# OREGON SCHOOL REPORT CARD 2006–2007 TECHNICAL BULLETIN

# **Rating System and Formulas**

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# **Technical Bulletin**

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#### **Preface**

This Technical Bulletin provides detailed information about how the ratings will be calculated for the 2006–2007 Oregon School Report Cards to be released in October 2007. A companion volume, *Oregon School & District Report Card 2006—2007 Policy Manual*, provides background information about the report cards.

School report cards were first issued in January 2000 with the rating formulas and rules remaining largely unchanged during the first three years. Extensive revisions in the formula were reflected in the report cards released in January 2003. Additional changes in displays were incorporated for January 2004 to bring the report card into compliance with requirements of the No Child Left Behind Act.

The Overall rating combines four components: **Student Performance**, **Student Behavior**, **Improvement**, and **School Characteristics**. This document describes in detail each of these component ratings.

Example procedures are included in this document to help readers understand how ratings are calculated for elementary/middle schools and high schools.

#### **Oregon Law**

Oregon law (ORS 329.105) requires that the Oregon Department of Education issue performance reports for public schools. These performance reports shall include school ratings for Overall School Performance, Student Performance, Student Behavior, and School Characteristics. Schools shall be rated as Exceptional, Strong, Satisfactory, Low, and Unacceptable. In December 1999, the State Board of Education passed administrative rule OAR 581-022-1060 that established these criteria as the basis for the Oregon school report card ratings. Senate Bill 811 passed in July 2001 requires specific data elements to be displayed on school and district report cards. The No Child Left Behind Act of 2001 mandates additional data elements and displays for school and district report cards produced by states.

The State Superintendent and the Oregon Department of Education are charged with establishing the specific means for calculating the ratings and reporting the results. Working with a national consultant and stakeholders throughout the state, the Department has produced the specific formulas, definitions, and procedures for the school report cards. The school and district report cards have continued to display but not rate other information in addition to the requirements.

#### Introduction

This document describes the rating system for the 2006–2007 School and District Report Cards to be issued in October 2007. It also provides detailed information about the specific formulas and definitions and examples of how the ratings will be calculated. The companion volume, *Oregon School & District Report Card 2006—2007 Policy Manual*, describes the Report Card elements, displays, and other background information.

Formula Changes in the Rating System for the 2006–2007 Report Cards

The following changes are incorporated into the formulas and rules:

- On March 15, 2007, the State Board of Education adopted revised achievement/performance standards in Reading/Literature and mathematics effective for the 2006-07 school year. See pages 16 and 17 of the <u>Report Card Policy Manual</u> to review the new performance standards. To maintain continuity in improvement ratings, the percentage of students in 06-07 meeting the 05-06 achievement/performance standards will be calculated. In addition, ODE will adjust the index cutpoints for student performance ratings based on the new standards.
- ♦ Attemptedness criteria have been defined for tests taken during 2006–2007. For TESA tests, students must complete at least 5 questions and for paper/pencil tests students must complete 10 questions for submission to be considered complete. Tests in writing must be of sufficient length and specificity to be scorable.
- ♦ Performance reporting will be expanded for 2006–2007 to include grades 4, 6, and 7 in both reading and mathematics. Previously, these grades and content areas were considered only in participation ratings.
- ◆ A number of changes have been made in participation determinations for 2006-2007.
  - Students taking modified tests, whether for language or disability, will be counted as non-participants. Their performance will not be included academic achievement indicators.
  - Students missing the test due to a medical emergency are not considered in calculating either participation or academic achievement.
  - Students whose writing samples do not meet these requirements will be counted as non-participants.
  - Papers coded with a "special code" will not receive valid scores and count as non-participants. Special codes are listed at <a href="http://www.ode.state.or.us/apps/fags/index.aspx?t=41&k=147">http://www.ode.state.or.us/apps/fags/index.aspx?t=41&k=147</a>.
  - ◆ A student who targets up as an 8<sup>th</sup> grader, attempting the CIM test two years before required, must also take the 8<sup>th</sup> grade test during the 8<sup>th</sup> grade year to be counted as a participant.
  - ◆ The first year of enrollment for LEP students begins with enrollment after May 1<sup>st</sup> rather than August 15<sup>th</sup> as in the past. Students in their first year are not required to take the English/language arts test if they take the state's English Language Proficiency Assessment (ELPA).

#### Variables Included in Report Card Ratings

Rating	Components	
Overall	Student Performance, Student Behavior, Improvement, School Characteristics	
Student Performance	Elementary/Middle School: Student performance in Grades 3–8 on Oregon Statewide Assessments in Reading/Literature and Math Knowledge and Skills.  High School: Student performance in Grade 10 on Oregon Statewide Assessments in Reading/Literature, Math Knowledge and Skills, and Writing.	
Student Behavior	Elementary/Middle School: Attendance rate. High School: Attendance and Dropout rates.	
Improvement	Improvement in Reading and Math Knowledge and Skills assessment scores combined with improvement in attendance and dropout rates.	
School Characteristics	Percentage of eligible students at grades 3–8 and 10 participating in 2006–2007 Oregon Statewide Assessments in English/Language Arts and Mathematics.	

# **Calculating the School Characteristics Rating**

#### Formula Description

School Characteristics will be based on the percentage of eligible students participating in Statewide Assessments. Each school will receive a School Characteristics rating reflecting its participation rate as shown in the table below. A school receiving an *Unacceptable* or *Low* rating in School Characteristics will receive no higher than an Overall rating of *Unacceptable* or *Low*, respectively.

School Characteristics Rating			
Rating Participation Rate			
Exceptional	94.5% and higher		
Low	89.5%–94.4%		
Unacceptable	Less than 89.5%		

#### **Discussion: The Importance of Participation Rate**

It is important that schools include all students in the statewide assessment system. As the number of students participating increases, the accuracy of the depiction of the school performance increases. If a school selects only a portion of the student body for assessments, the scores cannot be depended upon to represent all students. Valid comparisons of the school, whether to itself over time or to others for the current year, require that a representative group of students is included in the assessment data. The specifics of student participation are shown below for both 2005–2006 and 2006–2007.

	Participation Formula		
Testing Conditions	2005–2006 Report Card Issued October 2006	2006–2007 Report Card Issued October 2007	
Standard assessments (with or without accommodations)	Included	Included	
Targeted up (8th grade students must take the 8th grade test to be counted as participants in 06-07)	Included	Included	
Targeted down	Included	Included as non-participant	
Extended assessments	Included	Included	
Juried assessments	Included	Included	
Modified assessments	Included	Included as non-participant	
Parent Non-consent	Not included	Not included	
Student Non-consent/No attempt	Included as non-participant	Included as non-participant	
Exempted First Year ELL	Included	Included	
Non-completers	Included	Included	
Absent due to medical emergency	Included as non-participant	Not included	
Students enrolled on the first school day in May enrolled during a test window but not tested	Included as non-participant	Included as non-participant	

#### **Definition of Participation Rate**

#### **Definition of Participation Rate for Report Card**

The participation rate reflects the proportion of students eligible to participate in the reading, writing, and mathematics Oregon Statewide Assessments to those who actually received scores. For the purposes of the school report card system, the participation rate is defined as follows:

number of participating tests in reading, mathematics, and writing

expected number of participating tests in reading, mathematics, and writing-number of tests from students that were ineligible for testing

This definition reflects the percentage of students who should have participated in assessments but did not participate. Schools receive a *Low* School Characteristics rating if more than 5.5% of expected tests from students enrolled on the first school day in May are non-participants. Schools receive an *Unacceptable* School Characteristics rating if more than 10.5% of expected tests from students enrolled on the first school day in May are non-participants. See below for details on non-participating tests and expected number of tests.

#### **Summary Discussion**

The participation rate for the 2006–2007 report card includes all students enrolled in a school or district on the first school day in May except those students who were exempted due to parent non-consent for religious or disability-related reasons. Students who were exempted due to parent non-consent for religious or disability-related reasons are considered ineligible for testing and are excluded from the calculation of the report card participation rate. For 2006–2007 the expected tests are students that were enrolled during a test window for the following tests:

- Reading/Literature grades 3—8 and 10
- Mathematics Knowledge and Skills grades 3—8 and 10
- Writing grades 4, 7, and 10

Note that registered home schooled students, private school students, tuitioned students, and students attending public or private alternative programs for whom public funds are expended on the education of the student or who did not receive instruction from the district in the state content standards during the 2006–2007 school year are excluded from district and school report card calculations when so identified by the district.

Non-participants are students enrolled on the first school day in May who were enrolled during a test window and not tested. This includes answer sheets coded as "absent", students who refuse to participate, parents who refuse to have their students tested for reasons other than religious or disability-related reasons.

Students with "special codes" in Writing (e.g. "too long," "too short," "off topic") are included for as non-participants.

#### **Student Inclusion Rules**

Туре	Assessment Code	Report Card 2005–2006 Policy	Report Card 2006–2007 Policy
Absent	1	2	2
Non-attempt (no attempt—includes student non-consent)		2	2
Modified (student with disability)	3	3	2
Exempt* (Limited English Proficient)		3	3
Modified (Limited English Proficient)	5	3	2
Refusal (parent)	7	1	1
Home schooled (home schooled/foreign exchange)	6	1	1
Not enrolled during test window	8	1	1
Excused for a medical emergency	9	1	1

#### Code key:

- 1— Not included in Participation (denominator) nor in calculation of Student Performance
- 2— Included as non-participant; not included in calculation of Student Performance
- 3— Included as participant; not included in calculation of Student Performance

Note: In calculating Student Performance, the average of two years is always used. In calculating Participation, the single most recent year is used.

