

OREGON SCHOOL REPORT CARD

2002 MANUAL



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I. Introduction

Oregon law mandates that the Oregon Department of Education produce and issue an annual performance report card for schools and districts. The report card is a logical extension of other programs initiated to improve education in Oregon's schools by encouraging responsible action, identifying excellence and driving improvement. It is designed to

1. communicate the many good things occurring in the schools;
2. provide a fair, workable and educationally and technically sound means of reporting ratings of current school performance and improvement over time; and
3. demonstrate to the public that the schools are accountable for their work.

The Oregon School Report Card Manual is a compilation of the policies, processes, strategies and timelines that relate to producing and improving the report card. It will be updated annually to provide you with the latest information on policies and timelines. We are committed to making the report card a valuable tool for educators, parents and community members throughout the state. We encourage your feedback. For additional information, comments or suggestions, please call (503) 378-3600 ext. 2353 or e-mail to report.card@state.or.us



II. Background Information

Created by the 1999 Oregon State Legislature, the school report card is an extension of other programs initiated to improve Oregon's educational system. This legislation requires that the Oregon Department of Education produce and issue a report card to all districts and schools in the state. The Department has developed a strategic plan to insure the report card develops into an effective tool for educators, parents and community members. Essential components of this plan include: a continuous "feedback" loop from all stakeholders, focus groups, external and internal advisory committees, discussion with a national consultant, and regular meetings of Quarterly Policy Advisory Team. Some significant events in the development of the Oregon School Report card are:

- In June of 1999 the State legislature established the rating labels and categories. The Department of Education was instructed to research, develop and implement all other components of the report card.
- Several prototype report cards were developed and sent out for feedback from stakeholders throughout the state. ODE contracted with The National Center for the Improvement of Educational Assessment for assistance in the development of the report card.
- The State Board of Education approved the first Oregon school report card.
- ODE sent out the first report card to over 1300 schools and districts in January 2000.
- Feedback was solicited from stakeholders, which helped inform the development and distribution of the next report card.
- ODE sent out the second school report card in January 2001.
- The report card team developed a communications plan for future report cards.
- The Oregon State Legislature passed SB 811. (See pg. 8).

III. The Report Card Plan

Strategies

This section describes the Oregon Department of Education's plan for improving and producing the school and district report card. The report card team has led discussions focused on identifying questions to be resolved, problems to be solved and future improvements to the report card. Input from various departments at the ODE and from the field helped inform these discussions.

The general plan calls for internal and external discussion of issues and solutions, piloting and modeling where appropriate, and formal setting of policy within the Department. The Report Card Quarterly Policy Advisory Committee (QPAC), which draws on staff from all ODE departments, meets regularly to ensure thorough discussion and coordination. Another strategy is to include input from the field. External focus groups, made up of stakeholders from throughout the state, discuss issues and concerns.

Issues

As mentioned in the section above, the report card team has been collecting feedback, answering questions and identifying issues. A plan has been created for resolving these issues and incorporating the decisions into an improved report card.

The Department of Education recognizes that the report card is not static and must evolve over time. As issues surface, they will be evaluated and may become part of the overall report card plan. For now, the issues that have been identified as needing resolution can be grouped into the following categories:

- Including all students in the accountability system
- Dealing with special school situations
- Modifying what or how information is reported
- Incorporating new assessment systems into accountability
- Adjusting the elements and formula underlying the ratings
- Communicating and capacity building
- Coordinating with U. S. Department of Education initiatives and programs (e.g., Title I, assistance grants)
- Addressing connections with the Quality Education Commission

Timeline

The following timeline is a first step in communicating the long-range plan for the Oregon School Report Card. Many of these issues are discussed further in the "Accountability Policy" and "Technical Bulletin" sections of this manual. Communication and capacity building will be ongoing components of the Report Card Plan.

Report Card Year	Changes
2002	<ul style="list-style-type: none"> • Includes ALL students for accountability • Includes a provision for high performing schools that may not show improvement • Graphically displays overall score on a continuum • Attaches all students to a school • Displays improvement for student performance, student behavior and the overall rating separately • Includes SB 811 elements • Includes population change rule at 40% • Disaggregates data by gender, special education, economic disadvantaged • Clarifies participation • Addresses student refusals on OSATs.
2003 (proposed)	<ul style="list-style-type: none"> • Formula and rating adjustments • Include science in student performance • Make improvement rating more transparent • Make Overall rating more consistent with sub ratings • Address special school situations (dropout recovery schools, small schools, etc.) • Distinguish between parental/student non-consent
2004 (proposed)	<ul style="list-style-type: none"> • Additional disaggregated reports • LEP assessments

IV. Accountability Policy

The Oregon School Report Card is an important educational accountability tool. While assessment scores play a major factor in the rating system, it is important to understand how accountability and assessment are related and how they are different. Both are measures used to improve student achievement. Assessment is the measure of student and school performance, in relation to Oregon's Standards. An assessment policy question is, "What is the most appropriate way to assess students to derive accurate measurement information about what students know and can do?"

Accountability is the measure of how a school and/or district are doing in achieving results. It involves the evaluation of performance, discussion of results and assignment of consequences. An accountability policy question is, "What are the most appropriate ways to use assessment information to improve learning and teaching?"

This section of the Report Card Manual is in a question and answer format. Many of the questions most frequently asked about the report card are included. The answers to the questions define the policy around each issue.

General Information

1. What are the report cards?

ORS 329.105, passed in 1999, requires that the Oregon Department of Education produce and issue an annual report card for all schools and districts. This law was passed to recognize that members of the public want consistent, and reliable information about their schools.

2. What is the purpose of the report cards?

The school report card is one of several programs initiated to improve education throughout the state. It gives the school an opportunity to communicate to and celebrate with the community the many good things that are happening in the school. It also provides consistent and reliable information about the school's performance directly to parents and community members, demonstrating that schools are accountable for their work.

3. Who will receive the school report card?

All schools in Oregon that meet the definition of a public school will be included in the system. Some schools may not receive an overall rating because they are generally too small or have insufficient data.

4. When will the report card be issued?

The 2002 school report card will be released in January. Schools and districts must send out copies of the report cards to all parents by March 31 of each year.

5. Do report cards give schools A-F letter grades?

No, schools do not receive letter grades. The law lists the five ratings as Exceptional, Strong, Satisfactory, Low and Unacceptable.

6. What areas are rated?

Each school is given an overall rating. This rating is a composite of four categories: student performance, student behavior, school characteristics and an improvement adjustment. The rating system factors in both current performance and improvement over time.

