Tool 40

# Sample Data Packet

## Section I: State Assessment Data—Trend Analyses

All tables and figures in this section are adapted, with permission, from the Office of Superintendent of Public Instruction Washington State Report Card, http://reportcard.ospi.k12.wa.us

### Sample School: Washington Elementary School

The number of students at each grade level at Washington Elementary School (a pseudonym; hereafter WES) is small in relation to the numbers at other, larger schools. The small class sizes result in state assessment data that can vary widely from year to year. One way to compensate for this variance is to look at trends in performance over time. This strategy has been used in the data analysis included in this section. While WES contains grades PK–5, statewide trend data (for comparison purposes) are available only for fourth-graders.

### Key Findings

#### *Fourth-grade reading*

The percentage of WES students meeting the standard grew by 8 percentage points between 1997 and 2008. Statewide, that growth was 25 percentage points. (All percentages are rounded.) WES students meeting the standard trailed the statewide average by 19 percentage points. (See Table 1 and Figure 1.)

**Table 1: Percentage of Students Meeting Fourth-Grade Reading Standard**

| Year | School (%) | District (%) | State (%) |
|---|---|---|---|
| 1996–97 | 46.1 | 51.1 | 47.9 |
| 1997–98 | 41.7 | 57.6 | 55.6 |
| 1998–99 | 47.7 | 60.7 | 59.1 |
| 1999–00 | 54.7 | 67.4 | 65.8 |
| 2000–01 | 53.1 | 66.3 | 66.1 |
| 2001–02 | 50.5 | 69.6 | 65.6 |
| 2002–03 | 43.2 | 64.0 | 66.7 |
| 2003–04 | 65.3 | 72.4 | 74.4 |
| 2004–05 | 55.3 | 78.1 | 79.5 |
| 2005–06 | 72.9 | 80.9 | 81.2 |
| 2006–07 | 44.3 | 74.7 | 76.6 |
| 2007–08 | 53.8 | 72.8 | 72.6 |

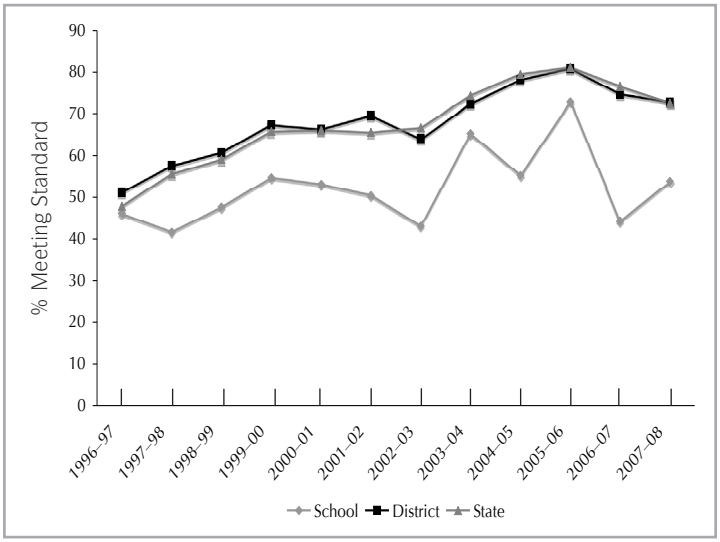


**Figure 1: Fourth-grade reading trend, 1996–2008.**

### *Fourth-grade mathematics*

The percentage of WES students meeting the standard grew by 16 percentage points between 1997 and 2008. Statewide, that growth was 33 percentage points. WES students meeting the standard trailed the statewide average by 22 percentage points. (See Table 2 and Figure 2.)