<sup>\*</sup> Limited English Proficient (LEP) students who enroll in a U.S. school for the first time after May 1 2006 are not required to take the state assessments in reading and writing. However, these first year LEP students are counted as participants in reading or writing tests <u>only</u> if reported as taking the state's English Language Proficiency Assessment during the school year. First year LEP students are required to take state assessments in mathematics and science.

# **Calculating the Student Performance Rating**

#### Formula Description

The Student Performance Rating will be based on student performance on Oregon Statewide Assessments during the two most recent school years, 2005–2006 and 2006–2007.

The Calculation of Student Performance Ratings

In order to maintain a rating system that is consistent for as many years as possible, the decision was made by the Oregon Department of Education that results of reading and math assessments at grades 4, 6, and 7 were not included in the calculation of student performance in 2005–2006 AYP reports or report card rating formulas. The data were reported for informational purposes only.

These data will be included in 2006–2007 reports and ratings. That is, not only will 2006–2007 performance at these grade levels be included but, because these ratings are based on 2 years of data, the 2005–2006 performance at these grade levels will be included in the ratings as well.

Determining Which Tests to Include in Calculating Student Performance

The rules for including tests in the calculation of student performance have changed over time.

- For the 2004–2005 school year and beyond, the highest score earned during the school year that a student taking a standard administration of a test at or above the student's enrolled grade is included in the school and district where the student was enrolled for a full academic year in the school of enrollment on the first school day in May.
- The scores of students enrolled in grade 10 who took and passed the test the previous school year or who targeted up and passed the test as an 8<sup>th</sup> grade student are included using the inclusion rules for the appropriate school year.
- Beginning in 2006-07, a student must meet the achievement/performance standard of the targeted up assessment to be counted as meeting standard for the student's grade.
- Beginning in 2006-07, an eighth grade student who targets up to the 10th grade assessment must take the eighth grade assessment in ordered to be counted as a participant. Only the eighth grade test score is eligible for inclusion in the accountability reports for the year the test is taken. When the student is reported in the Spring Membership as enrolled in grade 10, scores that meet or exceed the achievement/ performance standard for grade 10 from prior years, including target up assessments from 8th grade students, are eligible for inclusion in the report card.

Note that registered home schooled students, private school students, tuitioned students and students attending public or private alternative programs for whom public funds are not expended on the education of the student or did not receive instruction from the district in the state content standards during the 2006–2007 school year are excluded from district and school report card calculations when so identified by the district.

#### Weights

- Elementary and Middle School: In calculations of the Student Performance ratings, results for Reading and Math Knowledge and Skills assessments will each contribute 50% of the total.
- High School: In calculations of the Student Performance ratings, results for Reading and Math Knowledge and Skills will each contribute 39% and Writing will contribute 22% of the total.

#### **Student Performance Rating Formulas**

**Elementary and Middle Schools:** The Student Performance rating will be calculated as an average of scores on Reading and Math Knowledge and Skills statewide assessments for the two most recent years.

**High School:** The Student Performance rating will be calculated as a weighted average of scores on Reading, Math Knowledge and Skills, and Writing statewide assessments for the two most recent years.

```
Student Performance Index Score _{\text{Grade 10}}= [((.39 x Reading _{2005-2006}) + (.39 x Math Knowledge/Skills _{2005-2006}) + (.22 x Writing _{2005-2006}))+ ((.39 x Reading _{2006-2007}) + (.39 x Math Knowledge/ Skills _{2006-2007}) + (.22 x Writing _{2006-2007})] /2
```

#### Calculating Index Points From Performance Levels

Based on performance levels, an Assessment Index Score is calculated for each student assessment, with the same general method used for each assessment. The table below shows the score points for 2006–2007. These are adjusted from 2005–2006. These new performance standards will be applied to the 2006–2007 data for 2006–2007 ratings. 2005-2006 standards will be applied to 2005-2006 data. Performance levels for entry points adjusted upward are marked with 1, those adjusted downward are marked with 2, and unchanged entry points are marked with 2. This table and a similar one for 2005–2006 report cards ratings are presented in the *Oregon School & District Report Card 2006—2007 Policy Manual*.

2006–2007 Oregon Assessments Performance Levels and Cut Scores by Content Area and Grade					
Scale Score Ranges for Each Performance Level			/el		
Grade	Exceed the Standard	Meet the Standard	Nearly Meet the Standard	Low	Very Low
		Reading/Litera	ture		
Grade 3	218 & above û	<b>204 – 217</b> û	199 – 203 企	189-198↓	below 188∜
Grade 4	223 & above⇔	<b>211 – 222</b> û	205 – 210 企	198-204介	below 198û
Grade 5	230 & above ↓	<b>218 – 229</b> û	209 – 217⇔	202-208企	below 202⇔
Grade 6	234 & above û	<b>222 – 233</b> û	214 – 221⇔	207-213分	below 207û
Grade 7	239 & above û	<b>227 – 238</b> û	<b>219 – 226</b> û	211-218 <sup>企</sup>	below 211û
Grade 8	<b>241 &amp;</b> above û	231 – 240⇔	<b>224 − 230</b> û	213-223分	below 213û
Grade 10	248 & above <sup>⊕</sup>	<b>236 – 247</b> û	231 – 235 û	217-230 企	below 217û
	Ma	th Knowledge ar	nd Skills		
Grade 3	217 & above û	205 – 216分	201 – 204 企	190-200 企	below 190û
Grade 4	225 & above û	<b>212 – 224</b> 兌	208 – 211 🕆	198-207 企	below 198û
Grade 5	229 & above û	218 – 228分	214 – 217仓	203-213分	below 203⇔
Grade 6	232 & above û	221 – 231 û	216 – 220 企	207-215⇔	below 207∜
Grade 7	238 & above û	226 – 237⇔	221 – 225 û	211-220⇔	below 211∜
Grade 8	241 & above û	230 – 240↓	225 – 229⇔	213-224分	below 213∜
Grade 10	246 & above <sup>⊕</sup>	236 – 245∜	<b>231 – 235</b> û	214-230↓	below 214∜
		Writing			
Grade 4	40 – 48⇔	32 – 39⇔	28 – 31⇔	16 – 27⇔	0 – 15⇔
Grade 7, 10	50 – 60⇔	40 – 49⇔	35 – 39⇔	20 – 34⇔	0 – 19⇔
		Science			
Grade 5	238 & above <sup>⊕</sup>	<b>225 – 237</b> û	<b>216 – 224</b> 企	209-215 企	below 209û
Grade 8	246 & above∜	<b>234 – 245</b> û	229 – 233 û	217-228分	below 217⇔
Grade 10	249 & above	<b>240 – 248</b> û	235 – 239 û	220-234⇩	below 220↓

#### **Index Points**

Index points are assigned for the number of students in each performance category. The index points for each performance level are shown in the table below.

Performance Level	Index Points
Exceed the Standard	133
Meet the Standard	100
Nearly Meet the Standard	67
Low	33
Very Low	0

#### **Assessment Index Score Formula**

The formula below yields one Assessment Index Score for a school. The index score is rounded to the nearest tenth of a point.

#### Assessment Index Score=

[(0 X Number of Very Low Scores) + (33 X Number of Low Scores) + (67 X Number of Nearly Meets Scores) + (100 X Number of Meets Scores) + (133 X Number of Exceeds Scores)] / Total Number of Student Scores

#### Student Performance Index Scores

The Student Performance Index Scores will be calculated and compared to the index score ranges below to determine the Student Performance rating. Ratings in student performance will be expressed as Unacceptable to Exceptional based on the index score ratings rather than as the index score itself.

Student Performance Index Score Ranges				
Rating	Elementary and Middle School	High School		
Exceptional	113.0 or higher	98.0 or higher		
Strong	98.0–112.9	80.0–97.9		
Satisfactory	68.0–97.9	68.0–79.9		
Low	58.0–67.9	60.0–67.9		
Unacceptable	Less than 58.0	Less than 60.0		

#### Method for Calculation

An Assessment Index Score for a given year and subject is calculated by counting the number of students who scored at the Exceed, the Meet, the Nearly Meet, the Low, and the Very Low performance levels. Then the points are applied to the number of students at each performance level. Please note that this method can be used to calculate an index score for each assessment at a particular grade level, or for a particular assessment across multiple grade levels within a school.

The Assessment Index Scores for a school include all the students assessed, regardless of the benchmark grade level. For example, a school with Grades 3, 4, and 5 will have the scores combined into a single Reading Assessment Index Score for the three grades combined.

#### Discussion

The Assessment Index Score represents the average performance of students in the school on that particular assessment. A score of 100 indicates that, on average, the students performed at the level of *Meet the Standard*. A score of 33 indicates that, on average, the students performed at the *Low* level. A school could have a maximum Assessment Index Score of 133 if all students are at the *Exceeds the Standard* level. The minimum score would be 0 if all the students were at the *Very Low* level.