7. Do districts get the same ratings on their report cards?

No, districts do not receive ratings. Only schools do. District report cards contain district-wide statistics and list all schools in the district with their ratings.

8. What are the benefits of this rating system?

This rating system credits schools for improving student performance on state assessments, student attendance and dropout rate over time. It allows for each school to achieve higher ratings than they would if absolute performance were the only consideration.

9. Why is so much emphasis put on state test scores?

State test scores are the most reliable, consistent and stable measurement of student performance over time across the state. The rating system is an educationally and technically sound means of reflecting current performance and improvement over time.

10. Why is there so much emphasis on improvement in the rating system?

Schools should have the same expectations for students, regardless of their economic background. While there is a strong relationship between “point-in-time” tests and socio-economic status, research shows that there is not a strong correlation between poverty and how much a student improves. The belief that every student, given time and opportunity, can make substantial progress toward meeting standards is the rationale behind the emphasis on improvement in the rating system.

11. Can the report card be used to evaluate principals or teachers?

No, the report card cannot be used to evaluate educators because they do not provide a comprehensive picture of the educators’ work.

12. Why does the rating system emphasize the percent of students who take the test?

The percent of students who take state tests is a good indicator of whether all eligible students receive the same educational opportunities. High state test participation rates also help ensure sound comparisons over time, a key element of validity.

13. The report card does not describe many important aspects of schools, such as community involvement. Why not?

The report card is a snapshot of school quality. It is limited in its perspective because only data that is comparable from school to school can be used. Community involvement is difficult to quantify using the same measure for all schools.

The Department requires that all statistics used in the report card be reliable and consistent across the state. If data did not meet this rigorous test, it was not included in the report card. As more reliable and consistent statewide data become available it will be included in the report card.

14. How can a school communicate information that is not reflected on the report card?

Each school and district is encouraged to use the blank panel on the report card to include local information not currently available at the state level. This should be an important feature of every district and school report card.

15. What happens if a school receives a rating of low or unacceptable?

Low and unacceptable ratings can be addressed and corrected. Report cards help focus local and state energy and resources. Low-performing schools will receive technical assistance from the Department and may be eligible for school improvement grants.

16. What happens if a school receives a low or unacceptable rating for three years in a row?

A school that receives a low or unacceptable rating three years in a row will want to analyze and examine its data very closely in order to plan for successful improvement efforts. The Department will assist in this process and will continue to provide resources as well as direction.

17. Were schools given an opportunity to review the report card data?

Yes, each school and district is given an opportunity to review and verify the data used in the rating system. If they believe an error exists, they are given the opportunity to appeal.

18. How should parents respond if their child's school receives a low rating?

Parents should observe how their school responds to areas of concern. They should become involved in the school to encourage student learning and help make student attendance a priority.

19. How does the passage of Senate Bill 811 by the 2001 Oregon State Legislature affect the report card?

Senate Bill 811 made no changes to the rating system or to the structure of the card itself. The bill required a number of elements be added to both the school and district cards. **These elements are for display purposes only.** The following elements, when available, are from the most recent school year:

School Report Card	District Report Card
<ul style="list-style-type: none"> • Enrollment in ESL programs • ** School safety information (e.g. expulsions involving weapons) • Students meeting CIM standards • Number of students who dropped out of school • ** Parent and community involvement (e.g. volunteer hours) • Classes taught outside of certificated area • School staff, by category 	<ul style="list-style-type: none"> • * Resident students who attend outside the district • Facilities used for distance learning • Bond levy election results • Expenditures • ESD support provided to the district • Administrators not assigned to a school • District staff, by category • Students eligible for special education

* The 2002 report card will not only report students who attend outside the district, but students who come to a district from another district.

** This data may not be available for the 2002 report card.

Assessment

1. What is the relationship between assessment and accountability on the state report card?

Accountability is the measure of how schools are doing at moving ALL students to higher levels. The school report card is just one of the tools that is used to measure results. The state assessments measure what a student knows and can do. This is a key element of the school report card.

2. ODE allows students to take a benchmark test that may not correspond with their grade level. For example, a 5th grader who takes the 8th grade benchmark assessment is “challenging up”. Similarly, a 5th grader who takes a 3rd grade test is “challenging down.” Are these scores included in the 2002 report card?

The scores of students who challenged up are figured into both the student performance and the participation rate on the 2002 report card. The students who challenged down will be counted in student participation but not student performance.

- 3. Beginning with the Spring 2002 assessments, ODE will provide extended assessments to those students for whom such assessments are appropriate. How will these scores be included in future report cards?**

The scores of students taking extended assessments will be included in the student participation component of the 2002 report card. In 2003 extended assessments will be included in both student performance and student participation.

- 4. How are “non-consent” students (those whose parents do not give consent for their child to participate on the state assessments) treated on the 2002 report card?**

Students whose parents provide a written refusal of consent will not be included in the 2002 report card calculations for student performance or participation rate.

- 5. The current assessment policy states that students who do not answer the minimum number of questions will not be included in the student performance rating. Is there a different policy for the 2002 report card?**

No, for the 2002 state report card these circumstances will not be included in the student performance rate. They will be counted in the participation rate. Because schools are accountable for ALL their students, a policy will be developed to determine how to handle students who have below the minimum number of responses for the 2003 report card.

- 6. Are students with Limited English Proficiency included in the 2002 report card?**

Yes, those students who are able to participate on the standard state mathematics assessments in either Spanish or English are included in both student performance and participation. The Department is in the process of developing tests that will be valid for LEP students.

- 7. How are the scores of 11th and 12th grade students taking the CIM assessments reported?**

Only the scores of students who are at the benchmark level (3rd, 5th, 8th, and 10th) are included in participation and student performance. An 11th grader taking the CIM (Grade 10) level test would not be reported for accountability purposes.

- 8. If a student hands in a completed writing assessment but it is off-topic, how is this treated on the report card?**

A writing assessment that is complete, but off topic is counted as a “Does not meet.” It is also included in the participation rating.

9. What were the 2001 testing options for students and how will these be treated on the 2002 school/district report card?

The following chart depicts how each 2001 testing option will be reported on the 2002 report card. Specific details on the rating and formula of each report card component can be found in the Technical Bulletin.

