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September 2006

#### A HISTORIC LOOK AT THE WASL AND HIGH SCHOOL GRADUATION

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." To that end, the Institute will publish a series of single-topic reports, as well as an interim report, by December 2006, and a final report in December 2007.

This first report examines the historical relationship between student performance on the 10th-grade Washington Assessment of Student Learning (WASL) and subsequent high school graduation.

Beginning with the high school class of 2008, students must meet standard in three subject areas—reading, writing, and math—to graduate. Student-level WASL data for 10th graders in the class of 2008 were not available until after the publication of this report. The graduation data for the class of 2008 will not be available until the end of 2008.

Since data for the class of 2008 are not yet available, this first report examines the historical relationship between student performance on the 10th-grade WASL and graduation.

The class of 2004 is the most recent cohort for which both WASL and graduation data are available. Since WASL performance continues to improve, this report provides a starting point to examine the relationship between student performance on the WASL and graduation rates.

It is important to emphasize that generalizations from this analysis to the class of 2008 cannot be made for these significant reasons:

- Students in the class of 2008 have two additional years of instruction before graduation.
- Students can retake the WASL up to four times in each subject to meet standard.

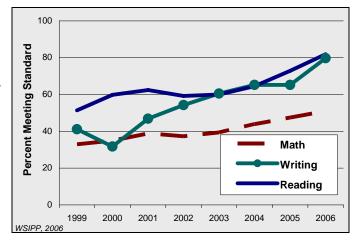
- Districts have adopted curriculum and classroom instruction that is more closely aligned with statewide learning standards.
- Targeted assistance programs, such as Promoting Academic Success, have been developed and offered to students.
- Meeting standard on the WASL is now a prerequisite for graduation.
- Alternative assessments are an option for meeting graduation requirements.

#### A HISTORY OF IMPROVING WASL PERFORMANCE AND GRADUATION RATES

**Exhibit 1** plots the annual 10th-grade WASL performance in reading, writing, and math between 1999 and 2006.<sup>4</sup>

The proportions of students who met standard in reading and math have steadily increased. Nevertheless, the gap in the percentage of students meeting standard in reading versus math has persisted. In 2006, 82 percent of students met standard in reading while 51 percent met standard in math. The percentage of students who met standard in writing increased much more rapidly, from a low of 32 percent in 2000 to 80 percent in 2006.

Exhibit 1
Percentage of 10th Graders Meeting Standard in Reading, Writing, and Math, 1999–2006



<sup>&</sup>lt;sup>4</sup> http://reportcard.ospi.k12.wa.us/waslTrend.aspx

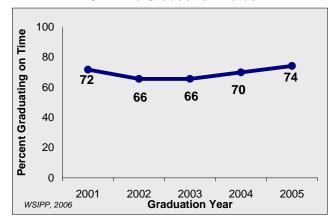
<sup>&</sup>lt;sup>1</sup> SSB 6618, Chapter 352, Laws of 2006.

<sup>&</sup>lt;sup>2</sup> The class of 2005 graduation data were not available until August 2006. Since the WASL results and graduation rates for the class of 2004 and 2005 are similar, we are confident the findings apply to both classes.

<sup>&</sup>lt;sup>3</sup> See Exhibit 1.

**Exhibit 2** displays the "on-time" graduation rates from 2001 to 2005.<sup>5</sup> These rates have increased from a low of 66 percent for the class of 2002 to 74 percent for the class of 2005.

Exhibit 2
On-Time Graduation Rates



Exhibits 1 and 2 demonstrate improving student academic performance.

## HOW WERE SUBJECT AREA WASL RESULTS RELATED TO GRADUATION RATES?

**Exhibit 3** plots the percentage of students who graduated for each combination of subject-area results.<sup>6</sup> Approximately half of students (55 percent) who did not meet standard in any subject area in 2002 graduated in 2004. These students accounted for 23 percent of the class of 2004.

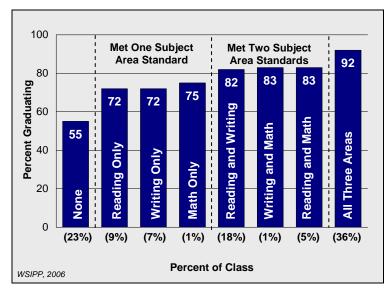
In contrast to those who did not meet standard in any area, students who met standard in *one* content area graduated at a much higher rate, above 70 percent. These students accounted for 17 percent of the class.

