

# OREGON SCHOOL REPORT CARD

## 2001-2002 TECHNICAL BULLETIN

### Rating System and Formulas

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## I. Preface

The Technical Bulletin provides detailed information about how the ratings will be calculated for the 2001-2002 Oregon School Report Cards to be released in January 2003. A companion 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. However, extensive revisions in the formula will be reflected in the upcoming report cards to be released in January 2003. The changes are summarized in a section following this preface and are also noted in the detailed descriptions throughout this document.

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

Examples of schools are provided 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.

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.

# Rating System and Formulas

## 2001-2002 Oregon School Report Card

### II. Introduction

This document describes the rating system for the 2001-2002 School and District Report Cards to be issued in January 2003. It also provides detailed information about the specific formulas and definitions and examples of how the ratings will be calculated. The Technical Bulletin describes in detail the following four major topics:

- Formula changes for the 2001-2002 Report Card
- How the Overall rating will be calculated
- How the component ratings will be calculated
- Definitions of the data elements

A companion Policy Manual describes the Report Card elements, displays, and other background information.

#### **Formula Changes in the Rating System for the 2001-2002 Report Cards**

The following changes will be incorporated into the formulas and rules:

- The Student Performance rating and the Improvement rating will be calculated and displayed separately.
- The Student Behavior rating and the Improvement rating will be calculated and displayed separately.
- Writing and Math Problem Solving assessments will not be included in the calculation of elementary and middle school ratings.
- High school ratings will continue to be based on Reading and Math Knowledge and Skills, Writing, and Math Problem Solving assessments.
- Standards will be raised for Student Performance and Student Behavior.
- Two different methods for determining the Overall rating will be offered.

Note that because of these changes, ratings on the 2001-2002 Report Card should not be compared with the ratings of previous years.

#### **Variables Included In the Ratings**

School report card ratings will be based on quantitative performance on the variables listed in the chart below.

Rating	Criteria
<b>Overall</b>	Student Performance, Student Behavior, Improvement, School Characteristics
<b>Student Performance</b>	<b>Elementary/Middle School:</b> Student performance in Grades 3, 5, 8 on Oregon Statewide Assessments in Reading and Math Knowledge and Skills. <b>High School:</b> Student performance in Grade 10 on Oregon Statewide Assessments in Reading, Math Knowledge and Skills, Writing, and Math Problem Solving.
<b>Student Behavior</b>	<b>Elementary/Middle School:</b> Attendance rate. <b>High School:</b> Attendance and Dropout rates.
<b>Improvement</b>	Improvement in Reading and Math Knowledge and Skills assessment scores along with improvement in attendance and dropout rates.
<b>School Characteristics</b>	Percentage of eligible students participating in Oregon Statewide Assessments.

## **XII. Calculating the School Characteristics Rating**

### **Formula Description**

The School Characteristics rating will be based on one indicator: the percentage of eligible students that participate in Oregon Statewide Assessments. Each school will receive a School Characteristics rating that reflects its participation rate as shown in the table below. A school that receives an *Unacceptable* rating in School Characteristics will receive an Overall rating of *Unacceptable*.

<b>School Characteristics Rating</b>	
<b>Rating</b>	<b>Participation Rate</b>
Exceptional	95.0% and higher
Strong	90.0% - 94.9%
Satisfactory	85.0% - 89.9%
Unacceptable	Less than 85.0%

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

It is important that schools include all students in the statewide assessment system. As the number of students who participate appropriately increases, the accuracy of the depiction of the school performance increases. If a school were to select only the top 20% of its students to assess, the scores would be higher than if all students were assessed. Valid comparisons of the school to itself over time, or of one school to another, assume that a representative group of students at each school has been assessed.

<b>Testing Conditions</b>	<b>Participation Formula</b>
	<b>2001 – 2002 Report Card To be issued January 2003</b>
Standard assessments	Included
Standard with accommodations	Included
Challenge up	Included
Challenge down	Included
Extended assessments	Included
Juried assessments	Included
Modified assessments	Included
Parent Non-consent	Not included
Student Non-consent	Included
Exempted ELL and IEP	Not included
Non-completers	Included
Absent	Included

## Contrasting Definitions of Participation Rate

### Definition of Participation Rate for Report Card

The participation rate reflects the proportion of students eligible to participate in Oregon Statewide Assessments to those who actually received scores. Please note that the report card participation rate is different from the participation rate reported for assessment purposes. For the purposes of the school report card system, the participation rate is defined as follows:

Number of students who attempted statewide assessments      DIVIDED BY  
Number of students who attempted statewide assessments + Number of absent students + Number of student non-consents

This definition reflects the percentage of students who should have participated in assessments but did not participate. Schools that will receive an *Unsatisfactory* School Characteristics rating had more than 15% of their students absent from the assessments. A more detailed definition is provided below.

Standard + Challenge Up + Challenge Down + Extended + Juried + Side-by-Side + Plain Language + Modified LEP & IEP + TESA + Non-completers

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Standard + Challenge Up + Challenge Down + Extended + Juried + Side-by-Side + Plain Language + Modified LEP & IEP + TESA + Non-completers + Absent + Student Non-consent

### Contrasting Definition of Participation Rate for Assessment

Note that the definition of participation rate used for the report card differs substantially from another definition of participation published by the Assessment Office. The Assessment Office reports a participation rate that includes the students who are exempt because of special education and/or language proficiency reasons. The participation rate for assessment is defined as follows:

Number of students who attempted the test under regular conditions      DIVIDED BY  
Number of students who attempted test under regular conditions + Number of students who tested under non-regular conditions having modifications due to special education and/or limited English proficiency + Number of students absent from testing + Number of students excused or exempted

This definition of participation essentially reports the proportion of regular education students to non-regular education students. In schools that serve larger populations of special education students and/or students with limited English proficiency, this participation rate has been much lower than the definition used for the report card ratings.