Options for 2001 Testing	2002 Report Card	
	Student Performance	Student Participation
Standard assessments	Included	Included
Standard assessment with accommodations	Included	Included
Challenge up	Included	Included
Challenge down	Not included	Included
Extended assessments	Not included	Included
Juried assessments	Included	Included
Modified assessments	Not included	Included
Non-consent (parents and students)	Not included	Not included
Exempted (ELL, IEP)	Not included	Not included
Non completers	Not included	Included
Absent	Not included	Included (as non-participant)

10. How will each of the 2001 testing options be displayed on the 2002 report card?

The 2001 testing options will be displayed in 5 participation categories: Standard, Other State Assessments, No Valid Score, Modified, Exempt and Absent. The following chart illustrates into which category each option falls.

<i>2001 testing condition</i>	<i>2002 report card display</i>
Standard	Standard
Challenge Up	Other State Assessments/ No Valid Score
Challenge Down	Other State Assessments/ No Valid Score
Extended	Other State Assessments/ No Valid Score
Juried	Other State Assessments/ No Valid Score
Modified ELL	Modified
Modified IEP	Modified
Exempted ELL	Exempt
Exempted IEP	Exempt
Exempted Other	Exempt
Non-completers	Other State Assessments/ No Valid Score
Non-consent of Parent	Exempt
Non-consent of Student	Exempt
Absent	Absent

11. How are Math Problem Solving and Writing “conditionally meets” scores used in the calculations of the report card rating?

The “conditionally meets” assessment score does not count as a “meets” the assessment standard when calculating the student performance rating. There are five performance levels used in the report card calculations (Exceeds, Meets, Nearly Meets, Low and Very Low). The Scale Score Ranges for each Performance Level chart shows the range of these scores. Most likely, a “conditionally meets” score would fall in the “nearly meets” performance level and would be assigned that weight.

Performance Levels and Cut scores, by Content Area and Grade Oregon Benchmark Tests					
Content Area and Grade	Scale Score Ranges for Each Performance Level				
	Exceed the Standard	Meet the Standard	Nearly Meet the Standard	Low	Very Low
Reading/Literature					
Grade 3	215 and above	201 – 214	196 - 200	190 – 195	below 190
Grade 5	231 and above	215 – 230	209 – 214	201 – 208	below 201
Grade 8	239 and above	231 – 238	223 – 230	208 – 222	below 208
Grade 10	249 and above	239 – 248	230 – 238	214 – 229	below 214
Math (multiple choice)					
Grade 3	215 and above	202 – 214	196 – 201	186 – 195	below 186
Grade 5	231 and above	215 – 230	210 – 214	202 – 209	below 202
Grade 8	239 and above	231 – 238	225 – 230	216 – 224	below 216
Grade 10	249 and above	239 – 248	229 – 238	219 – 228	below 219
Writing	50 – 60	40 – 49	35 – 39	20 – 34	0-19
Math problem solving	40 – 46	32 – 39	29 – 31	16 – 28	0-15

- PLEASE NOTE:** On the district and school report cards graph entitled “Percentage of Students Meeting Standards,” the “conditionally meets” scores are counted as a “meets the standards.” This is because the graph on the card refers to meeting the “benchmark” standard, not solely the “assessment” standard. A student with a composite score that conditionally meets the performance standard may or may not meet the benchmark standard in these areas. Schools determine if students meet benchmark standards based on state assessment results **and** locally assessed work samples. Since the state does not collect information on locally assessed work samples, the graph displayed assumes that all students will meet the benchmark standard.

12. Where can I find out more information on state assessment accommodations and modifications?

More detail about the Oregon Statewide Assessment System can be found at the Assessment and Evaluation website at <http://www.ode.state.or.us/asmt/index.htm>

Ratings and Formulas

(Please refer to the Technical Bulletin for a detailed explanation of the rating system)

1. How are schools rated?

Overall school performance ratings are based on four elements: student performance, student behavior, school characteristics and an improvement adjustment.

- A. Student performance is 80 percent of the overall rating. It consists of:
 - Student performance on the 2001 state tests; and
 - Student improvement over time on the state reading and math knowledge and skills tests (1998 to 2001)
- B. Student behavior is 20 percent of the overall rating. It consists of:
 - Student attendance in 2001 and improvement over time in attendance (1998-2001)
 - For schools with grade 12, it includes student dropout rate for 2000 and 2001 and improvement over time in the dropout rate (1998-2001).
- C. School characteristics play a key role in determining the overall rating.
 - If more than 85 percent of the eligible students took state tests in 2001, the school earns extra points which may boost its overall performance rating
 - If fewer than 85 percent of the eligible students took state tests, the school automatically receives an overall performance rating of low, unless the school's overall rating was already low. Then the school receives an overall performance rating of unacceptable.

2. What is the definition of the participation rate for the 2002 report card?

The participation rate reflects the proportion of students eligible to take the test who actually received scores. The participation rate is figured as: The number of students who attempted the test **DIVIDED BY** the number of students who attempted the test **PLUS** the number of students who did not take the test because they were absent.

Please note that this definition is different than the participation rate reported for assessment purposes.

3. What will happen to schools that have had a significant change in population due to a boundary change or change in grade configuration?

For the 2002 Report Card, schools that had a 20% change in average student membership due to a boundary change or grade configuration will be noted with an asterisk. The denotative text will read, " This rating should be interpreted with

caution because the school has had a significant change in population due to boundary/organizational changes.”

In cases where the change is 40% or more, the institution will be considered a new school. In these situations, the data history will be removed and consequently the school will not be eligible for a 2002 report card.

In cases where a number of students in the membership have not changed but boundaries representing 40 % of the students have, a school board resolution may be substituted for the above formula.

4. How many years of data are necessary to receive ratings on the report card?

Four years of data is optimum in calculating the report card ratings. However, some schools do not have four consecutive years of data. In these cases, three years of data may be used to calculate the student performance and behavior ratings (the most recent two years of data will be used for improvement and the other year will be used for baseline.)

5. All schools have attendance data but not all schools receive a rating in student behavior. Why is this?

Not all schools have historic data. If a school closes or has not been opened for at least 3 years there would not be the data needed for a rating in student behavior.

6. Could a high school receive a student behavior rating even though they are missing dropout data?

Yes, in a very few cases a high school was given a rating even though they did not have dropout data. In these cases the elementary/middle school formula for student behavior was used.

7. What grades are used in calculating the attendance rating?

Grades 1-12 were used in calculating the attendance rating. Please note that, consistent with last year’s report card, Kindergarten was not included in the attendance rating.