**Table 2: Percentage of Students Meeting Fourth-Grade Math Standard**

| Year | School (%) | District (%) | State (%) |
|---|---|---|---|
| 1996–97 | 15.8 | 24.2 | 21.4 |
| 1997–98 | 12.5 | 33.6 | 31.2 |
| 1998–99 | 26.7 | 35.3 | 37.3 |
| 1999–00 | 27.1 | 37.9 | 41.8 |
| 2000–01 | 21.9 | 38.1 | 43.4 |
| 2001–02 | 33.3 | 52.1 | 51.8 |
| 2002–03 | 18.8 | 49.6 | 55.2 |
| 2003–04 | 50.7 | 57.0 | 59.9 |
| 2004–05 | 38.2 | 59.3 | 60.8 |
| 2005–06 | 47.1 | 60.2 | 58.9 |
| 2006–07 | 32.8 | 55.5 | 58.1 |
| 2007–08 | 32.3 | 53.1 | 53.6 |

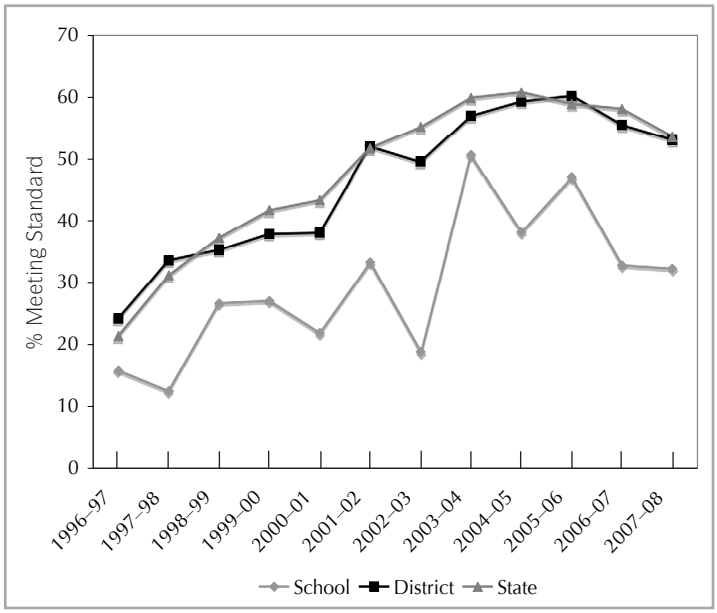


**Figure 2: Fourth-grade math trend, 1996–2008.**

### *Fourth-grade writing*

The percentage of WES students meeting the standard grew by 13 percentage points between 1997 and 2008. Statewide, that growth was 19 percentage points. WES students meeting the standard trailed the statewide average by 25 percentage points. (See Table 3 and Figure 3)

**Table 3: Percentage of Students Meeting Fourth-Grade Writing Standard**

| Year | School (%) | District (%) | State (%) |
|---|---|---|---|
| 1996–97 | 23.7 | 34.9 | 42.8 |
| 1997–98 | 12.3 | 31.1 | 36.7 |
| 1998–99 | 25.6 | 34.6 | 32.6 |
| 1999–00 | 22.4 | 38.1 | 39.4 |
| 2000–01 | 21.9 | 37.3 | 43.3 |
| 2001–02 | 33.3 | 50.4 | 49.5 |
| 2002–03 | 27.5 | 54.5 | 53.6 |
| 2003–04 | 30.6 | 41.7 | 55.8 |
| 2004–05 | 33.3 | 49.4 | 57.7 |
| 2005–06 | 42.5 | 58.7 | 60.4 |
| 2006–07 | 36.1 | 59.7 | 60.2 |
| 2007–08 | 36.9 | 55.5 | 62.3 |