Number of Students Assessed Under Regular Conditions

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Number of Students Assessed Under Regular Conditions + Challenge Up + Challenge Down + Extended + Juried + Side-by-Side + Plain Language + Modified LEP & IEP + TESA + Absent + Student Non-consent + Non-completers

## **Summary Discussion**

The participation rate for the 2001-2002 report card includes all students except those who were exempted due to limited English proficiency, an IEP exemption, or parent non-consent.

Students who had a “special code” marked for Reading or Math Knowledge and Skills were included for participation but not for calculating student performance. Students with “special codes” in Writing or Math Problem Solving (e.g. “too long,” “too short,” “off topic”) were included for both participation and school performance calculations.

Students coded as “Absent” were counted as non-participants for participation, and no test scores were included for these students in calculating student performance.

The issue of how non-consent impacts the participation rate has been clarified for the 2001-2002 report card. If a student was exempted from testing due to parental non-consent, the student will be considered ineligible for assessment and will not be included in the calculation of participation. Student non-consent will be included in the participation formula and will reduce the participation rate for the school.

### **XIII. 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, 2000-2001 and 2001-2002.

#### **Changes in the Calculation of Student Performance Ratings**

During the 2001-2002 school year, students in Grade 3 were assessed only in Reading and Math Knowledge and Skills. Students in Grades 5, 8, and 10 were assessed in Reading and Math Knowledge and Skills, Writing, and Math Problem Solving. During the 2002-2003 school year, students in Grades 3, 5, and 8 will not be assessed in Writing and Math Problem Solving.

In order to maintain a rating system that will be consistent for as many years as possible, the decision was made by the Oregon Department of Education that the

- *Elementary and Middle School* formula will include only the results of Reading and Math Knowledge and Skills assessments in the report card ratings.
- *High School* formula will continue to include all four assessments in Student Performance: Reading and Math Knowledge and Skills, Writing, and Math Problem Solving.

Additional changes in the rating system for Student Performance on the 2001-2002 Report Card:

- Student Performance will be separated from Improvement.
- Student Behavior will be separated from Improvement.
- Index score ranges for elementary/middle schools and high schools will be different because of the formulaic differences between the grade levels.

For the reasons listed above, it will not be possible to directly compare the ratings on the 2001-2002 Report Card to those of previous years.

Please note: The Writing and Math Problem Solving assessment results for Grades 5 and 8 will be displayed but not rated on the 2001-2002 Report Card.

## 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 each of the assessments will contribute to the total with the following percentages:

- Reading Knowledge and Skills: 35%
- Math Knowledge and Skills: 35%
- Writing: 20%
- Math Problem Solving: 10%

## 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.

### Student Performance Index Score Grades 3,5,8

$$\left[ \left( (.50 * \text{Reading}_{2001-2002}) + (.50 * \text{Math Knowledge/Skills}_{2001-2002}) \right) + \left( (.50 * \text{Reading}_{2000-2001}) + (.50 * \text{Math Knowledge/Skills}_{2000-2001}) \right) \right] / 2$$

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

### Student Performance Index Score Grade 10

$$\left[ \left( (.35 * \text{Reading}_{2001-2002}) + (.35 * \text{Math Knowledge/Skills}_{2001-2002}) + (.20 * \text{Writing}_{2001-2002}) + (.10 * \text{Math Problem Solving}_{2001-2002}) \right) + \left( (.35 * \text{Reading}_{2000-2001}) + (.35 * \text{Math Knowledge/Skills}_{2000-2001}) + (.20 * \text{Writing}_{2000-2001}) + (.10 * \text{Math Problem Solving}_{2000-2001}) \right) \right] / 2$$

## Calculating Index Points From Performance Levels

Based on performance levels, an Assessment Index Score will be calculated for each student assessment used in the rating, with the same general method used for all assessments. The scale score ranges for each performance level are shown below by test and by grade level.

<b>Oregon Assessments Performance Levels and Cut Scores by Content Area and Grade</b>					
<b>Content Area and Grade</b>	<b>Scale Score Ranges for Each Performance Level</b>				
	<b>Exceed the Standard</b>	<b>Meet the Standard</b>	<b>Nearly Meet the Standard</b>	<b>Low</b>	<b>Very Low</b>
<b>Reading/Literature</b>					
Grade 3	215 & above	201 – 214	196 – 200	190 – 195	below 190
Grade 5	231 & above	215 – 230	209 – 214	201 – 208	below 201
Grade 8	239 & above	231 – 238	223 – 230	208 – 222	below 208
Grade 10	249 & above	239 – 248	230 – 238	214 – 229	below 214
<b>Math Knowledge and Skills</b>					
Grade 3	215 & above	202 – 214	196 – 201	186 – 195	below 186
Grade 5	231 & above	215 – 230	210 – 214	202 – 209	below 202
Grade 8	239 & above	231 – 238	225 – 230	216 – 224	below 216
Grade 10	249 & above	239 – 248	229 – 238	219 – 228	below 219
<b>Writing</b>					
Grade 10	50 – 60	40 – 49	35 – 39	20 – 34	0 – 19
<b>Math Problem Solving</b>					
Grade 10	40 – 46	32 – 39	29 – 31	16 – 28	0 – 15

## Index Points

Index points will be assigned for each student score with more points being assigned to higher student performance levels. 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=

$$\frac{[(0 * \text{Number of Very Low Scores}) + (33 * \text{Number of Low Scores}) + (67 * \text{Number of Nearly Meets Scores}) + (100 * \text{Number of Meets Scores}) + (133 * \text{Number of Exceeds Scores})]}{\text{Total Number of Student Scores}}$$

## 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.

### Elementary and Middle School

Student Performance Index Score Ranges	
Rating	Index Score Range
Exceptional	115.0 or higher
Strong	100.0 – 114.9
Satisfactory	70.0 – 99.9
Low	60.0 – 69.9
Unacceptable	Less than 60.0

### High School

Student Performance Index Score Ranges	
Rating	Index Score Range
Exceptional	100.0 or higher
Strong	90.0 – 99.9
Satisfactory	70.0 – 89.9
Low	60.0 – 69.9
Unacceptable	Less than 60.0

## Method for Calculation

An Assessment Index Score for 2001-2002 will be calculated by counting the number of students who scored at the Exceed level, the Meet level, the Nearly Meet, the Low, and the Very Low performance level. Then the points will be 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 and 5 will have the scores combined into a single Reading Assessment Index Score for both 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 the students were at the level of *Exceed the Standard*. The minimum score would be 0 if all the students were at the level of *Very Low*.