#### Display

The percentage of students meeting or exceeding the standards will be displayed for the Reading Mathematics, and Writing assessments. Reports cards for the 2005-06 and prior school years displayed the percentage of students exceeding, meeting, and conditionally meeting the state standards for the Writing tests.

For the 2006-07 report cards, the percentage of students meeting achievement/performance standards in effect for the 2005-06 school year will be shown for both the 2005-06 and 2006-07 school years.

# Calculating the Student Behavior Rating

#### Formula Description

- *Elementary/Middle Schools:* The Student Behavior rating will be based on attendance rates during the two most recent school years, 2005–2006 and 2006–2007.
- ◆ High Schools/Schools With Grade 12: The Student Behavior rating will be based on attendance and dropout rates during the two most recent school years available.

#### Calculation of Student Behavior Ratings

- The Student Behavior rating will be based on attendance and/or dropout rates for the two most recent years.
- Improvement in Student Behavior will not be included in this category, but improvement in attendance and dropout rates will be part of the separate Improvement rating.
- The index score for attendance will be the percentage of students attending in grades 1– 12 and will not be based on a formula index.
- Index score ranges will be the same for elementary, middle, and high schools.

#### **Student Behavior Rating Formulas**

**Elementary and Middle Schools:** The Index Score will be based on an average of the attendance rates for the 2005–2006 and 2006–2007 schools years.

Student Behavior Index Score  $_{E/MS}$  = [(Attendance Rate  $_{2005-2006}$  + Attendance Rate  $_{2006-2007}$ )]/2

High Schools/Schools with Grade 12: Because of the delay in collection of dropout information, the Student Behavior Index Score will be based on an average of the attendance rates for the school years 2005–2006 and 2006–2007 and dropout rates for 2004–2005 and 2005–2006. High schools will not receive separate ratings for attendance and dropout. The two measures will be combined into the Student Behavior rating.

Student Behavior Index Score  $_{HS}$  = ([Attendance Index Score + Dropout Index Score]) /2

Attendance Index Score  $_{HS}$  = [(Attendance Rate  $_{2005-2006}$  + Attendance Rate  $_{2006-2007}$ )]/2 Dropout Index Score  $_{HS}$  = [(100-Dropout Rate  $_{2004-2005}$ ) + (100-Dropout Rate  $_{2005-2006}$ )]/2

#### Student Behavior Index Score Ranges

The ratings and corresponding index score ranges are shown below for all schools regardless of grades served. The Student Behavior Index Score will be calculated and compared to the index score ranges in the table below to determine the Student Behavior rating.

Student Behavior Ratings		
Rating Index Score Rang		
Exceptional	96.0 or higher	
Strong	94.0–95.9	
Satisfactory	92.0–93.9	
Low	89.0–91.9	
Unacceptable	less than 89.0	

#### **Definition of Attendance Rate**

The attendance rate is the average percentage of enrolled students attending school each day during the school year. An attendance rate of 100% means that every enrolled student attended school every day. Because there is a normal rate of illness and other incidents, it is reasonable for schools to have attendance rates less than 100%.

Attendance rates include absences that are excused and unexcused. When a student is not at school (unless withdrawn), the student is counted as absent. Out-of-school suspensions are included as absences. Attendance is defined using the standard definitions published by the Oregon Department of Education.

#### **Calculation of the Attendance Rate**

Attendance is calculated as the ratio between **Total Days Present** and **Total Days Students Could Have Attended**.

- **Total Days Present** is calculated by summing the number of students present in the school each day, across all the days of the school year.
- **Total Days Absent** is calculated by summing the number of students absent in the school each day, across all the days of the school year.
- The Attendance Rate is calculated by dividing the Total Days Present by the sum of the Total Days Present and the Total Days Absent and multiplying by 100. Attendance rates are rounded to the nearest tenth of one percent for the school report card.

Attendance Rate =

Total Days Present (Total Days Present + Total Days Absent) X 100

#### **Definition of Dropout Rate**

A dropout is defined by Oregon Revised Statute ORS 339.505. This definition of dropout is consistent with the definition used by the National Center for Education Statistics and is calculated following the regular definitions published by the Oregon Department of Education.

#### **Calculation of the Dropout Index**

#### **Dropout Index=100-Dropout Rate**

The dropout rate is calculated annually. Final dropout figures are not available until after December of each year because schools must confirm that a student has not re-enrolled in school.

A dropout is a student who withdrew from school and did not graduate. Dropouts do not include students who:

- transferred to another school that leads to graduation.
- moved, and enrollment is verified by contact with the student's new school.
- received a high school diploma issued by a school district.
- received a modified diploma based on completion of an IEP.
- received home instruction paid for by the district.
- temporarily absent because of suspension, long-term illness, or family emergency.
- enrolled in an approved, district-sponsored alternative education program.
- enrolled in a foreign exchange program.
- moved out of the United States and enrollment status is unknown.
- enrolled in an adult high school diploma program sponsored by the district.
- in protective custody and the location of the student is not legally available.
- placed in a corrections facility, substance abuse facility, or mental health facility, or a CSD certified shelter care program, or legally deported.
- deceased.
- withdrew to be taught at home by a parent or private tutor and registered with the Education Service District (ESD).
- received an adult high school diploma at a community college.
- received a GED certificate.

For more information which students are considered dropouts and to view annual statewide reports on dropouts, see <a href="http://www.ode.state.or.us/search/page/?id=1">http://www.ode.state.or.us/search/page/?id=1</a>.

# VI. Calculating the Improvement Rating

#### Formula Description

The Improvement rating will be based on improvement over four years in performance on statewide assessments, attendance, and dropout rates.

#### Improvement Ratings and Index Score Ranges

The Improvement Index Score will be calculated and compared to the index score ranges below to determine the Improvement Rating. The same index score ranges apply to all schools.

Improvement Ratings			
Rating Index Score Range			
Improved	4.0 and higher		
Stayed About the Same	-5.9 to +3.9		
Declined	-6.0 and less		

#### **Improvement Rating Formulas**

**Part 1:** Calculating Improvement in Student Performance on Reading and Math Knowledge and Skills assessments.

Improvement in Student Performance is based on an average of the performance on Reading and Math Knowledge and Skills assessments as shown below. Note that the Student Performance Improvement Rating formula will be the same for elementary, middle, and high schools.

#### Student Performance Improvement<sub>2003-2005</sub> to 2005-2007=

[(Reading Improvement 2003–2005 to 2005–2007)] / 2

As noted earlier, for the 2006-2007 academic year, new performance standards have been adopted. These new standards will be used to calculate the Student Performance Rating for 2006-2007.

In calculating the Student Performance Improvement Rating, however, 2006-2007 student test results will be evaluated using the 2005-2006 performance standards. Using the older standards for this purpose will make the resulting data more effectively comparable with earlier student performance ratings and will help described whether particular school or district experienced real change in student performance rather than changes to the evaluation process.

Part 2: Calculating Improvement in Student Behavior on attendance and dropout rates.

**Elementary/Middle School:** Improvement in Student Behavior will be the change in attendance rates.

#### Student Behavior Improvement E/MS=

(Attendance Improvement<sub>2003–2005</sub> to 2005–2007)

*High School:* If the school includes 12<sup>th</sup> grade students, Improvement in Student Behavior will be an average of the change in attendance and the change in dropout.

#### Student Behavior Improvement HS=

[(Attendance Improvement<sub>2003-2005</sub> to 2005-2007) + (Dropout Improvement<sub>2003-2005</sub> to 2005-2007)] / 2

Part 3: Calculating the Improvement change over four years.

#### **Improvement Index=**

[(.8 x Student Performance Improvement) + (.2 x Student Behavior Improvement)]

Please note that in cases where only three years of data are available, the two most recent years of data are compared against the single most prior year for the purposes of calculating Improvement. If three years of dropout data are not available, the elementary school improvement formula will be applied.

# VII. Calculating The Overall Rating

#### Formula Description

- The Overall rating will be based on
- **Student Performance:** Oregon Statewide Assessment results during the two most recent school years, 2005–2006 and 2006–2007.
- **Student Behavior:** Attendance and dropout rates during the two most recent school years.
- **Improvement:** Change in performance on statewide assessments, attendance, and dropout rates during the four most recent school years.
- School Characteristics: Participation in Reading, Writing, and Mathematics Oregon Statewide Assessments during the most recent school year, 2006–2007.

Two methods for determining the Overall rating are described below. The two methods yield the same results.

#### Method 1: Calculating the Overall Rating

**Step 1**: If the rating of School Characteristics is *Exceptional*, then the Overall rating can be determined using the rating scores in the charts below. To calculate the Overall rating, find the numerical rating scores associated with the ratings for each of the component ratings:

#### Student Performance, Student Behavior, and Improvement.

Note that if a school has an *Unacceptable* School Characteristics rating, then it will receive an Overall rating of *Unacceptable*. If a school has a *Low* School Characteristics rating, then it will receive a maximum Overall rating of *Low*.

