by student characteristics such as ethnicity, economic status, and English language learner status. The Institute also plans to issue reports that examine students who participate in alternative assessments; relationships among reading, writing, and math scores; and WASL strand results.<sup>5</sup>

---

<sup>5</sup> WASL strands are detailed components of the Essential Academic Learning Requirements (EALRs). Student performance on strands is described as either performance similar to, better than, or below that of students at the standard.

For further information, please contact:  
Wade Cole at [wcole@wsipp.wa.gov](mailto:wcole@wsipp.wa.gov) (360) 586-2791  
or Robert Barnoski at [barney@wsipp.wa.gov](mailto:barney@wsipp.wa.gov) (360) 586-2740

Document No. 06-10-2201



The Washington State Legislature created the Washington State Institute for Public Policy in 1983. A Board of Directors—representing the legislature, the governor, and public universities—governs the Institute and guides the development of all activities. The Institute’s mission is to carry out practical research, at legislative direction, on issues of importance to Washington State.