## Display

**Elementary/Middle School:** The percentage of students meeting or exceeding the standards will be displayed for both Reading and Math Knowledge and Skills tests.

**High School:** The percentage of students meeting or exceeding the standards will be displayed for Reading and Math Knowledge and Skills tests. Graphs will display the percentage of students exceeding, meeting, and conditionally meeting the state standards on Writing and Math Problem Solving tests.

## Additional Display for Elementary and Middle Schools

Writing and Math Problem Solving results will not be included in the ratings for elementary and middle schools, but graphs will display the percentage of students exceeding, meeting, and conditionally meeting the state standards on Writing and Math Problem Solving tests.

## XIV. 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, 2000-2001 and 2001-2002.

**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, 2000-2001 and 2001-2002.

### Changes in the Calculation of Student Behavior Ratings

- The Student Behavior rating will be based on attendance and 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 a 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.

For the reasons listed above, it will not be possible to directly compare the ratings on the 2001-2002 report card to those of previous years.

### Student Behavior Rating Formulas

**Elementary and Middle Schools:** The Index Score will be based on an average of the attendance rates for the 2000-2001 and 2001-2002 schools years.

$$\text{Student Behavior Index Score}_{E/MS} = \frac{[(\text{Attendance Rate}_{2001-2002} + \text{Attendance Rate}_{2000-2001})]}{2}$$

**High Schools/Schools with Grade 12:** The Index Score will be based on an average of the attendance rates and dropout rates for the school years, 2000-2001 and 2001-2002. High schools will not receive separate ratings for attendance and dropout. The two measures will be combined into the Student Behavior rating.

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

- **Attendance Index Score**  $_{HS} = \frac{[(\text{Attendance Rate}_{2001-2002} + \text{Attendance Rate}_{2000-2001})]}{2}$
- **Dropout Index Score**  $_{HS} = \frac{[(100 - \text{Dropout Rate}_{2001-2002}) + (100 - \text{Dropout Rate}_{2000-2001})]}{2}$

## Student Behavior Index Score Ranges

The ratings and corresponding index score ranges are shown below for all schools. 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. The same index score ranges apply to all schools.

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

## 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 Attendance** and **Total Daily Membership**.

- **Total Days Attendance** is calculated by summing the number of students present in the school each day, across all the days of the school year.
- **Total Daily Membership** is the total number of days that could have been attended by students in the school. It is calculated by summing the number of students enrolled in the school on each day across all the days of the school year.
- The **Attendance Rate** is calculated by dividing the Total Days Attendance by the Total Daily Membership and multiplying by 100. Attendance rates are rounded to the nearest tenth of one percent for the school report card.

$$\text{Attendance Rate} = \frac{\text{Total Days Attendance}}{\text{Total Daily Membership}} \times 100$$

### **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 Rate**

The Dropout rate will be calculated as **(100 - Dropout Rate)**.

The dropout rate is calculated annually. Final dropout figures are not available until after October of each year because schools must confirm that a student has not enrolled in school. If three years of dropout data are not available, the elementary school student behavior formula will be applied.

## XV. Calculating the Improvement Rating

### Formula Description

The Improvement rating will be based on improvement during the past 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	5.0 and higher
Stayed About the Same	-4.9 to + 4.9
Declined	-5.0 and less

### Improvement Rating Formulas

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

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

$$\text{Student Performance Improvement}_{1998-1999 \text{ to } 2001-2002} = \frac{[(\text{Reading Improvement}_{1998-1999 \text{ to } 2001-2002}) + (\text{Math Improvement}_{1998-1999 \text{ to } 2001-2002})]}{2}$$

**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.

$$\text{Student Behavior Improvement}_{E/MS} = (\text{Attendance Improvement}_{1998-1999 \text{ to } 2001-2002})$$

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

$$\text{Student Behavior Improvement}_{HS} = \frac{[(\text{Attendance Improvement}_{1998-1999 \text{ to } 2001-2002}) + (\text{Dropout Improvement}_{1998-1999 \text{ to } 2001-2002})]}{2}$$

**Part 3:** Calculating the Improvement change over four years.

**Improvement Weights=**

$$[(.8 * \text{Student Performance Improvement}) + (.2 * \text{Student Behavior Improvement})]$$

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.

## XVI. 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, 2000-2001 and 2001-2002.
- **Student Behavior:** Attendance and dropout rates during the two most recent school years, 2000-2001 and 2001-2002.
- **Improvement:** Change in performance on statewide assessments, attendance, and dropout rates during the four most recent school years 1998-1999 to 2001-2002.
- **School Characteristics:** Participation in Oregon Statewide Assessments during the most recent school year, 2001-2002.

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 *Satisfactory* or higher, 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*. The reasons for this provision are discussed in prior sections of the Policy Manual and Technical Bulletin under the heading of School Characteristics.