Student Performance		
Rating	Rating Score	
Exceptional	4	
Strong	3	
Satisfactory	2	
Low	1	
Unacceptable	0	

Student Behavior		
Rating	Rating Score	
Exceptional	4	
Strong	3	
Satisfactory	2	
Low	1	
Unacceptable	0	

Improvement		
Rating	Rating Score	
Improved	1	
Stayed About the Same	0	
Declined	25	

#### Step 2: Apply the following formula

#### Overall Rating Index Score =

(.8 x Student Performance Rating Score) + (.2 x Student Behavior Rating Score) + Improvement Rating Score

**Step 3:** Find the rating that corresponds to the Overall Rating Index Score. Please note that for the Overall rating the same index score ranges apply to all schools.

Overall Rating		
Index Score Range	Rating	
4.0 or above	Exceptional	
3.0–3.9	Strong	
1.5–2.9	Satisfactory	
1.0–1.4	Low	
less than 1.0	Unacceptable	

#### **Method 2: Calculating the Overall Rating**

If the rating of School Characteristics is *Exceptional*, the Overall rating may be determined by using the chart below. Find the row that corresponds with each component rating.

Overall Rating	Student Performance	Student Behavior	Improvement
Exceptional	Exceptional	Exceptional	Improved
Exceptional	Exceptional	Strong	Improved
Exceptional	Strong	Exceptional	Improved
Exceptional	Exceptional	Satisfactory	Improved
Exceptional	Exceptional	Exceptional	Stayed about the same
Exceptional	Strong	Strong	Improved
Exceptional	Exceptional	Low	Improved
Exceptional	Exceptional	Unacceptable	Improved
Exceptional*	Exceptional	Exceptional	Declined
Strong	Satisfactory	Exceptional	Improved
Exceptional*	Exceptional	Strong	Stayed about the same
Strong	Strong	Satisfactory	Improved
Strong	Strong	Exceptional	Stayed about the same
Strong	Satisfactory	Strong	Improved
Strong	Exceptional	Strong	Declined
Exceptional*	Exceptional	Satisfactory	Stayed about the same

Overall Rating	Student Performance	Student Behavior	Improvement
Strong	Strong	Low	Improved
Strong	Exceptional	Satisfactory	Declined
Strong	Strong	Strong	Stayed about the same
Strong	Satisfactory	Satisfactory	Improved
Strong	Exceptional	Low	Stayed about the same
Strong	Exceptional	Low	Declined
Strong	Strong	Unacceptable	Improved
Strong	Exceptional	Unacceptable	Stayed about the same
Strong	Strong	Exceptional	Declined
Strong	Exceptional	Unacceptable	Declined
Satisfactory	Low	Exceptional	Improved
Satisfactory	Satisfactory	Exceptional	Stayed about the same
Satisfactory	Low	Strong	Improved
Satisfactory	Strong	Strong	Declined
Satisfactory	Strong	Satisfactory	Stayed about the same
Satisfactory	Satisfactory	Low	Improved
Satisfactory	Satisfactory	Exceptional	Declined
Satisfactory	Satisfactory	Strong	Stayed about the same
Satisfactory	Low	Satisfactory	Improved
Satisfactory	Strong	Satisfactory	Declined
Satisfactory	Strong	Low	Stayed about the same
Satisfactory	Satisfactory	Strong	Declined
Satisfactory	Low	Exceptional	Stayed about the same
Satisfactory	Strong	Low	Declined
Satisfactory	Satisfactory	Satisfactory	Stayed about the same
Satisfactory	Low	Low	Improved
Satisfactory	Satisfactory	Unacceptable	Improved
Satisfactory	Unacceptable	Exceptional	Improved
Satisfactory	Satisfactory	Satisfactory	Declined
Satisfactory	Satisfactory	Low	Stayed about the same
Satisfactory	Strong	Unacceptable	Stayed about the same
Satisfactory	Unacceptable	Strong	Improved
Satisfactory	Satisfactory	Low	Declined

Overall Rating	Student Performance	Student Behavior	Improvement
Satisfactory	Low	Unacceptable	Improved
Satisfactory	Strong	Unacceptable	Declined
Satisfactory	Satisfactory	Unacceptable	Stayed about the same
Low	Unacceptable	Satisfactory	Improved
Low	Low	Exceptional	Declined
Low	Low	Strong	Declined
Low	Low	Satisfactory	Stayed about the same
Low	Low	Low	Stayed about the same
Low	Unacceptable	Low	Improved
Low	Satisfactory	Unacceptable	Declined
Low	Unacceptable	Unacceptable	Improved
Low	Low	Strong	Stayed about the same
Low	Low	Satisfactory	Declined
Unacceptable	Unacceptable	Exceptional	Stayed about the same
Unacceptable	Low	Low	Declined
Unacceptable	Unacceptable	Exceptional	Declined
Unacceptable	Unacceptable	Strong	Stayed about the same
Unacceptable	Low	Unacceptable	Stayed about the same
Unacceptable	Unacceptable	Strong	Declined
Unacceptable	Unacceptable	Satisfactory	Stayed about the same
Unacceptable	Low	Unacceptable	Declined
Unacceptable	Unacceptable	Satisfactory	Declined
Unacceptable	Unacceptable	Low	Stayed about the same
Unacceptable	Unacceptable	Low	Declined
Unacceptable	Unacceptable	Unacceptable	Stayed about the same
Unacceptable	Unacceptable	Unacceptable	Declined

<sup>\*</sup> Exceptional\* is a specialized rating. See note 4 below.

#### **Exceptions**

The formula method and the matrix method can be used in most circumstances. However, there are four situations when a formula override will be applied.

- 1) If the rating of School Characteristics is Unacceptable, the Overall rating is set to Unacceptable.
- 2) If the rating of School Characteristics is Low, the Overall rating is set to a maximum of Low.
- 3) If the ratings for Student Performance and Student Behavior are Exceptional, but there is a decline in the Improvement factor, the Overall rating is set to Exceptional. This adjustment is noted with an asterisk in the Rating Matrix shown above.
- 4) **Elementary/Middle Schools:** If the index score for Student Performance is 113.0 or higher, then the rating for Student Performance is set to Exceptional\* and the school will receive 4.5 points toward the Overall rating score. When combined with a Student Behavior rating of Strong and an Improvement rating of Stayed About the Same, the Overall rating will be set to Exceptional\*. This adjustment is noted with an asterisk in the Rating Matrix shown above.

#### **Special Circumstances**

An asterisk or a superscripted number by an Overall rating denotes a special circumstance for which additional information in a footnote is needed to allow the reader to interpret the rating appropriately.

If requested by the district, schools that have a significant change in population due to changes in boundaries or grade level configurations are noted with an asterisk. In cases where there has been a population change of at least 40%, the institution is considered a new school and the Overall, Student Performance, and Student Behavior ratings are not computed until sufficient historical data is again accumulated.

# VIII. An Example of Calculating Ratings: Elementary/Middle School

#### Introduction

The report card rating system is based on the following components: student performance on Oregon Statewide Assessments, attendance and dropout rates, and participation rates on statewide assessments. The rating system provides a method for combining index scores for the component ratings into a single number which is used to calculate the Overall rating.

Although there are many numbers, the calculations themselves are quite simple. You will need the score reports returned to the school by the Assessment Office of the Department of Education and the attendance and dropout data reported by the school to the Department.

#### Background: Example for Elementary School

For the purpose of this example, we will assume that students in Grades 3 and 5 were included in assessments for Reading and Math Knowledge and Skills. We will also assume that the school has attendance data, and that a dropout rating does not apply to this school.

To calculate the Overall rating, we will need to calculate each of the four elements. The example will show how this is done for each element:

- Student Performance Index Score
- Student Behavior Index Score
- Improvement Index Score
- ♦ School Characteristics Index Score

#### Calculating the Student Performance Index Score

## Elementary/Middle School

Student assessment results are used to calculate the Student Performance Index Score. The steps are listed below.

- 1. Calculate a Reading Assessment Index Score using 2005–2006 data.
- 2. Repeat the procedures for 2006–2007 Reading.
- 3. Calculate a Math Assessment Index Score using 2005–2006 data.
- 4. Repeat the procedures for 2006–2007 Math.
- 5. Using the Reading Assessment Index Scores and the Math Assessment Index Scores, calculate the Total Assessment Index Score for 2005–2006 and 2006–2007.
- 6. Calculate the Student Performance Index Score by averaging the two Total Assessment Index Scores.
- 7. Compare the Student Performance Index Score to the table for a Student Performance Rating.

#### **Example: Elementary/Middle School**

Step 1. Calculating a Reading Assessment Index Score<sub>2005-2006</sub> for Grades 3, 4, and 5.\*

Performance Level	Number of Tests	Points	Total
Exceed	11	133	1463
Meet	15	100	1500
Nearly Meet	13	67	871
Low	7	33	231
Very Low	4	0	0
Total	50		4065
		Score	81.3

- 1) Count the number of tests at each Performance Level. In the example, there were eleven students who scored *Exceed the Standard* on the Reading test. Note that it is possible to count all students in the school across all grade levels tested; this is mathematically equivalent to counting each grade level, and then adding the sums.
- 2) Multiply the number of tests at each Performance Level by the points assigned for that Performance Level. In the example, the school receives 133 points for each student at the Exceed Performance Level. Since there were eleven students who scored Exceed, the school calculates 11x133 = 1463. This is done for each Performance Level.
- 3) Add the total points for all the Performance Levels. In the example, the school had (1463+1500+871+231+0) = 4065 total points.
- 4) Add the total number of tests for all the Performance Levels. In the example the school had (11+15+13+7+4) = 50 total students for the reading test.
- 5) Divide the total points by the total number of tests for the Assessment Index Score. In the example, the school had 4065 total points, divided by 50 total tests = 81.3 (rounded to the nearest tenth of a point).