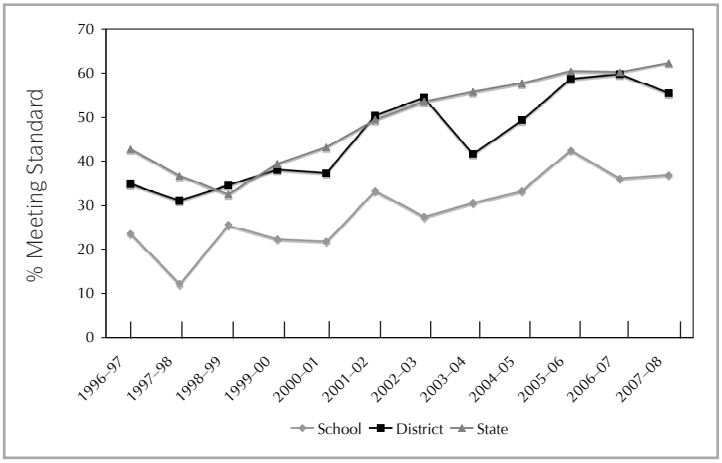


**Figure 3: Fourth-grade writing trend, 1996–2008.**

## WES Low-Income Students Compared to Their WES Non-Low-Income Peers

### *Fourth-grade reading*

The percentage of WES low-income students meeting the standard decreased by 3 percentage points between 2005 and 2008. Statewide, that decrease was 9 percentage points. The gap between low-income and non-low-income students at WES was 14 percentage points. Statewide, this gap was 23 percentage points. WES low-income students meeting the standard trailed the statewide average of low-income students by 12 percentage points. (See Tables 4 and 5 and Figure 4.)

**Table 4: Percentage of WES Students Meeting Fourth-Grade Reading Standard by Income Status**

| Year | Non-Low-Income (%) | Low-Income (%) |
|---|---|---|
| 2004–05 | 66.7 | 50.0 |
| 2005–06 | 92.0 | 62.2 |
| 2006–07 | 66.7 | 29.7 |
| 2007–08 | 61.3 | 47.1 |

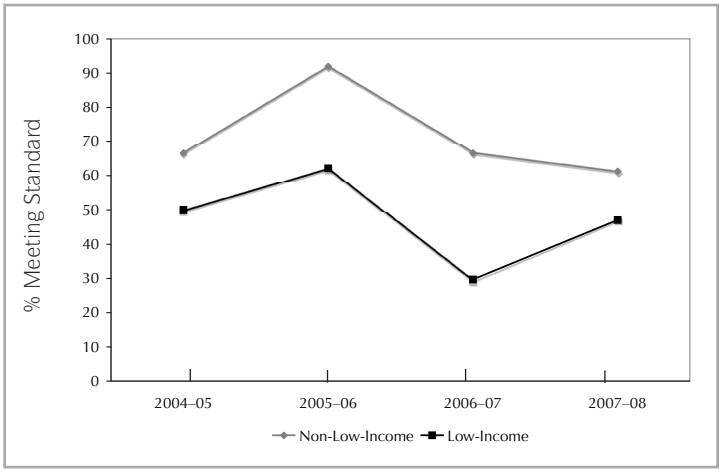


**Figure 4: WES fourth-grade reading trend by income status, 2004–2008.**

**Table 5: Percentage of Students Statewide Meeting Fourth-Grade Reading Standard by Income Status**

| Year | Non-Low-Income (%) | Low-Income (%) |
|---|---|---|
| 2004–05 | 87.7 | 67.7 |
| 2005–06 | 88.2 | 70.9 |
| 2006–07 | 85.0 | 64.8 |
| 2007–08 | 82.3 | 59.3 |

### *Fourth-grade mathematics*

The percentage of WES low-income students meeting the standard decreased by 5 percentage points between 2005 and 2008. Statewide, that decrease was 7 percentage points. The gap between low-income and non-low-income students at WES was 18 percentage points. Statewide, this gap was 29 percentage points. WES low-income-students meeting the standard trailed the statewide average of low-income students by 13 percentage points. (See Tables 6 and 7 and Figure 5.)

**Table 6: Percentage of WES Students Meeting Fourth-Grade Math Standard by Income Status**

| Year | Non-Low-Income (%) | Low-Income (%) |
|---|---|---|
| 2004–05 | 58.3 | 28.8 |
| 2005–06 | 68.0 | 35.6 |
| 2006–07 | 58.0 | 16.2 |
| 2007–08 | 41.9 | 23.5 |

**Table 7: Percentage of Students Statewide Meeting Fourth-Grade Math Standard by Income Status**

| Year | Non-Low-Income (%) | Low-Income (%) |
|---|---|---|
| 2004–05 | 72.4 | 43.8 |
| 2005–06 | 70.2 | 42.5 |
| 2006–07 | 70.3 | 40.7 |
| 2007–08 | 65.6 | 36.9 |