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

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

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

**Step 2:** Apply the following formula

$$\text{Overall Rating Index Score} = (.8 * \text{Student Performance Rating Score}) + (.2 * \text{Student Behavior Rating Score}) + \text{Improvement Rating Score}$$

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

**Method 2: Calculating the Overall Rating**

If the rating of School Characteristics is *Satisfactory* or higher, 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
Strong	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
Strong	Exceptional	Satisfactory	Stayed about the same

<b>Overall Rating</b>	<b>Student Performance</b>	<b>Student Behavior</b>	<b>Improvement</b>
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

<b>Overall Rating</b>	<b>Student Performance</b>	<b>Student Behavior</b>	<b>Improvement</b>
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

## Exceptions

The formula method and the matrix method can be used in most circumstances. However, there are two 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 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.

## 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.

Beginning with the 2001 Report Card, schools that had a significant change in population due to changes in boundaries or grade level configurations were 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, the Student Performance, and the Student Behavior ratings are not computed until sufficient historical data is again accumulated.

## **XVII. 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 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 Performance Index Score**

### **Elementary/Middle School**

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

- Step 1.** Calculate a Reading Assessment Index Score using 2001-2002 data.
- Step 2.** Repeat the procedures for 2000-2001 Reading.
- Step 3.** Calculate a Math Assessment Index Score using 2001-2002 data.
- Step 4.** Repeat the procedures for 2000-2001 Math.
- Step 5.** Using the Reading Assessment Index Scores and the Math Assessment Index Scores, calculate the Total Assessment Index Score for 2001-2002 and 2000-2001.
- Step 6.** Calculate the Student Performance Index Score by averaging the two Total Assessment Index Scores.
- Step 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>2001-2002</sub> for Grades 3 and 5

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

- **Count** the number of students at each Performance Level. In the example, there were seven 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.
- **Multiply** the number of students 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 seven students who scored Exceed, the school calculates  $11 * 133 = 1463$ . This is done for each Performance Level.
- **Add** the total points for all the Performance Levels. In the example, the school had  $(1463+1500+871+231+0) = 4065$  total points.
- **Add** the total number of students for all the Performance Levels. In the example the school had  $(11+15+13+7+4) = 50$  total students for the reading test.
- **Divide** the total points by the total number of students for the Assessment Index Score. In the example, the school had 4065 total points, divided by 50 total students = 81.3 (rounded to the nearest tenth of a point).
- After calculating a score for both the Reading and Math Knowledge and Skills assessments during the most recent school year, repeat the procedures for Reading and Math during the school year 2000-2001. 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>2000-2001</sub>

Repeat the procedures for Reading during the school year 2000-2001.

### Step 3. Calculating a Math Assessment Index Score<sub>2001-2002</sub>

Repeat the procedures for Math during the school year 2001-2002.

### Step 4. Calculating a Math Assessment Index Score<sub>2000-2001</sub>

Repeat the procedures for Math during the school year 2000-2001.

**Step 5. Calculating a Total Assessment Index Score**

<b>Total Assessment Index Score<sub>2000-2001</sub></b>			
<b>Test</b>	<b>Score</b>	<b>Weight</b>	<b>Total</b>
Reading Knowledge and Skills	81.3	50%	40.7
Math Knowledge and Skills	84.6	50%	42.3
Total		100%	83.0
<b>Total Assessment Index Score<sub>2001-2002</sub></b>			<b>83.0</b>

After calculating the Total Assessment Index Score for the school year 2001-2002, repeat the procedure using the data for the school year 2000-2001.

<b>Total Assessment Index Score<sub>2001-2002</sub></b>			
<b>Test</b>	<b>Score</b>	<b>Weight</b>	<b>Total</b>
Reading Knowledge and Skills	75.3	50%	37.7
Math Knowledge and Skills	82.6	50%	41.3
Total		100%	79.0
<b>Total Assessment Index Score<sub>2000-2001</sub></b>			<b>79.0</b>

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

Average the Total Assessment Index Score<sub>2001-2002</sub> and the Total Assessment Index Score<sub>2000-2001</sub>.

$$\text{Student Performance Index Score}_{2000-2001--2001-2002} = \frac{[\text{Total Assessment Index Score}_{2001-2002} + \text{Total Assessment Index Score}_{2000-2001}]}{2}$$

$$\text{Student Performance Index Score} = [83.0 + 79.0] / 2$$

$$\text{Student Performance Index Score}_{2000-2001--2001-2002} = 81.0$$

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

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

**Elementary and Middle School**

<b>Student Performance Index Score Ranges</b>	
<b>Rating</b>	<b>Index Score Range</b>
Exceptional	115.0 or higher
Strong	100.0 – 114.9
Satisfactory	70.0 – 99.9
Low	60.0 – 69.9
Unacceptable	Less than 60.0

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

### Step 1. Calculating the Attendance Index Score for Grades 3 and 5

The Attendance rate is calculated by dividing the Number of Days Attendance (days present) by the Total Daily Membership. The two numbers are reported by the school and district to the Department of Education. First calculate for 2001-2002.

Number of Days Attendance	29160
Total Daily Membership	31500
Attendance Rate	92.6
Attendance Index Score <sub>2001-2002</sub>	<b>92.6</b>

### Step 2. Repeating the procedure for 2000-2001 Attendance Data.

Number of Days Attendance	30140
Total Daily Membership	31600
Attendance Rate	95.3
Attendance Index Score <sub>2000-2001</sub>	<b>95.3</b>

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

$$\text{Student Behavior Index Score}_{2000-2001 - 2001-2002} = \frac{[\text{Attendance Index Score}_{2001-2002} + \text{Attendance Index Score}_{2000-2001}]}{2}$$

$$\text{Student Behavior Index Score} = [92.6 + 95.3] / 2$$

$$\text{Student Behavior Index Score}_{2000-2001 - 2001-2002} = 94.0$$

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

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

#### Student Behavior Index Score Ranges

The ratings and corresponding index score ranges are shown below for all schools.