## Step 2. Calculating a Reading Assessment Index Score<sub>2006–2007</sub>.\*

Repeat the procedures for Reading during the school year 2006–2007.

## Step 3. Calculating a Math Assessment Index Score<sub>2005–2006</sub>.\*

Repeat the procedures for Math during the school year 2005–2006.

## Step 4. Calculating a Math Assessment Index Score<sub>2006–2007</sub>.\*

Repeat the procedures for Math during the school year 2006–2007.

<sup>\*</sup> All calculations of the Student Performance Rating use 2005-2006 performance data evaluated against 2005-2006 standards and 2006-2007 performances data evaluated against 2006-2007 standards.

Step 5. Calculating a Total Assessment Index Score

Total Assessment Index Score <sub>2005–2006</sub>			
Test	Score	Weight	Total
Reading Knowledge and Skills	81.3	50%	40.7
Math Knowledge and Skills	76.6	50%	38.3
Total		100%	79.0
Total Assessment Index Score <sub>2005–2006</sub>		79.0	

After calculating the Total Assessment Index Score for the school year 2005–2006, repeat the procedure using the data for the school year 2006–2007.

Total Assessment Index Score <sub>2006-2007</sub>				
Test	Test Score Weight Total			
Reading Knowledge and Skills	83.3	50%	41.7	
Math Knowledge and Skills	82.6	50%	41.3	
Total		100%	83.0	
Total Assessment Index Score <sub>2006–2007</sub>		83.0		

#### Step 6. Calculating the Student Performance Index Score

Average the Total Assessment Index Score<sub>2005-2006</sub> and the Total Assessment Index Score<sub>2006-2007</sub>.

#### Student Performance Index Score<sub>2005-2006 through 2006-2007</sub> =

[Total Assessment Index Score<sub>2005–2006</sub> +Total Assessment Index Score<sub>2006–2007</sub>] / 2

Student Performance Index Score = [79.0 + 83.0]/2

Student Performance Index Score<sub>2005-2006 through 2006-2007</sub> = 81.0

#### **Step 7. Comparing the Student Performance Index Score**

Compare the Student Performance Index Score of 81.0 to the table below. In this example, the school has earned a *Satisfactory* Student Performance rating.

Elementary and Middle School		
Student Performance Index Score Ranges		
Rating	Index Score Range	
Exceptional	113.0 or higher	
Strong	98.0–112.9	
Satisfactory	68.0–97.9	
Low	58.0–67.9	
Unacceptable	Less than 58.0	

#### Calculating the Student Behavior Index Score: Elementary/Middle School

#### Step 1. Calculating the Attendance Index Score for 2005–2006

The Attendance rate is calculated by dividing the Number of Days Attendance (days present) by the Total Daily Membership (days present + days absent) for students in grades 1-12. The numbers are reported by the school and district to the Department of Education. First calculate for 2005–2006.

Number of Days Attendance	29160
Total Daily Membership	31500
Attendance Rate	92.6
Attendance Index Score <sub>2005–2006</sub>	92.6

#### Step 2. Calculating the Attendance Index Score for 2006-2007

Repeat the procedure for 2006–2007 Attendance Data.

Number of Days Attendance	30140
Total Daily Membership	31600
Attendance Rate	95.3
Attendance Index Score <sub>2006–2007</sub>	95.3

#### Step 3. Calculating the Student Behavior Index Score

#### Student Behavior Index Score<sub>2005-2006-2006-2007</sub>=

[Attendance Index Score<sub>2005–2006</sub> + Attendance Index Score<sub>2006–2007</sub>] / 2

Student Behavior Index Score = [92.6 + 95.3] / 2

Student Behavior Index Score<sub>2005-2006 to 2006-2007</sub> = 94.0 (rounded to the nearest tenth)

#### **Step 4. Comparing the Student Behavior Index Score**

Compare the Student Behavior Index Score of 94.0 to the table below. In this example, the school earned a *Strong* Student Behavior Rating with a score of 94.0.

Student Behavior Ratings		
Rating Index Score Range		
Exceptional	96.0 or higher	
Strong	94.0–95.9	
Satisfactory	92.0–93.9	
Low	89.0–91.9	
Unacceptable	less than 89.0	

#### Calculating the Improvement Index Score: Elementary/Middle School

#### Improvement in Assessments and Attendance

The formula for the Improvement Index Score is

#### Improvement Index Score =

(.8 x Assessment Improvement Index Score) + (.2 x Attendance Improvement Index Score)

We will calculate the Improvement Index Score<sub>E/MS</sub>. The steps are listed below.

- 1. Calculate the Reading Assessment Improvement Index Score
- 2. Calculate the Math Assessment Improvement Index Score
- 3. Calculate the Average Assessment Improvement Index Score
- 4. Calculate an Attendance Improvement Index Score
- 5. Calculate a Total Improvement Index Score
- 6. Compare the Total Improvement Index Score to the table for an Improvement rating.

#### Step 1. Calculating the Reading Assessment Improvement Index Score

The Assessment Improvement Index Score reflects improvement in performance on Reading and Math Knowledge and Skills statewide assessments during the past four school years.

#### Reading\*

The Reading Assessment Improvement Index is calculated by following the steps below.

◆ Calculate a Reading Assessment Index Score for the four school years 2006–2007, 2005–2006, 2004–2005, and 2003–2004 using the same procedures as discussed previously.

School Year	Assessment Index Score	Averages	Difference
2006–2007	83.3	Average of 2005–2006 & 2006–2007	_
2005–2006	81.3	82.3	Between 2005–2006 & 2006–2007
2004–2005	78.0	Average of 2003–2004 & 2004–2005	and 2003–2004 & 2004–2005
2003–2004	72.0	75.0	
Reading Assessment Improvement Index Score		7.3	

- ◆ Add the Index Score<sub>2005-2006</sub> and the Index Score<sub>2006-2007</sub>.
- Divide the sum by 2 for an average index for those two years.
- ◆ Add the Index Score<sub>2003-2004</sub> and the Index Score<sub>2004-2005</sub>.
- Divide the sum by 2 for an average index for those two years.
- Subtract the two average index scores. This is the amount of improvement or difference during the four years.
- \* All calculations of the Improvement Index use performance data evaluated against 2005-2006 standards regardless of the year of testing. This may result in a different Assessment Index Score for 2006-07 than that used for the Performance Index.

#### Step 2. Calculating the Math Assessment Improvement Index Score

The same procedure is used to calculate the Math Assessment Improvement Index using results from the Math Knowledge and Skills assessments.

#### Math\*

School Year	Assessment Averages Index Score		Difference
2006–2007	82.6	Average of 2005–2006 & 2006–2007	Datus
2005–2006	76.6	79.6	Between 2005–2006 & 2006–2007
2004–2005	78.6	Average of 2003–2004 & 2004–2005	and 2003–2004 & 2004–2005
2003–2004	76.2	77.4	
		Math Assessment Improvement Index Score	2.2

#### Step 3. Calculating the Average Assessment Improvement Index Score

The Average Assessment Improvement Index Score is the average of the index scores for Reading and Math Knowledge and Skills.

The Average Assessment Improvement Index Score is calculated by following the steps below.

- 1. Add the Reading Assessment Improvement Index Score and the Math Assessment Improvement Index Score.
- 2. Divide by 2.
- 3. Round to the nearest tenth of a point.

Average Assessment Improvement Index Score			
Content Area Index Score			
Reading Assessment Improvement 2003–2004 to 2006–2007	7.3		
Math Assessment Improvement 2003–2004 to 2006–2007	2.2		
Average Assessment Improvement Index Score	4.8		

<sup>\*</sup> All calculations of the Improvement Index use performance data evaluated against 2005-2006 standards regardless of the year of testing. This may result in a different Assessment Index Score for 2006-07 than that used for the Performance Index.

#### Step 4. Calculating the Attendance Improvement Index Score

The Attendance Improvement Index Score reflects improvement over the past four years calculated by comparing the average of the two most recent years to the average of the previous two years.

#### **Attendance**

School Year	Attendance Index Score	Averages	Difference	
2006-2007	95.3	2005-2006 & 2006-2007		
2005-2006	92.6	94.0	Between 2005-2006 & 2006-2007	
2004-2005	90.2	2003-2004 & 2004-2005	and 2003-2004 & 2004-2005	
2003-2004	88.5	89.4		
		Attendance Improvement Index Score	4.6	

#### Calculating the Attendance Improvement Index Score: Elementary/Middle School

The Attendance Improvement Index Score is calculated by following the steps below.