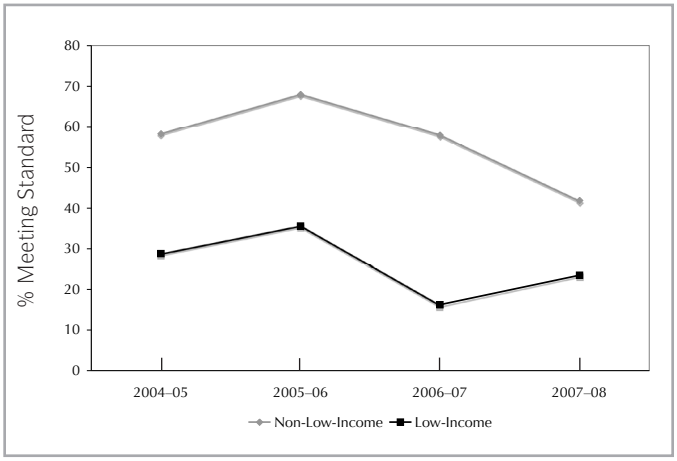


**Figure 5: WES fourth-grade math trend by income status, 2004–2008.**

### *Fourth-grade writing*

The percentage of WES low-income students meeting the standard increased by 4 percentage points between 2005 and 2008. Statewide, that increase was 5 percentage points. The gap between low-income and non-low-income students at WES was 10 percentage points. Statewide, this gap was 23 percentage points. WES low-income students meeting the standard trailed the statewide average of low-income students by 17 percentage points. (See Tables 8 and 9 and Figure 6.)

**Table 8: Percentage of WES Students Meeting Fourth-Grade Writing Standard by Income Status**

| Year | Non-Low-Income (%) | Low-Income (%) |
|---|---|---|
| 2004–05 | 45.8 | 27.5 |
| 2005–06 | 53.8 | 36.2 |
| 2006–07 | 50.0 | 27.0 |
| 2007–08 | 41.9 | 32.4 |

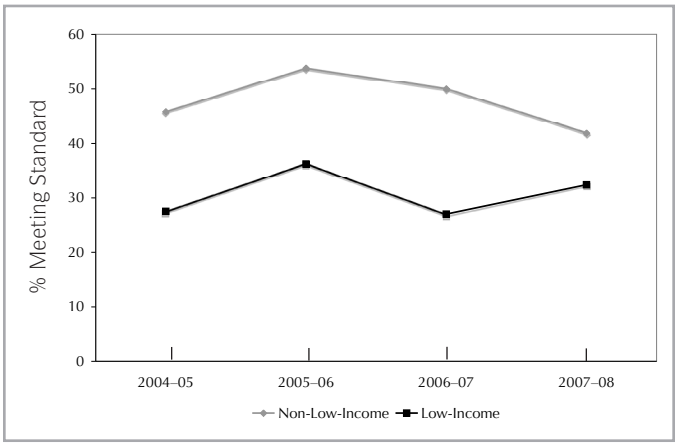


**Figure 6: WES fourth-grade writing trend by income status, 2004–2008.**

**Table 9: Percentage of Students Statewide Meeting Fourth-Grade Writing Standard by Income Status**

| Year | Non-Low-Income (%) | Low-Income (%) |
|---|---|---|
| 2004–05 | 67.3 | 43.9 |
| 2005–06 | 69.5 | 47.2 |
| 2006–07 | 70.2 | 46.0 |
| 2007–08 | 72.0 | 48.9 |

## WES Girls Compared to Boys in Writing

### *Fourth-grade writing*

The percentage of WES girls meeting the standard grew by 25 percentage points between 2001 and 2008. Statewide, that growth was 26 percentage points. WES girls meeting the standard trailed the statewide average by 19 percentage points. The percentage of WES boys meeting the standard grew by 7 percentage points between 2001 and 2008. Statewide, that growth was 19 percentage points. WES boys meeting the standard trailed the statewide average by 32 percentage points. (See Tables 10 and 11 and Figure 7.)