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

$$\text{Improvement Index Score} = (.8 * \text{Assessment Improvement Index Score}) + (.2 * \text{Attendance Improvement Index Score})$$

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

- Step 1.** Calculate the Reading Assessment Improvement Index Score
- Step 2.** Calculate the Math Assessment Improvement Index Score
- Step 3.** Calculate the Average Assessment Improvement Index Score
- Step 4.** Calculate an Attendance Improvement Index Score
- Step 5.** Calculate a Total Improvement Index Score
- Step 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

School Year	Assessment Index Score	Averages	Difference
2001-2002	75.3	Average of 2000-2001 and 2001-2002 77.8	Between 2000-2001+ 2001-2002  AND 1998-1999 +1999-2000
2000-2001	80.3		
1999-2000	78.0	Average of 1998-1999 and 1999-2000 75.0	
1998-1999	72.0		
		<b>Reading Assessment Improvement Index Score</b>	<b>2.8</b>

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

- Calculate a Reading Assessment Index Score for the four school years 2001-2002, 2000-2001, 1999-2000, and 1998-1999 using the same procedures as discussed previously.
- Add the Reading Assessment Index Score<sub>2001-2002</sub> and the Reading Assessment Index Score<sub>2000-2001</sub>.
- Divide the sum by 2 for an average index for those two years.
- Add the Reading Assessment Index Score<sub>1999-2000</sub> and the Reading Assessment Index Score<sub>1998-1999</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.

### 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.

<b>Math</b>			
<b>School Year</b>	<b>Assessment Index Score</b>	<b>Averages</b>	<b>Difference</b>
2001-2002	82.6	Average of 2000-2001 and 2001-2002 84.1	Between 2000-2001+ 2001-2002  AND 1998-1999 +1999-2000
2000-2001	85.6		
1999-2000	78.6	Average of 1998-1999 and 1999-2000 77.4	
1998-1999	76.2		
<b>Math Assessment Improvement Index Score</b>			<b>6.7</b>

### 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.

<b>Average Assessment Improvement Index Score</b>	
<b>Content Area</b>	<b>Index Score</b>
Reading Assessment Improvement 1998-1999 to 2001-2002	2.8
Math Assessment Improvement 1998-1999 to 2001-2002	6.7
<b>Average Assessment Improvement Index Score</b>	<b>4.8</b>

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

- Add the Reading Assessment Improvement Index Score and the Math Assessment Improvement Index Score.
- Divide by 2.
- 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 to the average of the previous two years.

#### Attendance

School Year	Attendance Index Score	Averages	Difference
2001-2002	92.6	2000-2001 and 2001-2002 94.0	Between 2000-2001+ 2001-2002 AND 1998-1999 +1999-2000
2000-2001	95.4		
1999-2000	90.2	1998-1999 and 1999-2000 89.4	
1998-1999	88.5		
		<b>Attendance Improvement Index Score</b>	<b>4.6</b>

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

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

- Calculate the Attendance Index for the four years 2001-2002, 2000-2001, 1999-2000, and 1998-1999, using the procedures discussed previously.
- Add the Attendance Index Score<sub>2001-2002</sub> and the Attendance Index Score<sub>2000-2001</sub>.  
[92.6 + 95.4 = 188.0]
- Divide the sum by 2 for an average index for those two years.  
[188.0 / 2 = 94.0]
- Add the Attendance Index<sub>1999-2000</sub> and the Attendance Index<sub>1998-1999</sub>.  
[90.2 + 88.5 = 178.7]
- Divide the sum by 2 for an Average Attendance Index Score for those two years.  
[178.7 / 2 = 89.4]
- Subtract the average index scores. This is the amount of improvement or difference during the four years. [94.0 – 89.4 = 4.6]
- 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 the assessment improvement and attendance improvement.

Element	Index Score		Weight		Weighted Index
Average Assessment Improvement	4.8	x	.8	=	3.8
Average Attendance Improvement	4.6	x	.2	=	0.9
<b>Total Improvement Index Score</b>					<b>4.7</b>

### 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	5.0 and higher
Stayed About the Same	-4.9 - + 4.9
Declined	-5.0 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.

**School Characteristics Index Score 2001-2002 = Participation Rate**

School Year	Participation Rate
2001 - 2002	95.1

### Step 1: Calculating the Participation Rate

Use the report card definition of participation below. Include participation for each student for each assessment included in the rating per benchmark grade.

- Grades 3, 5, 8: Reading and Math Knowledge and Skills
- Grade 10: Reading and Math Knowledge and Skills, Writing, Math Problem Solving

Standard + Challenge Up + Challenge Down + Extended + Juried + Side-by-Side + Plain Language + Modified LEP & IEP + TESA + Non-completers

Standard + Challenge Up + Challenge Down + Extended + Juried + Side-by-Side + Plain Language + Modified LEP & IEP + TESA + Non-completers + Absent + Student Non-consent

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

The Participation Rate in the example is 95.1, and therefore, does not change the Overall rating. Please note: If a school has a participation rate of 84.9% or less, the Overall rating will automatically be *Unacceptable*. For the example, the school earned an *Exceptional* School Characteristics rating.

School Characteristics Rating	
Rating	Participation Rate
Exceptional	95.0% and higher
Strong	90.0% - 94.9%
Satisfactory	85.0% - 89.9%
Unacceptable	Less than 85.0%

## 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 *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.

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	4.7	Stayed About the Same	0	1	0.0
<b>Overall Rating Index Score</b>					<b>2.2</b>

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 given beginning on page 17.