8. Are there confidentiality rules designed to protect a student’s identity?

Yes, under certain conditions summary data is not reported. The confidentiality data suppression rules are:

Rating Category	Condition	Rule
Student Performance	Percent of students meeting benchmark is either 0 or 100 percent	Data is categorized (5 % or less and 95 % or greater)
Student Performance	Number of students tested in a testing area or an ethnic group (i.e. Math) is less than 6	Data is suppressed
SAT scores	Number tested is less than 6	Data is suppressed for verbal and math

9. What are the rules for rounding calculations?

Rounding to the nearest tenth occurs after every arithmetic calculation.

10. What has changed on how improvement is reported on the 2002 report card? Improvement for both student performance and student behavior will be displayed on the 2002 report card. Please note that only improvement for student performance was reported on the 2001 report card. **The weight of improvement in the calculation of the 2002 Overall performance rating will remain the same.**

11. How will the report card display the Overall rating?

Feedback received from the field indicated that the overall performance rating was difficult to explain. This was especially true when a school's scores were near the end of a range and a change in rating could occur with very small changes in the raw score. To address this concern, the 2002 report card will feature a graph that depicts where a school's Overall rating falls on a continuum.



Special Education

1. How will students with disabilities be included in the 2001 assessments?

The Oregon Statewide Assessment System is designed to be comprehensive and inclusive of all students. The 2001 assessment system offers six options for students with disabilities to participate:

1. Regular or standard (with or without accommodations)
2. Modified
3. Standard at a challenge benchmark (with or without accommodations)
4. Challenge with modification
5. Extended
6. Juried

The options for test participation are designed so that every student has the opportunity to participate and no student with a disability need be "exempt" from the testing system.

2. How will these assessments be reported on future report cards?

Section III of this document describes the issues and strategies for the development of future report cards. How to include students who take extended assessments is one of the policy issues that is being discussed.

Special School Situations

1. Do alternative schools that focus on dropout recovery have the same rating criteria as mainstream schools?

Yes, alternative schools are subject to the same rating formula as mainstream schools. Many of these schools do not receive overall ratings because they are too small.

2. How will boundary changes and/or data limitations be reflected on the 2002 report card?

For the 2002 Report Card, schools that had a 20% change in average student membership due to a boundary change or grade configuration will be noted with an asterisk.

In cases where the change is 40% or more, institution will be considered a new school. In these situations, the data history will be removed and consequently the school will not be eligible for a 2002 report card.

In cases where a number of students in the membership have not changed but boundaries representing 40 % of the students have, a school board resolution may be substituted for the above formula.

Additionally, a school may receive footnotes next to its component ratings. A superscripted number will tie the explanation to the data that requires additional information.

3. What are the boundary and grade configuration changes that may warrant an asterisk on the overall performance rating?

A school will receive an asterisk on the overall performance rating if the sending population change is greater than 20%(addition or reduction) or when there is a change in benchmark test grades (addition or deletion). This is only for changes in school population due to changes in school organization (sending boundaries and/or grade level configuration). It does not apply to schools with high levels of student transience (e.g., student population turnover due to student mobility in and out of the school).

4. How does the report card account for those schools that have very high test scores but show little or no improvement?

In cases where schools have very high test scores but showed little or no improvement the calculation of the overall rating will exclude improvement. This will occur only if each of the component ratings are a level of "Strong" or higher and the alternative calculation results in a higher rating.

5. How are the test scores reported for students attending a school that does not receive a report card? (For example, a student attending a district alternative program?)

All public school students' assessment scores must be accounted for. If a student attends a district alternative program that does not receive a report card, his/her scores would be reported with a school receiving a report card.

Title I

1. What is Oregon’s definition of adequate yearly progress (AYP) for schools and districts?

A Title I funded school meets AYP when it receives a “satisfactory” or higher overall rating on its report card. A district meets AYP when 90% or more of its Title IA funded schools receive a “satisfactory” or higher rating on their annual report cards.

2. How are schools with a Kindergarten through Grade 2 grade configuration included in the state’s system for determining Adequate Yearly Progress?

K-2 schools funded with Title I will use local data on student performance toward the standards in at least reading and mathematics. Guidance documents on using local assessments for this purpose are available through the Oregon Department of Education, Title I. (503.378.3600 ext. 2723.)

3. Will the AYP status of the school be displayed on the report card?

The overall rating of a school is considered to be their AYP status.

4. When is a school considered to be in program improvement?

A school is considered to be in program improvement when the overall rating on the report card is less than satisfactory for two consecutive years. A school is removed from program improvement status after meeting AYP for two out of three consecutive years.

5. When is a district considered to be in program improvement?

A district is considered to be in program improvement when 10 percent or more of its Title I funded schools are in program improvement status. A district is removed from program improvement status when it has less than ten percent of its schools in program improvement.

6. How does the Report Card meet the Title I disaggregation requirements?

The 2002 district report card will include graphs displaying assessment results disaggregated by gender, ethnicity and Special Education.

7. When is a district considered to be in program improvement?

A district is considered to be in program improvement when 10 percent or more of its Title I funded schools are in program improvement status. A district is removed from program improvement status when it has less than ten percent of its schools in program improvement. A district identified as needing improvement is required by the federal law to revise its district/school improvement plans to better meet the needs of its students. Additional federal funds and technical support are available to schools in program improvement status to assist in improving the educational opportunities for students.

V. Technical Bulletin

Description of the 2002 Oregon School Report Card Rating System and Formulas

Technical Bulletin
September 2001

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Preface

Using This Document

This technical bulletin provides detailed information about how the ratings are calculated for the 2002 Oregon School Report Card.

School Report Cards were first issued in January 2000. The rating formulas and rules are largely unchanged from prior years. A section following this Preface summarizes the changes. The changes are noted in the detailed descriptions as well.

Each section of this document describes an aspect of the rating system. The sections are organized to proceed from general to more specific information. For example, the Overall Rating combines three components: current performance, improvement over time, and participation. Each of these components is made up of smaller parts. This document describes each of these smaller parts, until, for example, one gets to a test score for an individual student on one test in one year.

While this approach was chosen to help the reader understand the big picture, it is not the best way to actually calculate a rating. In that case, one needs to start with the test scores and other “raw” data, and do the calculations to eventually produce the single score used to generate the rating. Two examples are provided at the end of the paper to help readers see how ratings are calculated. A separate worksheet is also available that provides a step-by-step guide to calculating the ratings.

This document, with the “top down” and “bottom up” views, should help interested persons understand the rating system. Other materials also are available from the Department and local districts and schools to train people in interpreting and using the information from the report cards.