Over 80 percent of students who met standard in *two* subject areas graduated. Altogether, 24 percent of the students met standard in two content areas. Eighteen percent of the class met standard in reading and writing, but not math. Thirty-six percent of the class met standard in all

Thirty-six percent of the class met standard in all three subject areas, and this group had the highest graduation rate—92 percent.

These results indicate that as students meet standard in more subject areas, their likelihood to subsequently graduate increases.

Exhibit 3
Percentage Completing 10th-Grade WASL in 2002
Who Graduated in 2004
Performance in Each WASL Subject Area



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<sup>&</sup>lt;sup>5</sup> The percentage of students who began grade 9 and graduated "on time" four years later. The Office of Superintendent of Public Instruction (OSPI) began publishing these rates for the class of 2001. http://reportcard.ospi.k12.wa.us/summary.aspx

<sup>&</sup>lt;sup>6</sup> The sample includes all students who completed the 10th-grade WASL in 2002 and were expected to graduate by 2004. Of the 81,723 students enrolled in the 10th grade in 2002, 62,846 completed the three subject areas of the WASL. The graduation rate for this sample is higher than a typical 9th-grade on-time rate because some students drop out between the 9th and 10th grades, and because the students who did not complete the WASL had very low graduation rates.

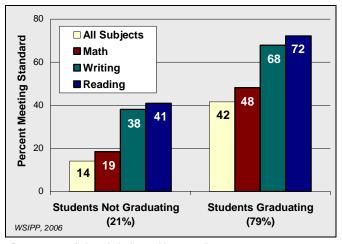
## How DID GRADUATES AND NON-GRADUATES DO IN THE 10TH-GRADE WASL CONTENT AREAS?

Another way to examine these data is to review the performance of 2004 graduates on their 10th-grade WASL exams.

**Exhibit 4** compares 10th-grade 2002 WASL performance for students who did and did not graduate in 2004. Graduates consistently outperformed non-graduates by approximately 30 percentage points in all three content areas. For example, 42 percent of graduates met standard in all three content areas, compared with only 14 percent of students who did not graduate.

Among graduating students, 72 percent met standard in reading, 68 percent met standard in writing, and 48 percent met standard in math.<sup>7</sup>

# Exhibit 4 WASL Performance in 2002 by High School Graduation in 2004



Percentage of class is indicated in parentheses.

The results displayed in Exhibit 4 indicate that most graduates in 2004 were at the expected level of reading proficiency in the 10th grade. Slightly fewer graduates were at the expected writing level. Less than half were at the expected level of proficiency in math.

It is important to emphasize that generalizations to the class of 2008 cannot be made from this report because of the multiple changes taking place in the education system. However, this report provides a starting point for examining the historical relationship between student performance on the WASL and graduation rates.

- The on-time graduation rate has increased from 66 percent for the class of 2002 to 74 percent for the class of 2005.
- The proportion of students meeting standard in reading, writing, and math has increased. Students meeting standard in reading and writing reached 80 percent in 2006, while only 51 percent of the students met standard in math.
- Approximately 36 percent of all students who completed the 10th-grade WASL in 2002 met standard in all three areas.
- Graduates performed much better on the WASL than non-graduates. Almost 42 percent of graduates met standard in all three content areas in the 10th grade compared with only 14 percent who did not graduate.
- Among graduating students, 72 percent had met standard in reading by the 10th grade, 68 percent had met standard in writing, and 48 percent had met standard in math.

Over the last five years, more than one quarter of Washington's 9th graders did not graduate within four years. Most of these non-graduates also performed poorly on the WASL. Students with characteristics similar to historic non graduates will face significant challenges in meeting standard.

In future reports, the Institute will examine WASL performance for students in the class of 2008 for whom meeting standard is a graduation requirement.

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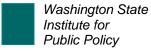
**FINDINGS** 

When the reading results are disaggregated by reading level, 56 percent of graduates performed well above standard and 18 percent were one level below standard. In contrast, only 21 percent of graduates scored well above standard in math and 25 percent were one level below standard.

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