Overall Rating	Student Performance	Student Behavior	Improvement
Satisfactory	Low	Exceptional	Declined
Satisfactory	Low	Strong	Stayed about the Same
Satisfactory	Satisfactory	Satisfactory	Declined
<b>Satisfactory</b>	<b>Satisfactory</b>	<b>Strong</b>	<b>Stayed about the Same</b>
Satisfactory	Low	Strong	Declined

In this example, 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 *Unacceptable* in School Characteristics, the Overall rating would have been *Unacceptable*.

## **XVIII. 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 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 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 Performance Assessment Index Score

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

- Step 1.** Calculate a Reading Assessment Index Score using 2001-2002 data.
- Step 2.** Repeat the procedures for 2000-2001 Reading.
- Step 3.** Calculate a Math Assessment Index Score for Math Knowledge and Skills using 2001-2002 data.
- Step 4.** Repeat the procedures for 2000-2001 Math Knowledge and Skills.
- Step 5.** Calculate a Writing Assessment Index Score using 2001 - 2002 data.
- Step 6.** Repeat the procedures for 2000-2001 Writing.
- Step 7.** Calculate a Math Problem Solving Assessment Index Score using 2001-2002 data.
- Step 8.** Repeat the procedures for 2000-2001 Math Problem Solving.
- Step 9.** Using the Assessment Index Scores for Reading, Math Knowledge and Skills, Writing, and Math Problem Solving, calculate the Total Assessment Index Score.
- Step 10.** Calculate the Student Performance Index Score by averaging the two total Assessment Index Scores.
- Step 11.** Compare the Student Performance Index Score to the table for a Student Performance Rating.

### Example: High School

#### Step 1. Calculating a Reading Assessment Index Score<sub>2001-2002</sub> for Grade 10

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

- **Count** the number of students at each Performance Level. In the example, there were seven 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 together.
- **Multiply** the number of students 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 seven students who scored Exceed, the school calculates  $11 * 133 = 1463$ . This is done for each Performance Level.

- **Add** the total points for all the Performance Levels. In the example, the school had  $(1463+1500+871+231+0) = 4065$  total points.
- **Add** the total number of students for all the Performance Levels. In the example, the school had  $(11+15+13+7+4) = 50$  total students for the reading test.
- **Divide** the total points by the total number of students for the Assessment Index Score. In the example, the school had 4065 total points, divided by 50 total students = 81.3 (rounded to the nearest tenth of a point).
- After calculating a score for Reading, Math Knowledge and Skills, Writing, and Math Problem Solving assessments during the most recent school year, repeat the procedures for results during school year 2000-2001. 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>2000-2001</sub>**  
Repeat the procedures for Reading during the school year 2000-2001.

**Step 3. Calculating a Math Assessment Index Score<sub>2001-2002</sub>**  
Repeat the procedures for Math during the school year 2001-2002.

**Step 4. Calculating a Math Assessment Index Score<sub>2000-2001</sub>**  
Repeat the procedures for Math during the school year 2000 -2001.

**Step 5. Calculating a Writing Index Score<sub>2001-2002</sub>**  
Repeat the procedures for Writing during the school year 2001-2002.

**Step 6. Calculating a Writing Index Score<sub>2000-2001</sub>**  
Repeat the procedures for Writing during the school year 2000-2001.

**Step 7. Calculating a Math Problem Solving Index Score<sub>2001-2002</sub>**  
Repeat the procedures for Math Problem Solving during the school year 2001-2002.

**Step 8. Calculating a Math Problem Solving Index Score<sub>2000-2001</sub>**  
Repeat the procedures for Math Problem Solving during the school year 2000-2001.

### Step 9. Calculating a Total Assessment Index Score

After calculating the Total Assessment Index for the school year 2001-2002, repeat the procedure using the data for the school year 2000-2001.

Total Assessment Index Score <sub>2001-2002</sub>			
Test	Score	Weight	Total
Reading Knowledge and Skills	81.3	35%	28.5
Math Knowledge and Skills	86.9	35%	30.4
Writing	82.0	20%	16.4
Math Problem Solving	76.8	10%	7.7
Total		100%	83.0
Total Assessment Index Score <sub>2001-2002</sub>			<b>83.0</b>

Total Assessment Index Score <sub>2000-2001</sub>			
Test	Score	Weight	Total
Reading Knowledge and Skills	75.3	35%	26.4
Math Knowledge and Skills	84.3	35%	29.5
Writing	80.0	20%	16.0
Math Problem Solving	71.3	10%	7.1
Total		100%	79.0
Total Assessment Index Score <sub>2000-2001</sub>			<b>79.0</b>

### Step 10. Calculating the Student Performance Index Score

Average the Total Assessment Index Score<sub>2001-2002</sub> and the Total Assessment Index Score<sub>2000-2001</sub>.

$$\text{Student Performance Index Score}_{2000-2001-2001-2002} = \frac{[\text{Total Assessment Index Score}_{2001-2002} + \text{Total Assessment Index Score}_{2000-2001}]}{2}$$

$$\text{Student Performance Index Score} = [83.0 + 79.0] / 2$$

$$\text{Student Performance Index Score}_{2000-2001-2001-2002} = 81.0$$

### Step 11. Comparing the Student Performance Index Score

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

#### High School

Student Performance Index Score Ranges	
Rating	Index Score Range
Exceptional	100.0 or higher
Strong	90.0 – 99.9
Satisfactory	70.0 – 89.9
Low	60.0 – 69.9
Unacceptable	Less than 60.0

## Calculating the Student Behavior Index Score: High School

### Calculating the Attendance Index Score: High School

#### Step 1. Calculating the Attendance Index Score

The Attendance rate is calculated by dividing the Number of Days Attendance (days present) by the Total Daily Membership. The two numbers are reported by the school and district to the Department of Education. First calculate for 2001-2002.

Number of Days Attendance	29160
Total Daily Membership	31500
Attendance Rate	92.6
Attendance Index Score <sub>2001-2002</sub>	<b>92.6</b>

Step 2. Repeating the procedure for 2000-2001 Attendance Data.