- 1. Calculate the Attendance Index for the four years 2006-2007, 2005-2006, 2004-2005, and 2003-2004, using the procedures discussed previously.
- 2. Add the Attendance Index  $Score_{2006-2007}$  to the Attendance Index  $Score_{2005-2006}$ . [95.3 + 92.6 = 187.9]
- 3. Divide the sum by 2 for an average index for those two years. [187.9 / 2 = 94.0]
- 4. Add the Attendance Index<sub>2004-2005</sub> to the Attendance Index<sub>2003-2004</sub>. [90.2 + 88.5 = 178.7]
- 5. Divide the sum by 2 for an Average Attendance Index Score for those two years. [178.7 / 2 = 89.4]
- 6. Subtract the average index scores. This is the amount of improvement or difference during the four years. [94.0–89.4 = 4.6]
- 7. The Attendance Improvement Index Score in this example is **4.6**.

#### **Step 5. Calculating the Total Improvement Index Score**

The Total Improvement Index Score combines assessment improvement and attendance improvement.

Element	Index Score		Weight		Weighted Index
Average Assessment Improvement	4.8	Х	.8	=	3.8
Average Attendance Improvement	4.6	Х	.2	=	0.9
	Total Improve	ment	Index Score		4.7

#### **Step 6. Comparing the Total Improvement Index Score**

We have calculated the Total Improvement Index Score as 4.7. Compare the Total Improvement Index Score of 4.7 to the table below to determine the rating for Improvement. For the example, the school has earned an Improvement Rating of *Stayed About the Same*.

Improvement Ratings			
Rating Improvement Index Score Range			
Improved	4.0 and higher		
Stayed About the Same	-5.9 to +3.9		
Declined	-6.0 and less		

#### Calculating the School Characteristics Index Score: Elementary School

The School Characteristics Index Score is based on the percentage of eligible students that participated in the Oregon Statewide Assessments in the most recent year.

School Characteristics Index Score 2006-2007 = Participation Rate

School Year	Participation Rate
2006–2007	96.5

#### **Step 1: Calculating the Participation Rate**

- Use the report card definition of participation below. Include participation for each student enrolled on the first school day in May for each assessment included in the rating:
- Grade 3-8 and 10: Reading/Literature and Math Knowledge and Skills
- Grades 4, 7, and 10: Writing

number of participating tests in reading, mathematics, and writing
expected number of participating tests in reading, mathematics, and writing-number tests from students ineligible for testing

Participation rate = number of participating tests/(expected number of participating tests-number of ineligible student tests)

Remember to exclude from the expected number of tests any student that was enrolled on the first school day in May but was not tested and was not enrolled during the school's entire test window.

#### **Step 2: Comparing the School Characteristics Index Score**

The Participation Rate in the example is 96.5%. For the example, the school earned an *Exceptional* School Characteristics rating.

School Characteristics Rating			
Rating Participation Rate			
Exceptional	94.5% and higher		
Low 89.5%-94.4%			
Unacceptable Less than 89.5%			

#### Calculating the Overall School Rating: Elementary School

#### **Method 1: Weighted Average Method**

In the example above, we calculated that the school received a Student Performance rating of *Satisfactory* and a Student Behavior Rating of *Satisfactory*. The Improvement rating was *Improved* and the School Characteristics rating was *Exceptional*. Please refer to pages 17-19 for rating scores that correspond to the ratings earned by the example school.

Component	Index Score	Rating	Rating Score	Weight	Total
Student Performance	81.0	Satisfactory	2	.8	1.6
Student Behavior	94.0	Strong	3	.2	0.6
Improvement	5.1	Stayed About the Same	0	1	0.0
		Overall Rating Index Sco	re		2.2

Compare the Overall Rating Index Score to the table below. The Overall Rating Index Score of 2.2 is converted into an Overall rating of *Satisfactory*.

Overall Rating			
Rating	Index Score Range		
Exceptional	4.0 and above		
Strong	3.0–3.9		
Satisfactory	1.5–2.9		
Low	1.0–1.4		
Unacceptable	less than 1.0		

#### **Method 2: Matrix Method**

The Overall rating can also be determined by using the Overall Rating Matrix. To use this method, identify the row that matches the school ratings for Student Performance, Student Behavior, and Improvement. The full matrix of possible ratings is included beginning on page 17.

Overall Rating	Student Performance	Student Behavior	Improvement
Satisfactory	Satisfactory	Low	Improved
Satisfactory	Satisfactory	Exceptional	Declined
Satisfactory	Satisfactory	Strong	Stayed about the same
Satisfactory	Low	Satisfactory	Improved
Satisfactory	Strong	Satisfactory	Declined

In this example, the third row of the matrix correctly matches the ratings for the school. The Overall rating associated with that row is *Strong*. However, if the school had received a rating of *Low* or *Unacceptable* in School Characteristics, the Overall rating would have been *Low* or *Unacceptable*.

# IX. An Example of Calculating Ratings: High School

#### Introduction

The report card rating system is based on the following components: student performance on Oregon Statewide Assessments, attendance and dropout rates, and participation rates on statewide assessments. The rating system provides a method for combining index scores for the component ratings into a single number used to calculate the Overall rating.

Although there are many numbers, the calculations themselves are quite simple. You will need the score reports returned to the school by the Assessment Office of the Department of Education and the attendance and dropout data reported by the school to the Department.

#### Background: Example for High School

For the purpose of this example, we will assume that students in Grade 10 were included in assessments in Reading and Math Knowledge and Skills, Writing, and Math Problem Solving. We will also assume that the school has attendance and dropout data.

Note that these same procedures apply to all schools with a Grade 12. For example, schools with grades K-12 or 7-12 are treated as high schools using the high school index scores for the purposes of issuing school report cards and ratings. The procedures used to generate ratings for elementary, middle, and high schools are identical, except that high schools include results from four assessments and dropout rates and use some different tables to convert index scores to ratings.

To calculate the Overall rating, we will need to calculate each of the four components. The example will show how this is done for each element:

- Student Performance Index Score
- Student Behavior Index Score
- Improvement Index Score
- School Characteristics Index Score

#### Calculating the Student Assessment Performance Index Score

Student assessment results are used to calculate the Student Performance Index Score. The steps are listed below.

- 1. Calculate a Reading Assessment Index Score using 2005-2006 data.
- 2. Repeat the procedures for 2006-2007 Reading.
- 3. Calculate a Math Assessment Index Score for Math Knowledge and Skills using 2005-2006 data.
- 4. Repeat the procedures for 2006-2007 Math Knowledge and Skills.
- 5. Calculate a Writing Assessment Index Score using 2005-2006 data.
- 6. Repeat the procedures for 2006-2007 Writing.
- 7. Using the Assessment Index Scores for Reading, Math Knowledge and Skills, and Writing, calculate the Total Assessment Index Score.
- 8. Calculate the Student Performance Index Score by averaging the two total Assessment Index Scores.
- 9. Compare the Student Performance Index Score to the table for a Student Performance Rating.

Performance Level	Number of Tests	Points	Total
Exceed	11	133	1463
Meet	15	100	1500
Nearly Meet	13	67	871
Low	7	33	231
Very Low	4	0	0
Total	50		4065
		Score	81.3

Example: High School

#### Step 1. Calculating a Reading Assessment Index Score<sub>2006-2007</sub> for Grade 10

- 1. Count the number of tests at each Performance Level. In the example, there were eleven students who scored *Exceed the Standard* on the Reading test. Note that it is possible to count all tests in the school across all grade levels tested; this is mathematically equivalent to counting each grade level, and then adding the sums together.
- 2. Multiply the number of tests at each Performance Level by the points assigned for that Performance Level. In the example, the school receives 133 points for each student at the Exceed Performance Level. Since there were eleven tests at the Exceed level, the school calculates 11 x 133 = 1463. This is done for each Performance Level.
- 3. Add the total points for all the Performance Levels. In the example, the school had (1463+1500+871+231+0) = 4065 total points.
- 4. Add the total number of tests for all the Performance Levels. In the example, the school had (11+15+13+7+4) = 50 total tests for the reading test.

- 5. Divide the total points by the total number of tests for the Assessment Index Score. In the example, the school had 4065 total points, divided by 50 total tests = 81.3 (rounded to the nearest tenth of a point).
- 6. After calculating a score for Reading/Literature, Math Knowledge and Skills, and Writing, assessments during 2005-2006, repeat the procedures for results during school year 2006-2007. Then calculate a Total Assessment Index Score by multiplying the score for each assessment by its assigned weight and adding the weighted scores.

## Step 2. Calculating a Reading Assessment Index Score<sub>2006-2007</sub>

Repeat the procedures for Reading during the school year 2006-2007.

## Step 3. Calculating a Math Assessment Index Score<sub>2005-2006</sub>

Repeat the procedures for Math during the school year 2005-2006.

## Step 4. Calculating a Math Assessment Index Score<sub>2006-2007</sub>

Repeat the procedures for Math during the school year 2006-2007.

## Step 5. Calculating a Writing Index Score<sub>2005-2006</sub>

Repeat the procedures for Writing during the school year 2005-2006.

## Step 6. Calculating a Writing Index Score<sub>2006-2007</sub>

Repeat the procedures for Writing during the school year 2006-2007.

## Step 7. Calculating a Total Assessment Index Score\*

After calculating the Total Assessment Index for the school year 2005-2006, repeat the procedure using the data for the school year 2006-2007.