Acknowledgments

Many people contributed to the successful issuance of school report cards this year. The Department especially appreciates the many educators whose comments on the design of the report cards over the past year helped make the report cards more responsive to the public and to schools. The 2000 school and district report cards were developed under the leadership of the Office of Curriculum, Instruction and Field Services (CIFS). The 2002 Report Cards are an agency wide effort with contributions from Aaron Munter, Tony Alpert, Nanci Schneider, Joni Gilles, Nancy Heiligman, and Clark Brody. Brian Gong from The National Center for the Improvement of Educational Assessment helped substantially in the design and documentation of the rating system.

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V. Description of the 2002 Oregon VI. School Report Card VII. Rating System and Formulas

Oregon Department of Education
September 2001

Introduction

This document describes the rating system required by Oregon law for the school and district report cards issued in January, 2002. It also provides detailed information about how the ratings are calculated, including specific formulas and definitions. Examples are also provided.

This document is intended to provide documentation for those who wish to understand in detail what the ratings for the school report card are and how they are calculated. Shorter documents that provide an overview of the rating system are available from the Department.

This document addresses four major topics concerning the ratings:

- Changes in 2002 from 2001 and 2000;
- How the ratings were calculated in general, and what variables were considered;
- How the specific ratings will be calculated; and
- Definitions for the data elements.

Information regarding the report formats for the school report card and district report card is available from the Department of Education. The Department can also provide information about the reporting schedule, support available to low performing schools, relation of the school and district report card to the district effectiveness model and other programs, and other related points. Much of this information is available on the Department's website www.ode.state.or.us.

Changes Implemented in 2001 Report Cards

The following changes were incorporated in the formulas and rules for the 2001 School Report Cards:

- "a top bar" was incorporated, whereby the highest performing schools on most recent test scores would receive at least a "Strong" Overall Rating, regardless of their improvement, if their other indicators were at least Satisfactory;
- students included for school accountability did not include students whose parents refused permission to participate or students who challenged and took

assessments below grade level. Participation rates did not include students who met these conditions.

- the School Characteristic Rating was expanded to include four performance ratings instead of two. This did not affect the calculation of the Overall Rating.
- schools with a significant change in population due to a boundary change or grade configuration will be noted with an asterisk next to their Overall rating;
- four years of data will be used to calculate the change in dropout rate;
- the rules for rounding calculations were made more explicit; rounding takes place generally after every calculation.
- for the 2001 School Report Cards, certain schools were given the option of not having an Overall Rating calculated or reported.

Changes Implemented in 2002 Report Cards

The following changes were incorporated in the formulas and rules for the 2002 School Report Cards:

- Includes a provision for high performing schools that may not show improvement
- Graphically displays overall score on a continuum
- Attaches all kids to a school
- Displays improvement for student performance, student behavior and the overall rating separately
- Includes additional elements for display
- Adds population change rule at 40 %
- Disaggregates data by gender and special education for display
- Clarifies participation
- Addresses student refusals on statewide tests.

In What Areas Does the Law Require Ratings Be Issued?

Oregon law (ORS 329.105) requires that the Department of Education issue performance reports for public schools. These performance reports shall include ratings for schools for:

- Overall School Performance
- Student Performance
- Student Behavior
- School Characteristics

In these areas, schools shall be rated as:

- Exceptional
- Strong
- Satisfactory
- Low
- Unacceptable

What Variables Will Be Included When Calculating the Ratings?

The school report card ratings will be based on quantitative performance on the following variables:

Rating	Criteria
Overall School Performance Rating	All variables below
Student Performance Rating	Student test scores on the Oregon State Assessments in grades 3, 5, 8, and 10 (reading, writing, mathematics multiple choice, and mathematics problem solving) ¹
Student Behavior Rating	Student attendance rate (all schools) and Student dropout rate (schools with grade 12)
School Characteristics Rating	Percent of students attempting to take state tests

The State Board of Education passed an administrative rule in December 1999 (OAR 581-022-1060) that establishes these criteria as the basis for the school report card ratings. Note that the school and district report cards will report information in addition to that listed in the table. However, the ratings will be based on the criteria listed in the table. The Department of Education staff drew upon national research and extensive feedback from groups within the state to design a school report card and district report card that meets the requirements of the law and the needs of parents and the public, as well as educators. School and district report cards can be found on the Department website, reportcard.ode.state.or.us. The state Superintendent and Department of Education are charged with establishing the specific means for calculating the ratings and reporting the results. The Department has worked with external contractors and has consulted with educational stakeholders in producing the specific formulas, definitions, and procedures for producing the school report cards required by law.

The procedures and formulas will be described below to determine:

- School Characteristics Rating
- Student Behavior Rating
- Student Performance Rating
- Overall School Performance Rating
- Other elements included in the report cards.

¹ Grade 3 includes only reading and mathematics multiple-choice tests.

Calculating the School Characteristics Rating

The School Characteristics Rating is based upon one indicator, the percent of eligible students who take the state benchmark assessments. Each school will receive a School Characteristics rating that reflects its participation rate, as shown in the table below.

School Characteristics Ratings	
All Schools	
Rating	Participation Rate (Percent)
Exceptional	95.0 – 100
Strong	90.0 – 94.9
Satisfactory	85.0 – 89.9
Unacceptable	less than 85%

Relationship Between School Characteristics Rating and Overall Rating

The School Characteristics Rating can also influence the Overall Rating of a school. A school that receives an “Unacceptable” rating in School Characteristics cannot receive an Overall School Performance Rating higher than “Low.” A school that received an “Unacceptable” rating in School Characteristics will receive an Overall School Performance Rating of “Low” unless it had a “Low” or “Unacceptable” Overall rating already. Then it would receive an “Unacceptable” Overall Rating.

Importance of “Participation Rate”

It is important that schools have a high participation rate of their students on the state tests. One reason is that the more students who participate appropriately, the more accurate the depiction of the school performance. Obviously, if a school selected its top 20% of students to take the exam, its test scores would be higher than if all of its students took the exam. Comparisons of the school to itself over time or of one school to another likewise assume that a representative group of the schools’ students have taken the test.

For these reasons, a school that is missing more than 15% of its students (essentially due to unexcused absences) shall receive not only an Unacceptable rating in School Characteristics, but also shall receive an Overall Rating no higher than Low. And if the school were to be eligible for an Overall Rating of Low but had an Unacceptable School Characteristics rating, its Overall Rating would be lowered to Unacceptable.

Definition of “Participation Rate” for use in school report card ratings

There are many types of participation associated with student testing and school accountability in Oregon. The definition used for accountability in the school report

cards is presented below, and then contrasted with the definition used for assessment reporting.

