

How Different Base Populations Affect WASL Results

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.” An interim report is due by December 2006 and a final report by December 2007.¹

A basic indicator of student performance on the Washington Assessment of Student Learning (WASL) is the percentage of students who meet standard. This percentage can vary depending on which students are included in the calculation.

As one in a series of reports on the WASL, this analysis describes the different ways to calculate the “met standard” rate.

In particular, this report compares the percentage of 10th-grade students who met standard in spring 2006 based on students:

- slated to take the WASL (“slated”),²
- without exemptions approved by the Office of Superintendent of Public Instruction (“OSPI exemptions”),
- who completed the WASL (“completers”), and
- using guidelines established by the No Child Left Behind Act (“NCLB exemptions”).

SUMMARY

This report considers how different methods of calculating the “met standard” rate affect the Washington Assessment of Student Learning (WASL) results.

Using different base student populations, the percentage of 10th graders who met standard on the WASL in spring 2006 is as follows:

- As a percentage of students who were **slated** to take the WASL, 44.9 percent met standard.
- Excluding students with **OSPI-approved exemptions**, 50.5 percent of students met standard.
- As a percentage of students who **completed** an assessment, 53.6 percent met standard.
- Using guidelines established by the **No Child Left Behind Act**, 47.2 percent of students met standard.

When analyzing the relationships between performance on the WASL and student characteristics, the Institute’s calculations use the number of students who completed all three WASL subject areas.

When analyzing performance in a specific subject area, such as math, the Institute uses the number of students who completed the subject area test.

¹ SSB 6618, Chapter 352, Laws of 2006

² “Slated students” consist of 10th graders who were assigned a WASL booklet.

Exhibit 1 identifies the different categories of students included in each method of computing met standard rates.

Depending on the choice of base population denominators, the percentage of 10th graders who met standard in each content area of the WASL in spring 2006 varies by as much as 8.7 percent.

SLATED STUDENTS AND COMPLETERS

Records obtained from OSPI indicate that 78,020 students were slated to take the WASL in spring 2006; 83.8 percent (n=65,362) of these students completed all three content areas. An additional 3,595 students, or 4.4 percent of all 10th graders, were eligible to participate in an alternative assessment reserved for special education students with an Individualized Education Program (IEP). A separate report focuses on this population.³

Overall, 12,658 students slated to take the WASL did not complete all three subject areas. The details by subject area are reported in **Exhibit 2**.

Exhibit 1
Categories of Students Included in Different Calculations of Met Standard Rates

Categories of Students	Denominators			
	Slated	Completers	OSPI	NCLB
Completed unmodified WASL	✓	✓	✓	✓
Took Alternate Assessment				✓
Excused Absences	✓			
Partial Enrollment	✓			✓
Previously Passed WASL	✓			
English Language Learner	✓			
Medical Exemption	✓			
Unexcused Absence	✓		✓	✓
Incomplete/Not Tested	✓		✓	✓
Student Refusal	✓		✓	✓
Invalidated Assessment	✓		✓	✓

Exhibit 2
10th Graders Who Completed and Did Not Complete the WASL, by Subject Area, Spring 2006

Subject	Slated Students	Completed		Not Completed	
		Number	Percentage	Number	Percentage
Reading	78,787	70,922	90.0%	7,865	10.0%
Writing	78,647	70,461	89.6%	8,186	10.4%
Math	78,600	69,803	88.8%	8,797	11.2%
All Three	78,020	65,362	83.8%	12,658	16.2%

³ Wade Cole and Robert Barnoski. (2006). *Tenth-Grade Alternate Assessments for Special Populations: Summary Results* Olympia: Washington State Institute for Public Policy, Document No. 06-11-2202. Alternate assessments will be included in our computation of the percentage of students who met standard according to the No Child Left Behind Act.

OSPI EXEMPTIONS

Exhibit 3 displays the number of students who did not complete an assessment by subject and their reasons, categorized by whether their reason is “approved” (and hence exempt) or “not approved” by OSPI.