Total Assessment Index Score <sub>2005-2006</sub>				
Test Score Weight To				
Reading Knowledge and Skills	81.3	39%	31.7	
Math Knowledge and Skills	86.9	39%	33.9	
Writing	79.0	22%	7.4	
Total		100%	83.0	
		Total Assessment Index Score <sub>2005-2006</sub>	83.0	

Total Assessment Index Score <sub>2006-2007</sub>				
Test Score Weight				
Reading Knowledge and Skills	75.3	39%	29.4	
Math Knowledge and Skills	84.3	39%	32.9	
Writing	80.0	22%	17.6	
Total		100%	79.9	
		Total Assessment Index Score <sub>2006-2007</sub>	79.9	

#### Step 8. Calculating the Student Performance Index Score

Average the Total Assessment Index Score<sub>2005-2006</sub> and the Total Assessment Index Score<sub>2006-2007</sub>.

#### Student Performance Index Score<sub>2005-2006 to 2006-2007</sub>=

[Total Assessment Index Score $_{2005-2006}$  +Total Assessment Index Score $_{2006-2007}$ ]/2 Student Performance Index Score = [83.0 + 79.9]/2 Student Performance Index Score $_{2005-2006}$  to  $_{2006-2007}$ = 81.5

## **Step 9. Comparing the Student Performance Index Score**

Compare the Student Performance Index Score of 81.5 to the table below. For the example, the school earned a *Satisfactory* Student Performance rating.

Student Performance Index Score Ranges			
Rating	Index Score Range		
Exceptional	98.0 or higher		
Strong	88.0–97.9		
Satisfactory	68.0–87.9		
Low	58.0–67.9		
Unacceptable	Less than 58.0		

<sup>\*</sup> All calculations of the Student Performance Rating use 2005-2006 performance data evaluated against 2005-2006 standards and 2006-2007 performances data evaluated against 2006-2007 standards.

## Calculating the Student Behavior Index Score: High School

## Step 1. Calculating the Attendance Index Score for 2005-2006

The Attendance rate is calculated by dividing the Number of Days Attendance (days present) by the Total Daily Membership (days present + days absent). The two numbers are reported by the school and district to the Department of Education. First calculate for 2005-2006.

Number of Days Attendance	29,160
Total Daily Membership	31,500
Attendance Rate	92.6
Attendance Index Score <sub>2005-2006</sub>	92.6

## Step 2. Calculating the Attendance Index Score for 2006-2007

Repeat the procedure for 2006-2007 Attendance Data.

Number of Days Attendance	30,140
Total Daily Membership	31,600
Attendance Rate	93.4
Attendance Index Score <sub>2006-2007</sub>	93.4

## **Step 3. Averaging the Attendance Index Scores.**

## Student Attendance Index Score<sub>2005-2006 & 2006-2007</sub>=

[ Attendance Index Score<sub>2005-2006</sub>+Attendance Index Score<sub>2006-2007</sub>] / 2 Student Attendance Index Score = [92.6+93.4] / 2 Student Attendance Index Score<sub>2005-2006</sub> & 2006-2007</sub> = 93.0

## Calculating the Dropout Index Score: High School

#### **Step 1. Calculating the Dropout Index Score**

Dropout data are one year delayed because more recent data are not available when Report Cards are prepared. The Dropout Index Score is calculated by subtracting the dropout rate from 100.

**Dropout Index Score** HS = 100-(Dropout Rate)

## Step 2. Calculating the Dropout Index Score

To calculate the Dropout Index Score, average the two years of Dropout Index Scores.

**Dropout Index Score** HS = (Dropout Index Score<sub>2004-2005</sub>+Dropout Index Score<sub>2005-2006</sub>) / 2

For the example, assume the school has a dropout rate of 6.2% in 2004-2005 and 7.6% in 2005-2006. The Dropout Index<sub>2004-2005</sub> is 93.8. The Dropout Index<sub>2005-2006</sub> is 92.4. The average of the two years is 93.1. The Dropout Index Score<sub>2004-2005</sub> through 2005-2006 for the school is 93.1.

School Year	Dropout Rate	Index Score	Average
2004-2005	6.2	93.8	
2005-2006	7.6 92.4		
	Dropout Ind	93.1	

## Step 3. Calculating the Student Behavior Index Score

The Attendance and Dropout Index Scores are averaged together to produce the Student Behavior Index Score.

## Student Behavior Index Score<sub>2005-2006-2006-2007</sub> =

[(Attendance<sub>2005-2006</sub>+Attendance<sub>2006-2007</sub>)+(Dropout<sub>2004-2005</sub>+Dropout<sub>2005-2006</sub>)]/2 Student Behavior Index Score = (93.8+92.4)/2 = 93.1

Element	Index Score
Attendance (Average of 2005-2006 and 2006-2007)	93.0
Dropout (Average of 2004-2005 and 2005-2006)	93.1
Student Behavior Index Score	93.1

**Step 4. Comparing the Student Behavior Index Score** of 93.1 to the table 2. For the example, the school earned a *Satisfactory* Student Behavior Rating.

Student Behavior Ratings			
Rating Index Score Range			
Exceptional	96.0 or higher		
Strong	94.0–95.9		
Satisfactory	92.0–93.9		
Low	89.0–91.9		
Unacceptable less than 89.0			

## Calculating the Improvement Index Score: High School

## Improvement in Assessments, Attendance, Dropout

The formula for the Improvement Index Score is

#### Improvement Index Score =

(.8 x Assessment Improvement Index Score) + (.2 x Attendance Improvement Index Score)

We will calculate the **Improvement Index Score** through the following steps:

- 1. Calculate the Reading Assessment Improvement Index Score
- 2. Calculate the Math Assessment Improvement Index Score
- 3. Calculate the Average Assessment Improvement Index Score
- 4. Calculate an Attendance Improvement Index Score
- 5. Calculate a Dropout Improvement Index Score
- 6. Combine these scores for an Average Attendance/Dropout Improvement Index Score
- 7. Calculate a Total Improvement Index Score
- 8. Compare the Total Improvement Index Score to the table for an Improvement rating

## Step 1. Calculating the Reading Assessment Improvement Index Score

The Assessment Improvement Index Score reflects improvement in performance on Reading and Math Knowledge and Skills statewide assessments during the past four school years.

## Reading\*

School Year	Assessment Index Score	Averages	Difference
2006-2007	75.3	2005-2006 & 2006-2007	
2005-2006	81.3	78.3	Between 2005-2006 & 2006-2007
2004-2005	77.0	2003-2004 & 2004-2005	and 2003-2004 & 2004-2005
2003-2004	74.8	75.9	
		Reading Assessment Improvement Index Score	2.4

<sup>\*</sup> All calculations of the Improvement Index use performance data evaluated against 2005-2006 standards regardless of the year of testing. This may result in a different Assessment Index Score for 2006-07 than that used for the Performance Index.

The Reading Assessment Improvement Index is calculated by following the steps below.

- 1. Calculate a Reading Assessment Index Score for the four school years 2006- 2007, 2005- 2006, 2004-2005, and 2003-2004 using the same procedures as discussed previously.
- 2. Add the Reading Assessment Index Score<sub>2006-2007</sub> and the Reading Assessment Index Score<sub>2005-2006</sub>.
- 3. Divide the sum by 2 for an average index for those two years. Round to one decimal place.
- 4. Add the Reading Assessment Index Score<sub>2004-2005</sub> and the Reading Assessment Index Score<sub>2003-2004</sub>.
- 5. Divide the sum by 2 for an average index for those two years. Round to one decimal place.
- 6. Subtract the two average index scores. This is the amount of improvement or difference during the four years.

## **Step 2. Calculating the Math Assessment Improvement Index Score**

The same procedure is used to calculate the Math Assessment Improvement Index Score using results from the Math Knowledge and Skills assessments.

#### Math\*

School Year	Assessment Index Score	Averages	Difference
2006-2007	84.3	2005-2006 & 2006-2007	
2005-2006	86.9	85.6	Between 2005-2006 & 2006-2007
2004-2005	84.0	2003-2004 & 2004-2005	AND 2003-2004 & 2004-2005
2003-2004	82.4	83.2	
		Math Assessment Improvement Index Score	2.4

<sup>\*</sup> All calculations of the Improvement Index use performance data evaluated against 2005-2006 standards regardless of the year of testing. This may result in a different Assessment Index Score for 2006-07 than that used for the Performance Index.

## Step 3. Calculating the Average Assessment Improvement Index Score

The Average Assessment Improvement Index Score is the average of the Improvement Index Scores for Reading and Math Knowledge and Skills.

Average Assessment Improvement Index Score			
Content Area Index Score			
Reading Assessment Improvement 2003-2004 to 2006-2007	2.4		
Math Assessment Improvement 2003-2004 to 2006-2007	2.4		
Average Assessment Improvement Index Score	2.4		

The Average Assessment Improvement Index Score is calculated by following the steps below.

- 1. Add the Reading Assessment Improvement Index Score and the Math Assessment Improvement Index Score.
- 2. Divide by 2.
- 3. Round to the nearest tenth of a point.

## **Step 4. Calculating the Attendance Improvement Index Score**

The Attendance Improvement Index score reflects improvement in attendance over the past four school years. It is calculated by comparing the average of the two most recent years available to the average of the previous two years. Note that these data are one year older than other data because dropout and graduation data are not available at the time report cards are prepared.