Number of Days Attendance	30140
Total Daily Membership	31600
Attendance Rate	93.4
Attendance Index Score <sub>2001-2002</sub>	<b>93.4</b>

Step 3. Averaging the Attendance Index Scores.

$$\begin{aligned} \text{Student Attendance Index Score}_{2000-2001 - 2001-2001} &= \\ & [ \text{Attendance Index Score}_{2001-2002} + \text{Attendance Index Score}_{2000-2001} ] / 2 \\ \text{Student Attendance Index Score} &= [92.6 + 93.4] / 2 \\ \text{Student Attendance Index Score}_{2000-2001 - 2001-2001} &= 93.0 \end{aligned}$$

## Calculating the Dropout Index Score: High School

### Step 1. Calculating the Dropout Index Score

The Dropout Index Score for one year is calculated by subtracting the dropout rate from 100.

$$\text{Dropout Index Score}_{\text{HS}} = 100 - (\text{Dropout Rate})$$

### Step 2. Calculating the Dropout Index Score

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

$$\text{Dropout Index Score}_{\text{HS}} = (\text{Dropout Index Score}_{2001-2002} + \text{Dropout Index Score}_{2000-2001}) / 2$$

For the example, assume the school has a dropout rate of 6.2% in 2001-2002 and 7.6% in 2000-2001. The Dropout Index<sub>2001-2002</sub> is 93.8. The Dropout Index<sub>2000-2001</sub> is 92.4. The average of the two years is 93.1. The Dropout Index Score<sub>2000-2001 - 2001-2002</sub> for the school is 93.1.

School Year	Dropout Rate	Index Score	Average
2001-2002	6.2	93.8	
2000-2001	7.6	92.4	
<b>Dropout Index Score</b>			<b>93.1</b>

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

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

$$\text{Student Behavior Index Score}_{2000-2001 - 2001-2002} = \frac{[(\text{Attendance}_{2000-2001} + \text{Attendance}_{2001-2002}) + (\text{Dropout}_{2000-2001} + \text{Dropout}_{2001-2002})]}{2}$$

Element	Index Score
Attendance (Average of 2000-2001 and 2001-2002)	93.0
Dropout (Average of 2000-2001 and 2001-2002)	93.1
<b>Student Behavior Index Score</b>	<b>93.1</b>

**Step 4. Comparing the Student Behavior Index Score** of 93.1 to the table below. 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

$$\text{Improvement Index Score} = (.8 * \text{Assessment Improvement Index Score}) + (.2 * \text{Attendance Improvement Index Score})$$

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

- Step 1.** Calculate the Reading Assessment Improvement Index Score
- Step 2.** Calculate the Math Assessment Improvement Index Score
- Step 3.** Calculate the Average Assessment Improvement Index Score
- Step 4.** Calculate an Attendance Improvement Index Score
- Step 5.** Calculate a Dropout Improvement Index Score
- Step 6.** Combining for an Average Attendance/Dropout Improvement Index Score
- Step 7.** Calculate a Total Improvement Index Score
- Step 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
2001-2002	81.6	2000-2001 and 2001-2002	Between 2000-2001+ 2001-2002  AND 1998-1999 +1999-2000
2000-2001	75.3	78.5	
1999-2000	77.0	1998-1999 and 1999-2000	
1998-1999	74.8	75.9	
		<b>Reading Assessment Improvement Index Score</b>	<b>2.6</b>

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

- Calculate a Reading Assessment Index Score for the four school years 2001-2002, 2000-2001, 1999-2000, and 1998-1999 using the same procedures as discussed previously.
- Add the Reading Assessment Index Score<sub>2001-2002</sub> and the Reading Assessment Index Score<sub>2000-2001</sub>.
- Divide the sum by 2 for an average index for those two years. Round to one decimal place.
- Add the Reading Assessment Index Score<sub>1999-2000</sub> and the Reading Assessment Index Score<sub>1998-1999</sub>.
- Divide the sum by 2 for an average index for those two years. Round to one decimal place.
- 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.

<b>Math</b>			
<b>School Year</b>	<b>Assessment Index Score</b>	<b>Averages</b>	<b>Difference</b>
2001-2002	86.6	2000-2001 and 2001-2002 85.5	Between 2000-2001+ 2001-2002 AND 1998-1999 +1999-2000
2000-2001	84.3		
1999-2000	84.0	1998-1999 and 1999-2000 83.2	
1998-1999	82.4		
<b>Math Assessment Improvement Index Score</b>			<b>2.3</b>

### 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.

#### Math

Average Assessment Improvement Index Score	
Content Area	Index Score
Reading Assessment Improvement 1998-1999 to 2001-2002	2.6
Math Assessment Improvement 1998-1999 to 2001-2002	2.3
<b>Average Assessment Improvement Index Score</b>	<b>2.5</b>

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

- Add the Reading Assessment Improvement Index Score and the Math Assessment Improvement Index Score.
- Divide by 2.
- 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 to the average of the previous two years.

School Year	Attendance Index Score	Averages	Difference
2001-2002	92.6	2000-2001 and 2001-2002 93.0	Between 2000-2001+ 2001-2002 AND 1998-1999 +1999-2000
2000-2001	93.4		
1999-2000	90.2	1998-1999 and 1999-2000 89.4	
1998-1999	88.5		
		<b>Attendance Improvement Index Score</b>	<b>3.6</b>

### Calculating the Attendance Improvement Index Score: High School

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

- Calculate the Attendance Index for the four years 2001-2002, 2000-2001, 1999-2000, and 1998-1999, using the procedures discussed previously.
- Add the Attendance Index Score<sub>2001-2002</sub> and the Attendance Index Score<sub>2000-2001</sub>.  
[92.6 + 93.4 = 186.0]
- Divide the sum by 2 for an average index for those two years. [186.0 / 2 = 93.0]
- Add the Attendance Index<sub>1999-2000</sub> and the Attendance Index<sub>1998-1999</sub>. [90.2 + 88.5 = 178.7]
- Divide the sum by 2 for an Average Attendance Index Score for those two years.  
[178.7 / 2 = 89.4]
- Subtract the average index scores. This is the amount of improvement or difference during the four years. [93.0 – 89.4 = 3.6]
- The Attendance Improvement Index Score in this example is 3.6.