When calculating the percentage of students who meet standard on the WASL, OSPI excludes students who were not tested due to excused absences or one of the following exemptions: partial enrollment, previously passed, first-year English language learner (ELL), and medical.⁴

For example, Exhibit 3 indicates that a plurality of students who did not complete the WASL—32.6, 31.9, and 32.6 percent for reading, writing, and math, respectively—had an excused absence. Unexcused absences, which do not constitute an OSPI-approved exemption, account for an additional 17 to 18 percent of incomplete assessments.

Exhibit 3
Reasons for Not Completing the WASL
in Spring 2006

	Reason Not Completed	Reading (n=7,865)	Writing (n=8,186)	Math (n=8,797)
Approved by OSPI	Absent Excused	32.6%	31.9%	32.6%
	Partially Enrolled	21.3%	20.2%	20.7%
	Previously Passed Exemption	4.6%	3.7%	1.5%
	ELL Exemption	3.2%	3.1%	3.0%
	Medical Exemption	0.1%	0.1%	0.1%
	Sub-total	61.8%	59.0%	57.9%
Not Approved by OSPI	Absent Unexcused Not Tested	18.0%	17.3%	17.7%
	No Booklet Not Tested	9.9%	10.2%	10.3%
	Incomplete Not Tested	7.6%	10.0%	10.0%
	Refused Not Tested	2.6%	3.3%	3.7%
	Invalidated Not Tested*	0.2%	0.3%	0.4%
	Sub-total	38.3%	41.1%	42.1%

* Reasons for invalidation include cheating, test disruption, and improper test administration.

FEDERAL GUIDELINES: NO CHILD LEFT BEHIND

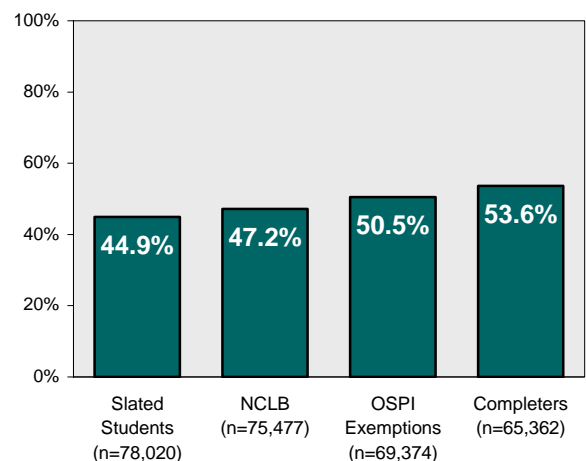
Federal guidelines prescribe yet another method for evaluating student performance on the WASL. The No Child Left Behind Act of 2001 (NCLB) establishes specific criteria for calculating the percentage of students who meet state achievement standards. As applied to Washington State, these calculations must include students who participate in alternate assessments for special populations (i.e., the WASL-Modified or Washington Alternative Assessment System), but exclude first-year English language learner (ELL) students, students with OSPI-approved medical exemptions, and students with excused absences.⁵

COMPARING MET STANDARD RATES ON WASL

Exhibit 4 illustrates how these four denominators produce different results. For example, when basing the results on all students slated to take the WASL in spring 2006, 44.9 percent met standard in all three subject areas.

Basing the results on students who completed all three subject areas produces the highest met standard rate, whereas results based on all students who were slated to take the WASL produce the lowest rate. There is an 8.7 percentage point difference between these methods.