I. Definition of “Participation Rate” for Accountability

Participation rate reflects the proportion of students eligible to take the test who actually received scores. The report card “participation rate” is different from the “participation rate” reported for assessment purposes. For the purposes of the school report card system, participation rate is defined as follows:

$$\text{Participation Rate} = \frac{\text{Number of students who attempted to take state assessments}}{[(\text{Number of students who attempted to take state assessments}) + (\text{Number of students who did not take the test because they were absent})]}$$

This definition also reflects the percentage of students who should have participated in testing (i.e., were not exempted), but who did not, and did not make up the test at any time during the testing window. Schools that receive an “Unsatisfactory” School Characteristics rating, then, had more than 15% of their students absent from the test.

II. Change in Calculation of the 2002 Participation Rate

The participation formula has been changed in the 2002 report card to comply with federal regulations regarding the inclusion of all students in the accountability system. The table below identifies the additional test conditions that are incorporated in 2002, which were previously excluded in the 2001 rate. Please note that the 2002 formula for student performance has not changed from prior years and excludes some of tests that are included in the 2002 participation rate (see the sections regarding student performance for more information).

Options for Testing	Participation Formula	
	2001	2002
Standard assessments	Included	Included
Standard assessment with accommodations	Included	Included
Challenge up	Included	Included
Challenge down	Not included	Included
Extended assessments	Not included	Included
Juried assessments	Included	Included
Modified assessments	Not included	Included
Non-consent (parents and students)	Not included	Not included
Exempted (ELL, IEP)	Not included	Not included
Non completers	Not included	Included
Absent	Included	Included

In contrast to prior years, the 2002 participation rate excludes only students who are exempted based on English proficiency and/or an IEP. Students who were enrolled in the school at the time of testing but for whom the school did not return student answer documents were also not included. Students who had a “special code” marked for reading or math multiple-choice were included for participation but not for calculating school performance. (Students coded as “Absent” were counted as non-participants for participation, but no test scores were included for these students for calculating school performance.) Students with “special codes” in writing or math problem solving (e.g., for “too long,” “too short,” “off topic”) were included for participation rate calculations and for calculation of school performance. Students with applicable special codes in writing and/or math problem solving and no valid score or rating received a zero for purposes of calculating the school report card ratings.

III. 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 Department. The assessment division reports a participation rate that includes the proportion of students in the school who are exempt because of special education and/or language proficiency reasons. The participation rate for assessment is defined as:

$$\text{Participation (assessment)} = \frac{\text{Number of students who attempted the test under regular conditions}}{[(\text{Number of students who attempted test under regular conditions}) + (\text{Number of students who did not take the test because they were absent}) + (\text{Number of students who took the test under non-regular conditions, i.e., had modifications due to special education and/or limited English proficiency reasons}) + (\text{Number of students who did not take the test because they were excused or exempted})]}$$

This latter definition of “participation” essentially reports the proportion of regular to non-regular education and other students. In schools that serve larger proportions 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.

Comments About Participation Rate as an Indicator of School Characteristics

Participation rate, as it has been defined above for use in the school report card ratings, is an essential variable to monitor. It is also anticipated that the standard for “Satisfactory” will be increased from 85% with the 2003 report card.

The Department recognizes that school characteristics should include much more than just participation rate. The Department is working with other state agencies on developing the capacity to gather and report a richer array of data. These may be incorporated when they are available.

The Department recognized that many schools and districts have other information that is unique to them. The report card was designed so that schools would have space on the report card to include some information of their own choosing. Schools and districts may also publish local information in venues other than the school report cards, just as the state has with its Oregon Report Card of state indicators. Presumably, much of this information would fall under portrayal of school characteristics.

Calculating the Student Behavior Rating

Overview

The Student Behavior Rating considers attendance for elementary and middle schools, and attendance and dropout for schools that include grade 12. The latter schools include traditional high schools (grades 9-12) and also other grade organizations, such as 7-12 and K-12.

Both the most recent performances in attendance and/or dropout as well as the improvement over time are considered.

Indices, or numerical scores, are created from the attendance rates and dropout rates. These indices make it possible to combine the performance on attendance and dropout for schools with grade 12, and also to include attendance and dropout in the Overall School Performance Rating.

Student Behavior Ratings and Corresponding Scores

The rating levels and the corresponding index score ranges are shown below. The same ratings and student behavior scores apply to elementary, middle, and high schools.

Student Behavior Ratings	
Rating	Student Behavior Index
Exceptional	100.0 or higher
Strong	80.0 – 99.9
Satisfactory	60.0 – 79.9
Low	40.0 – 59.9
Unacceptable	less than 40.0

For example, if a school had a Student Behavior Index of 85.0, it would receive a rating of “Strong.” A school with an index of 79.9 would receive a rating of “Satisfactory.”

Student Behavior Rating Formulas – Elementary and Middle Schools

The following formulas define how the Student Behavior Index for elementary and middle schools is calculated, beginning with the attendance rate or percentage for school years 2000-01, 1999-2000, 1998-99, and 1997-98

$$\text{Student Behavior Index}_{E/MS} = \text{Most Recent Attendance Index} + \text{Attendance Improvement Index}$$

Most Recent Attendance Index $E/MS = (10 * \text{Attendance Rate}_{2001}) - 860$
The maximum score reported is 120.0, and the minimum score reported is 0.0 (zero). In other words, a school with a score less than zero would have its Attendance Index rounded up to 0.

$$\text{Attendance Rate} = (860 + \text{Attendance Index}_{E/MS}) / 10$$

The Attendance Rate formula is equivalent to the formula before it. The first formula is used to calculate the attendance index when the attendance rate is known. The latter formula is used to calculate the attendance rate when the attendance index is known.

$$\begin{aligned} \text{Attendance Improvement Index}_{E/MS} = & [(\text{AttendanceIndex}_{2001} \\ & + \text{AttendanceIndex}_{2000}) / 2] \\ & - [(\text{AttendanceIndex}_{1999} \\ & + \text{AttendanceIndex}_{1998}) / 2] \end{aligned}$$

The elementary and middle school (schools without grade 12) Attendance Index formula is set so an attendance rate of 96% gives an index score of 100, and a rate of 98% or higher gives an index score of 120. An attendance rate of 86% or lower gives an index score of 0 (zero) points.

The Attendance Improvement Index measures the improvement of the school in attendance rate from the two most recent years (1999-2000 and 2000-01) compared to the two previous years (1997-98 and 1998-99). The Attendance Improvement Index can range from -120 to plus 120, although usual index scores are in the -70 to +70 range. If a school, for example, improved its average attendance from 87% in 1998 and 1999 to 92% in 2000 and 2001, it would have an Improvement Index of 50.0.