**Table 10: Percentage of WES Students Meeting Fourth-Grade Writing Standard by Gender**

| Year | Female (%) | Male (%) |
|---|---|---|
| 2000–01 | 27.3 | 14.6 |
| 2001–02 | 45.8 | 21.6 |
| 2002–03 | 37.5 | 17.5 |
| 2003–04 | 37.5 | 25.0 |
| 2004–05 | 37.0 | 31.3 |
| 2005–06 | 52.8 | 32.4 |
| 2006–07 | 36.7 | 35.5 |
| 2007–08 | 51.5 | 21.9 |

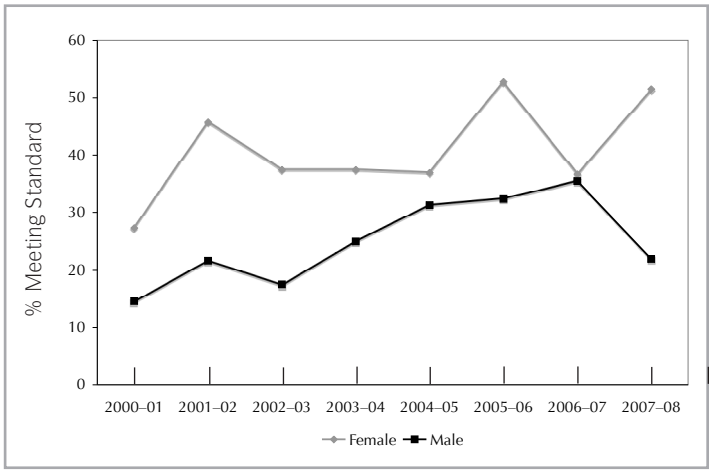


**Figure 7: WES fourth-grade writing trend by gender, 2000–2008.**

**Table 11: Percentage of Students Statewide Meeting Fourth-Grade Writing Standard by Gender**

| Year | Female (%) | Male (%) |
|---|---|---|
| 2000–01 | 52.0 | 35.3 |
| 2001–02 | 58.7 | 41.3 |
| 2002–03 | 62.1 | 45.8 |
| 2003–04 | 64.0 | 48.0 |
| 2004–05 | 67.3 | 48.6 |
| 2005–06 | 69.1 | 52.0 |
| 2006–07 | 69.1 | 51.8 |
| 2007–08 | 71.3 | 53.7 |

## Section II: Analysis of Student Work

### Sample School: Maple Valley Elementary/Intermediate

Prior to the on-site school review, teachers at Maple Valley (a pseudonym) were asked to collect student work from every class for a 2-week period. Teachers were also asked to include corresponding lesson plans, any scoring guides used, and a description of each assignment if available. In this example, student work was received from 13 teachers in the following content areas/classes: language arts, science, social studies, mathematics, art, career tech, physical education, skills for adolescents, and computers.

## Unique Assignments

A total of 243 unique assignments were received and reviewed (see Table 12). A "unique assignment" is one that is given in one or more classes. Thus an identical assignment given in two or more classes counts as a single unique assignment.

**Table 12: Number of Unique Assignments by Grade-Level and Specialist Grouping**

| | |
|---|---|
| Grades: K, 1, 2, and 1–2 split | 76 |
| Grades: 2–3 split, 3, and 4 | 31 |
| Grades: 5, 6, and 7 | 51 |
| Specialists: Art, PE, Special Education, Technology, Library | 85 |
| Could not determine grade level | 5 |
| **Total** | 243 |

## Cognitive Demand

Assignments were analyzed to determine their level of cognitive demand. The analysis was based on Bloom's Taxonomy, a classification of educational objectives developed in the 1950s by a group of researchers headed by Benjamin Bloom of the University of Chicago. These objectives are divided into lower- and higher-order thinking skills. The lower-order skills range from recall to comprehension to application. The higher-order skills progress from analysis to synthesis to evaluation.

The analysis of the level of cognitive demand showed that a preponderance of the 243 assignments reviewed during the 2-week window were targeted to lower-order thinking skills. However, within that category, the highest percentage of assignments were at the application level, which is the highest level in the lower order (see Table 13).

## Level of Rigor

Academically rigorous content leads students beyond the acquisition of knowledge. An academically rigorous curriculum teaches analytical thinking, learning skills, comprehension skills, and writing skills. The rigor of each assignment was calculated based on the degree of academic challenge present in the assignment in relation to state grade-level standards (see Table 14).