Exhibit 4
Meeting Standard on 10th-Grade WASL as
Percentage of All and Tested Students,
Spring 2006



⁴ Whether an absence is classified as excused or unexcused is regulated by policies developed by individual school districts. See: <http://reportcard.ospi.k12.wa.us/WASLCurrent.aspx?schoolid=1&reportLevel=State&year=2005-06&gradeLevel=10>. (RCW 28A.225.020)

⁵ For information about federal guidelines as they apply to Washington State, see Office of Superintendent of Public Instruction, “AYP Questions and Answers,” August 2006. See: http://www.k12.wa.us/ESEA/pubdocs/AYPFAQ_August0906.doc

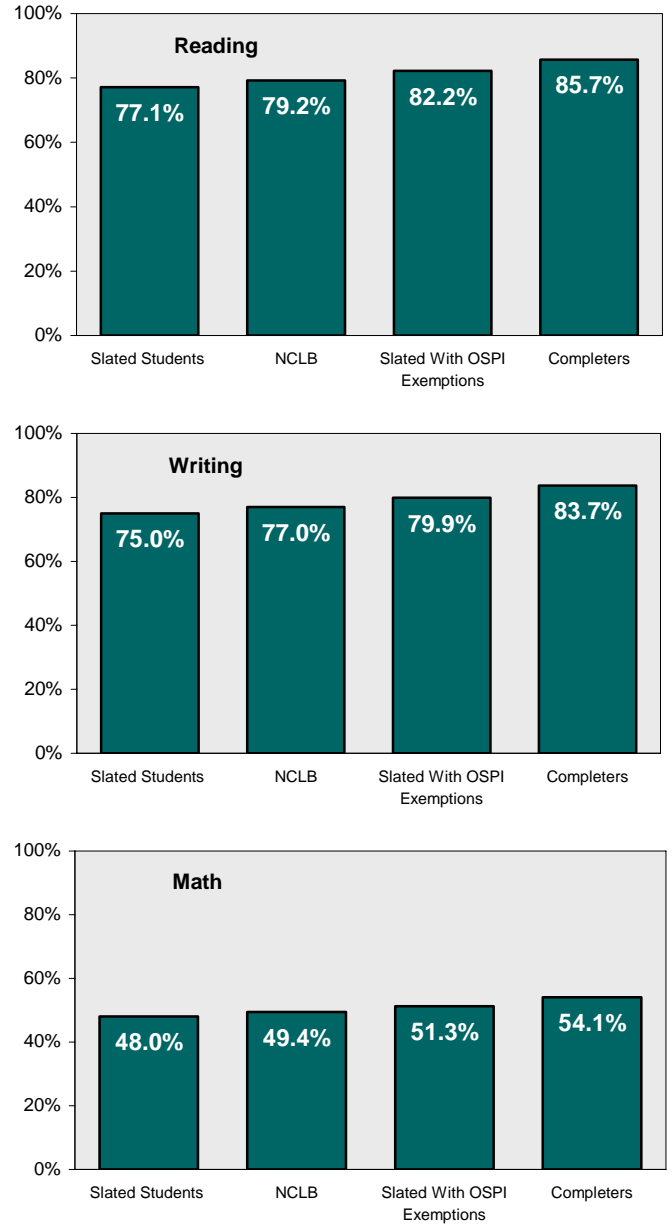
Exhibit 5 demonstrates how the use of different denominators to calculate met standard rates affects subject-area results on the WASL. The denominators for these calculations are based on the number of students for each subject area. For example, the percentage of students who met standard in reading varies between 77.1 percent for all 10th graders who were slated to take the reading assessment and 85.7 percent for students who completed the reading assessment.

As with the overall met standard rates, basing the results on students who completed each subject area assessment produces the highest met standard rate, whereas results based on students who were slated to take the subject area produce the lowest rate.

Pursuant to the Institute’s mandate to identify (1) the characteristics of students who did not meet standard on the WASL and (2) possible barriers to their lack of success,⁶ our focus is on students who take and complete the WASL. As such, the Institute reports the number of students who met standard on the WASL as a percentage of students who completed an assessment.

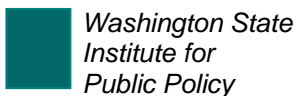
⁶ SSB 6618, Chapter 352, Laws of 2006.

Exhibit 5
Meeting Standard on the 10th-Grade WASL as a Percentage Based on Different Denominators, by Subject Area



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