Taking the average across multiple years increases the reliability of the estimate of the changes. This is particularly true of schools with relatively low enrollment where changes in a few students may make large differences in percentages of changes from year to year.

The most recent four years of data will be used in each report card. For example, the reports issued in January 2002 use the attendance data from 2000-01, 1999-2000, 1998-99, and 1997-98.

Student Behavior Rating Formulas – High Schools

The following formulas define how the Student Behavior Index is calculated for high schools, beginning with the attendance rates for school years 2000-01, 1999-2000, 1998-99, and 1997-98, and the dropout rates for 2000-01, 1999-2000, 1998-99, and 1997-98.

$$\text{Student Behavior Index} = \text{Recent Attendance and Dropout Index}$$

+ Attendance and Dropout Improvement Index

$$\text{Recent Attendance/Dropout Index}_{\text{HS}} = [(\text{Attendance Index}_{2001} + ((\text{Dropout Index}_{2000} + \text{Dropout Index}_{2001}) / 2))] / 2$$

$$\text{Attendance Index}_{\text{HS}} = (10 * \text{Attendance Rate}) - 840$$

Maximum of 120.0, minimum of 0.0

$$\text{Dropout Index}_{\text{HS}} = 140 - (10 * \text{Dropout Rate})$$

Maximum of 140.0, minimum of 0.0

$$\text{Attendance Rate}_{\text{HS}} = (840 + \text{Attendance Index}_{\text{HS}}) / 10$$

$$\text{Dropout Rate}_{\text{HS}} = (140 - \text{Dropout Index}_{\text{HS}}) / 10$$

The latter two Attendance Rate and Dropout Rate formulas are equivalent to the previous two formulas. The first two formulas are used to calculate the index when the attendance or dropout rates are known. The latter two formulas are used to calculate the attendance or dropout rates when the respective index scores are known.

$$\text{Improvement Index}_{\text{HS}} = (\text{Attendance Improvement Index} + \text{Dropout Improvement Index}) / 2$$

$$\text{Attendance Improvement Index}_{\text{HS}} = [(\text{Attendance Index}_{2001} + \text{Attendance Index}_{2000}) / 2] - [(\text{Attendance Index}_{1999} + \text{Attendance Index}_{1998}) / 2]$$

$$\text{Dropout Improvement Index}_{\text{HS}} = [(\text{Dropout Index}_{2001} + \text{Dropout Index}_{2000}) / 2] - [(\text{Dropout Index}_{1999} + \text{Dropout Index}_{1998}) / 2]$$

The high school Attendance Index formula is set so an attendance rate of 94% gives an index score of 100, and a rate of 96% or higher gives an index score of 120. An attendance rate of 84% or lower gives an index score of 0 (zero) points.

The high school Dropout Index formula is set so a dropout rate of 4% gives an index score of 100, and a rate of 0% gives an index score of 140. A dropout rate of 14% or more gives an index score of 0 (zero) points.

The attendance improvement index compares the average of the two most recent years (2000-2001 and 1999-2000) with the average of the two previous years (1998-99 and

1997-98). Using multiple years of data provides a more reliable estimate of improvement.

The dropout improvement index compares four years of data to provide a more stable estimate of improvement. The average of the two most recent years of dropout data are compared to the previous two years.

High schools will not receive separate ratings for attendance and dropout. The two measures are combined into the Student Behavior rating. This approach means that a higher attendance rate can compensate for a higher dropout rate, and vice versa.

Definition of Attendance Rate

Attendance is defined using the standard definitions published by the Oregon Department of Education. Attendance rate is the average percentage of students enrolled who were at school each day during the school year. An attendance rate of 100% means that every student enrolled was in school every day. Attendance rates are less than 100% due to absences that are “excused” (e.g., due to illness), as well as unexcused absences.

Attendance is calculated as the ratio between Total Days Attendance and Total Daily Membership. 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. This accounts for students moving in and out. 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. The attendance rate is calculated by dividing the Total Days Attendance by the Total Daily Membership. Attendance rates are rounded to the nearest tenth of one percent for the school report card.

It is important to note that “excused absences” and out of school suspensions count as absences. That is, if a student is not at school (unless withdrawn), then it is an absence. Because there is a normal rate of illness and other incidents, it is reasonable for schools to have attendance rates less than 100%. The school rating system allows a school to have an attendance rate of 96% (high schools) or 98% (elementary/middle schools) and still get “full credit” (100 points) in the school rating system.

Definition of Dropout Rate

The dropout rate is calculated following the regular definitions published by the Oregon Department of Education. A dropout is defined as a student enrolled in a public school, who does not enroll the next year, and who has not graduated, enrolled in another educational program, or moved to another state. The reporting year is July 1 – June 30. The definition of dropout used in Oregon is consistent with that of the National Center for Education Statistics.

The dropout rate is calculated on an annual basis. The final dropout figures are not available until after October of each year, because the Department must wait until schools confirm that a student has not enrolled again in school.

If three years of dropout data are not available, the elementary school student behavior formula will be applied.

Discussion of Student Behavior Indicators

Attendance and dropout are recognized by many states as important indicators of student behavior. It is important that dropout be included in a rating system to act as a counterbalance for schools not including students over time. This effect can be substantial. For example, an annual dropout rate of 7% means that the aggregate dropout rate for a cohort of students over four years (grades 9 – 12) is about 25%. For example, if a school started with a freshman class of 100 students and seven dropped out, the next year would start with 93 students. Seven percent of 93 equals 7 students, so grade 11 would start with 86 students. If 7% of the juniors dropped out, the senior class would start with 80 students. If 7% dropped out in the final year, then 75 students would graduate of the 100 who originally started. It is common for test scores to rise as a result of the more selective students left after dropouts.

With the added visibility of attendance and dropout data used in school report cards, the Department may institute additional measures to audit and monitor the accurate reporting of these dropout and attendance data.

As the discussion of indicators for school characteristics indicated, the Department recognizes the advantage of having additional, valid indicators of student behavior, and will consider including them as they become available.

Calculating the Student Performance Rating

Overview

The Student Performance Rating considers student performance on the state's benchmark tests for the most recent year (spring 2001) and improvement in scores over the past years.

The state requires that students take tests in reading, writing, mathematics (multiple choice) and mathematics problem solving in grades 5, 8, and 10. In grade 3 tests include reading and mathematics multiple choice.