School Year	Attendance Index Score	Averages	Difference
2006-2007	94.0	2005-2006 & 2006-2007	
2005-2006	92.6	93.3	Between 2005-2006 & 2006-2007
2004-2005	90.2	2003-2004 & 2004-2005	AND 2003-2004 & 2004-2005
2003-2004	88.5	89.4	
		Attendance Improvement Index Score	3.9

## Calculating the Attendance Improvement Index Score: High School

The Attendance Improvement Index Score is calculated by following the steps below.

- 1. Calculate the Attendance Index for the four years 2006-2007, 2005-2006, 2004-2005, and 2003-2004, using the procedures discussed previously.
- 2. Add the Attendance Index  $Score_{2006-2007}$  and the Attendance Index  $Score_{2005-2006}$  [94.0 + 92.6 = 186.6]
- 3. Divide the sum by 2 for an average index for those two years. [186.6 / 2 = 93.3]
- 4. Add the Attendance Index<sub>2004-2005</sub> and the Attendance Index<sub>2003-2004</sub>. [88.5+ 90.2 = 178.7]
- 5. Divide the sum by 2 for an Average Attendance Index Score for those two years. [178.7 / 2 = 89.4]
- 6. Subtract the average index scores. This is the amount of improvement or difference during the four years.

$$[93.3 - 89.4 = 3.9]$$

7. The Attendance Improvement Index Score in this example is 3.9.

## **Step 5. Calculating a Dropout Improvement Index**

The Dropout Improvement Index score reflects improvement in the dropout rate over the past four school years. It is calculated by comparing the average of the two most recent years to the average of the previous two years.

School Year	Dropout Index Score	Averages	Difference	
2005-2006	92.4	2004-2005 & 2005-2006		
2004-2005	93.8	93.1	Between 2004-2005 & 2005-2006	
2003-2004	89.2	2002-2003 & 2003-2004	AND 2002-2003 & 2003-2004	
2002-2003	84.6	86.9		
		Dropout Improvement Index Score	6.2	

## **Calculating the Dropout Improvement Index Score: High School**

The Dropout Improvement Index Score is calculated by following the steps below.

- 1. Calculate the Dropout Index for the four years 2005-2006, 2004-2005, 2003-2004, and 2002-2003 using the procedures discussed previously.
- 2. Add the Dropout Index Score<sub>2005-2006</sub> and the Dropout Index Score<sub>2004-2005</sub> [92.4+ 93.8 = 186.2]
- 3. Divide the sum by 2 to get an average index score for those two years. [186.2 / 2 = 93.1]
- 4. Add the Dropout Index  $Score_{2003-2004}$  and the Dropout Index  $Score_{2002-2003}$ . [89.2 + 84.6 = 173.8]
- 5. Divide the sum by 2 to get an average index score for those two years. [173.8 / 2 = 86.9]
- 6. Subtract the average index scores. This is the amount of improvement or difference during the four years.

$$[93.1 - 86.9 = 6.2]$$

7. The Dropout Improvement Index Score in this example is 6.2.

# Step 6. Combining the Attendance Improvement Index Score and the Dropout Improvement Index Score

## Attendance/Dropout Improvement Index Score=

(Attendance Improvement + Dropout Improvement)/2 (3.9+6.2)/2 = 5.1

## Step 7. Calculating the Total Improvement Index Score

The Total Improvement Index combines the assessment improvement and attendance improvement.

Element			Weight		Weighted Index
Average Assessment Improvement	3.9	Х	.8	=	3.1
Average Attendance/Dropout Improvement	5.1	Х	.2	=	1.0
	Total Improvement Index Score		4.1		

## **Step 8. Comparing the Total Improvement Index Score**

The Total Improvement Index Score is 4.1. Compare the Total Improvement Index Score of 4.1 to the table below to determine the rating for Improvement. For this example, the school has earned an Improvement Rating of *Stayed About the Same*.

Improvement Ratings				
Rating Improvement Index Score Range				
Improved	4.0 and higher			
Stayed About the Same	-5.9-+3.9			
Declined	-6.0 and less			

## Calculating the School Characteristics Index Score: High School

The School Characteristics Index Score is based on the percentage of eligible students that participated in the Oregon Statewide Assessments in the most recent year.

School Characteristics Index Score 2006-2007 = Participation Rate

School Year	Participation Rate
2006-2007	96.0

## **Step 1: Calculating the Participation Rate**

Use the report card definition of participation below. Include participation for each student enrolled on the first school day in May for each assessment included in the rating:

- Grade 3- 8, 10: Reading/Literature and Math Knowledge and Skills
- Grades 4, 7, and 10: Writing

Number of Participating tests in reading, mathematics, and writing

Expected Number of Participating tests in reading, mathematics, and writing-Number tests from students that were ineligible for testing

## Participation rate=

Number of participating tests/(expected number of participating tests-number of ineligible student tests)

192/(201-1) = 96.0%

Remember to exclude from the expected number of tests any student that was enrolled on the first school day in May but was not tested and was not enrolled during the school's test window.

## **Step 2: Comparing the School Characteristics Index Score**

The Participation Rate in the example is 96.0%. For the example, the school earned an *Exceptional* School Characteristics rating.

School Characteristics Rating					
Rating Participation Rate					
Exceptional	94.5% and higher				
Low	89.5%-94.4%				
Unacceptable	Less than 89.5%				

## Calculating the Overall School Rating: High School

## **Method 1: Weighted Average Method**

In the example above, we calculated that the school received a Student Performance rating of Satisfactory and a Student Behavior rating of Satisfactory. The Improvement rating was Stayed About the Same and the School Characteristics rating was Exceptional. Please refer to page 16 for rating scores that correspond to the ratings earned by the example school.

Compare the Overall Rating Index Score of 2.0 to the table below. The Overall Rating Index Score of 2.0 is converted into an Overall rating of *Satisfactory*.

Component	Index Score	Rating	Rating Score	Weight	Total
Student Performance	81.5	Satisfactory	2	.80	1.6
Student Behavior	93.1	Satisfactory	2	.20	0.4
Improvement	4.1	Stay about the same	0	1	0.0
	Overall Rating Index	Score		2.0	

Overall Rating					
Rating	Index Score Range				
Exceptional	4.0 and above				
Strong	3.0-3.9				
Satisfactory	1.5–2.9				
Low	1.0–1.4				
Unacceptable	less than 1.0				

#### Method 2: Matrix Method

The Overall rating can also be determined by using the Overall Rating Matrix. To use this method, identify the row that matches the school ratings for Student Performance, Student Behavior, and Improvement. The full matrix of possible ratings is given beginning on page 17.

In this example case, the fourth row of the matrix correctly matches the ratings for the school. The Overall rating associated with that row is *Satisfactory*. However, if the school had received a rating of *Low* or *Unacceptable* in School Characteristics, the Overall rating would have been *Low* or *Unacceptable*.

Overall Rating	Student Performance	Student Behavior	Improvement
Satisfactory	Low	Exceptional	Declined
Satisfactory	Low	Strong	Stayed about the Same
Satisfactory	Satisfactory	Satisfactory	Declined
Satisfactory	Satisfactory	Satisfactory	Stayed about the Same
Satisfactory	Low	Strong	Declined

## X. Resources and Background Materials

There are many Oregon School Report Card resources available. Most of these can be accessed at <a href="http://www.ode.state.or.us/search/page/?id=661">http://www.ode.state.or.us/search/page/?id=661</a>. There are also many links to other resources at the ODE website.

- 1. The ODE report card website contains all past editions of school and district report cards <a href="http://www.ode.state.or.us/data/reportcard/reports.aspx">http://www.ode.state.or.us/data/reportcard/reports.aspx</a>
- 2. The 1999 Legislation that created the Oregon School Report Card <a href="http://www.leg.state.or.us/99reg/measures/sb1300.dir/sb1329.en.html">http://www.leg.state.or.us/99reg/measures/sb1300.dir/sb1329.en.html</a>
- 3. The Oregon Administrative Rules that describe the report card ratings <a href="http://arcweb.sos.state.or.us/rules/OARS\_500/OAR\_581/581\_022.html">http://arcweb.sos.state.or.us/rules/OARS\_500/OAR\_581/581\_022.html</a>
- 4. National research that summarizes the public expectations for school report cards <a href="http://www.nwrel.org/planning/reports/rptcards/index.html">http://www.nwrel.org/planning/reports/rptcards/index.html</a>
- 5. A communications toolkit prepared by OSBA for districts and schools <a href="http://www.osba.org/hotopics/rptcard/index.htm">http://www.osba.org/hotopics/rptcard/index.htm</a>
- 6. How to Read the Oregon School and District Report Cards http://www.ode.state.or.us/search/page/?id=661
- 7. Information on the Oregon Statewide Assessments <a href="http://www.ode.state.or.us/search/results/?id=169">http://www.ode.state.or.us/search/results/?id=169</a>
- 8. NCLB Non-Regulatory Guidance on School, District, and State Report Cards <a href="http://www.ed.gov/programs/titleiparta/reportcardsguidance.doc">http://www.ed.gov/programs/titleiparta/reportcardsguidance.doc</a>