### 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
2001-2002	93.8	2000-2001 and 2001-2002 93.1	Between 2000-2001+ 2001-2002 AND 1998-1999 +1999-2000
2000-2001	92.4		
1999-2000	89.2	1998-1999 and 1999-2000 86.9	
1998-1999	84.6		
		<b>Dropout Improvement Index Score</b>	<b>6.2</b>

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

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

- Calculate the Dropout Index for the four years 2001-2002, 2000-2001, 1999-2000, and 1998-1999 using the procedures discussed previously.
- Add the Dropout Index Score<sub>2001-2002</sub> and the Dropout Index Score<sub>2000-2001</sub>.  
[93.8 + 92.4 = 186.2]
- Divide the sum by 2 to get an average index score for those two years. [186.2 / 2 = 93.1]
- Add the Dropout Index Score<sub>1999-2000</sub> and the Dropout Index Score<sub>1998-1999</sub>.  
[89.2 + 84.6 = 173.8]
- Divide the sum by 2 to get an average index score for those two years.  
[173.8 / 2 = 86.9]
- Subtract the average index scores. This is the amount of improvement or difference during the four years. [93.1 – 86.9 = 6.2]
- 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=

$$\frac{(\text{Attendance Improvement} + \text{Dropout Improvement})}{2}$$

$$\frac{(3.6 + 6.2)}{2} = 4.9$$

### Step 7. Calculating the Total Improvement Index Score

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

Element	Index Score		Weight		Weighted Index
Average Assessment Improvement	2.5	x	.8	=	2.0
Average Attendance/Dropout Improvement	4.9	x	.2	=	1.0
<b>Total Improvement Index Score</b>					<b>3.0</b>

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

The Total Improvement Index Score as 3.0. Compare the Total Improvement Index Score of 3.0 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	5.0 and higher
Stayed About the Same	-4.9 – + 4.9
Declined	-5.0 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.

**School Characteristics Index Score 2001-2002 = Participation Rate**

School Year	Participation Rate
2001 - 2002	95.1

### Step 1: Calculating the Participation Rate

Use the report card definition of participation below. Include participation for each student for each assessment included in the rating per benchmark grade.

- Grades 3, 5, 8: Reading and Math Knowledge and Skills
- Grade 10: Reading and Math Knowledge and Skills, Writing, Math Problem Solving

Standard + Challenge Up + Challenge Down + Extended + Juried + Side-by-Side + Plain Language + Modified LEP & IEP + TESA + Non-completers

Standard + Challenge Up + Challenge Down + Extended + Juried + Side-by-Side + Plain Language + Modified LEP & IEP + TESA + Non-completers + Absent + Student Non-consent

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

The Participation Rate in the example is 95.1, and therefore, does not change the Overall rating. Please note: If a school has a participation rate of 84.9% or less, the Overall rating will automatically be *Unacceptable*. For the example, the school earned an *Exceptional* School Characteristics rating.

School Characteristics Rating	
Rating	Participation Rate
Exceptional	95.0% and higher
Strong	90.0% - 94.9%
Satisfactory	85.0% - 89.9%
Unacceptable	Less than 85.0%

## 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.

Component	Index Score	Rating	Rating Score	Weight	Total
Student Performance	81.0	Satisfactory	2	.80	1.6
Student Behavior	93.1	Satisfactory	2	.20	0.4
Improvement	3.0	Stay about the same	0	1	0.0
<b>Overall Rating Index Score</b>					<b>2.0</b>

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*.

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 *Unacceptable* in School Characteristics, the Overall rating would have been *Unacceptable*.

Overall Rating	Student Performance	Student Behavior	Improvement
Satisfactory	Low	Exceptional	Declined
Satisfactory	Low	Strong	Stayed about the Same
Satisfactory	Satisfactory	Satisfactory	Declined
<b>Satisfactory</b>	<b>Satisfactory</b>	<b>Satisfactory</b>	<b>Stayed about the Same</b>
Satisfactory	Low	Strong	Declined

## **Resources and Background Materials**

There are many Oregon School Report Card resources available. Most of these can be accessed at <http://reportcard.ode.state.or.us>. There are also many links to other resources at the ODE website. Please contact (503) 378-3600 ext. 2644 if you would like hardcopies of the following items:

1. The ODE report card website contains all past editions of school and district report cards  
<http://reportcard.ode.state.or.us>
2. The 1999 Legislation that created the Oregon School Report Card  
<http://reportcard.ode.state.or.us>
3. The Oregon Administrative Rules that describe the report card ratings  
<http://reportcard.ode.state.or.us>
4. National research that summarizes the public expectations for school report cards  
<http://reportcard.ode.state.or.us>
5. A communications toolkit prepared by OSBA for districts and schools  
<http://www.osba.org/hotopics/rptcard/index.htm>
6. A PowerPoint presentation that provides general information on the background, rating system and next steps of the 2001 Oregon School Report Card  
<http://reportcard.state.or.us>
7. Information on the Oregon Statewide Assessments  
<http://www.ode.state.or.us/asmt/index.htm>
8. Information on the extended assessment system  
<http://www.ode.state.or.us/asmt/Administration/index.htm>
9. How to Read the Oregon School and District Report Cards  
<http://reportcard.ode.state.or.us>