**Table 13: Level of Cognitive Demand of Assignments by Grade-Level and Specialist Grouping**

| Taxonomic Level | K, 1, 2, & 1–2 split | | 3, 4, & 2–3 split | | 5, 6, & 7 | | Specialists | |
|---|---|---|---|---|---|---|---|---|
| | N | %* | N | %* | N | %* | N | %* |
| **Higher Order** | | | | | | | | |
| Evaluation | 0 | 0 | 1 | 3 | 1 | 2 | 1 | 1 |
| Synthesis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Analysis | 4 | 5 | 6 | 19 | 10 | 20 | 1 | 1 |
| **Lower Order** | | | | | | | | |
| Application | 40 | 53 | 14 | 45 | 20 | 39 | 51 | 60 |
| Comprehension | 10 | 13 | 6 | 19 | 1 | 2 | 14 | 16 |
| Recall | 19 | 25 | 3 | 10 | 19 | 37 | 17 | 20 |
| Could not determine | 3 | 4 | 1 | 3 | | | 1 | 1 |
| **Total N** | 76 | | 31 | | 51 | | 85 | |

*Percentages are rounded.

**Table 14: Level of Rigor of Assignments by Grade-Level and Specialist Grouping**

| Level of Rigor | K, 1, 2, & 1–2 split | | 3, 4, & 2–3 split | | 5, 6, & 7 | | Specialists | |
|---|---|---|---|---|---|---|---|---|
| | N | %* | N | %* | N | %* | N | %* |
| Higher than state standard/ benchmark | 12 | 16 | 1 | 3 | 9 | 18 | 1 | 1 |
| Match to state standard/ benchmark | 59 | 78 | 23 | 74 | 23 | 45 | 63 | 63 |
| Below state standard/ benchmark | 2 | 3 | 6 | 19 | 16 | 31 | 20 | 20 |
| Could not determine | 3 | 4 | 1 | 3 | 3 | 6 | 1 | 1 |
| **Total N** | 76 | | 31 | | 51 | | 85 | |

*Percentages are rounded.

# Section III: Survey Results

## Sample School: Maple Valley Elementary/Intermediate

During the on-site portion of the review, the review team collected and analyzed surveys from:

- Thirty-eight (38) parents
- Ten (10) classified staff members
- Thirteen (13) teachers/administrators
- Ninety-two (92) fifth-, sixth-, and seventh-grade students

The Parent Survey included five questions regarding the instructional program (Effectiveness Indicator 2) at Maple Valley Elementary/Intermediate. Tables 15 and 16 display the results of that portion of the survey.

**Table 15: Responses to Parent Survey by Number (N = 38)**

| | | Always True | Most Often True | Sometimes True | Never True | NA |
|---|---|---|---|---|---|---|
| 1 | My child's schoolwork is challenging. | 0 | 6 | 15 | 17 | 0 |
| 2 | Teachers believe my child can do well in school. | 0 | 20 | 11 | 5 | 2 |
| 3 | My child believes he/she can do well in school. | 1 | 23 | 6 | 8 | 0 |
| 4 | My child's teachers are very knowledgeable about the subjects they teach. | 8 | 15 | 10 | 0 | 5 |
| 5 | Teachers at this school are committed to making sure all students get a good education. | 2 | 21 | 10 | 5 | 0 |

**Table 16: Responses to Parent Survey by Percentage (N = 38)**

| | | Always True (%) | Most Often True (%) | Sometimes True (%) | Never True (%) | NA (%) |
|---|---|---|---|---|---|---|
| 1 | My child's schoolwork is challenging. | | 16 | 39 | 45 | |
| 2 | Teachers believe my child can do well in school. | | 53 | 29 | 13 | 5 |
| 3 | My child believes he/she can do well in school. | 3 | 61 | 16 | 21 | |
| 4 | My child's teachers are very knowledgeable about the subjects they teach. | 21 | 39 | 26 | | 13 |
| 5 | Teachers at this school are committed to making sure all students get a good education. | 5 | 55 | 26 | 13 | |