Student Performance Ratings and Corresponding Scores

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

Student Performance Ratings	
Rating	Student Performance Index
Exceptional	115.0 or higher
Strong	90.0 – 114.9
Satisfactory	60.0 – 89.9
Low	40.0 – 59.9
Unacceptable	less than 40.0

As in the Student Behavior area, a Student Performance Index is calculated and compared to the cutscore ranges to determine the Student Performance rating. A school that had a Student Performance Index of 92.4, for example, would receive a rating of "Strong."

Student Performance Rating Formulas

The general formula for calculating the rating for Student Performance considers the students' test performance in the most recent year and improvement over the previous several years.

$$\text{Total Performance Score} = \text{Current Test Performance} + \text{Test Improvement}$$

The current test performance is a weighted average of the students' performance across all the content areas tested in the most recent year (test results from spring 2001).

$$\text{Current Test Performance} =$$

$$(.35 * \text{Reading}_{2001}) + (.35 * \text{Math Multiple Choice}_{2001}) \\ + (.2 * \text{Writing}_{2001}) + (.1 * \text{Math Problem solving}_{2001})$$

$$\text{Current Test Performance}_{\text{Grade 3}} = (.5 * \text{Reading}_{2001}) \\ + (.5 * \text{Math Multiple Choice}_{2001})$$

Test improvement is an average of the students' performance in reading and math multiple choice. These two content areas have comparable data for the past several years.

$$\text{Test Improvement}_{1998-2001} = [(\text{ReadingImprovement}_{1998-2001}) \\ + (\text{MathImprovement}_{1998-2001})] / 2$$

How the yearly scores (e.g., Reading₂₀₀₁) and the improvement scores (e.g., ReadingImprovement₁₉₉₈₋₂₀₀₁) are calculated are described in the corresponding Overall Rating sections below. However, please note that in cases where only three years of data are available, the most current 2 years of data are compared against the single most prior year for the purposes of improvement.

Discussion of Student Performance Rating

The current test performance reflects weights for each of the content area tests: 35% for reading, 35% for math multiple choice, 20% for writing, and 10% for math problem solving. The Department set these weights to reflect considerations of the curriculum (e.g., 35% for reading, 20% for writing, and 45% for the two math tests together), anticipations of possible future areas to be tested, and comparability of the writing and math problem solving tests from year to year.

The department anticipates revising these weights and incorporating science tests on the 2003 report card.

The Writing and Math problem solving tests are administered in grades 5, 8, and 10. Therefore, schools that only test grade 3 have only reading and math multiple-choice tests. For schools that test Grade 3 only, the content area weights are evenly divided between reading and math.

Calculating The Overall School Performance Rating

Overview

The Overall School Performance Rating will reflect

- how well the school performed in the most recent year (2001) on
 - student tests
 - attendance
 - dropout (if school includes grade 12)
- how much the school improved on
 - student tests over the past several years (1998 through 2001 for the school report card issued in the year 2002)
 - attendance over the past several years (1998-2001)
 - dropout over the past several years (1998-2001, if school includes grade 12)
- how many students participated in the state tests.

Although the Overall School Performance Rating uses the same data elements as the previous three ratings, the data elements are combined differently. The Overall School Performance Rating is *not* the “average” of the three ratings for School Characteristics, Student Behavior, and Student Performance.

Overall Ratings and Corresponding Total Index Scores

The Total Scores that correspond to each Overall Rating are shown below. The same score ranges apply to all schools.

Overall Performance Rating	
Rating	Total Index Score
Exceptional	125.0 or above
Strong	100.0 – 124.9
Satisfactory	60.0 – 99.9
Low	40.0 – 59.9
Unacceptable	less than 40.0

For example, a school that has a Total Index Score of 111.7 would receive an Overall Rating of “Strong.”

Note that the highest rating a school can receive is “Low” if it has an “Unacceptable” rating in School Characteristics. If a school has an Unacceptable School Characteristics Rating, then it will receive an Overall Rating of Low, unless it would have received an Overall Rating of Low or Unacceptable. In that case, due to its low School Characteristics rating it will receive an Overall Rating of Unacceptable.

The reasons for this provision are discussed in the section on School Characteristics.

Overall Rating Formula

The Overall Rating is determined by calculating a numerical Total Score for each school. The formula is:

$$\text{Total Score} = \text{Performance Score} + (2 * \text{Improvement Score}) + (3 * \text{Participation Score})$$

Performance Score

The Performance Score includes the performance of the school in the most recent year. The Performance Score formula for high schools (schools that include grade 12) includes the Dropout Rate variable. The Performance Score formula for elementary and middle schools does not include dropout.

$$\text{Performance Score}_{\text{HS}} = (.8 * \text{Test Score}) + (.2 * (\text{Attendance Score} + \text{Dropout Score}) / 2)$$

$$\text{Performance Score}_{\text{E/MS}} = (.8 * \text{Test Score}) + (.2 * \text{Attendance Score})$$

The weights provide that student tests scores will constitute 80% of the Performance Score. Attendance Scores (and Dropout Scores, where applicable) account for 20% of the Performance Score.

Improvement Score

The Improvement Score reflects improvement over time. Four years' data are used to provide a more reliable estimate of how much the school's scores have changed in test scores, attendance and dropout rates. In cases where there are only three years of data, the two most current years are compared against the single most prior available.

$$\begin{aligned} \text{Improvement Score}_{\text{HS}} = & (.8 * \text{Change in Test Scores from 1997-98 to 2000-01}) \\ & + (.2 * ((\text{Change in Attendance Scores from 1997-98 to 2000-01}) \\ & + (\text{Change in Dropout Scores from 1997-98 to 2000-01})) / 2) \end{aligned}$$

$$\begin{aligned} \text{Improvement Score}_{\text{E/MS}} = & (.8 * \text{Change in Test Scores from 1997-98 to 2000-01}) \\ & + (.2 * \text{Change in Attendance Scores from 1997-98 to 2000-01}) \end{aligned}$$

The weights provide that changes in student test scores account for 80% of the Improvement Score. Average changes in Attendance Scores (and Dropout Scores, where applicable) account for 20% of the Improvement Score.²

Change in Dropout Scores uses the most recent two years compared to the previous two years. Note that in the 2000 report cards, only two years of dropout data were used. In cases where there are only three years of data, the elementary school formula is applied to the data instead.

Participation Score

The Participation Score indicates the percentage of students, above a specified minimum, who participated in the state tests. The minimum on the 2002 card is 85%.

$$\text{Participation Score} = .1 * (\text{Participation Rate} - 85)$$

Zero (0) will be the lowest Participation Score reported.

The function of the Participation Rate in the School Characteristics rating is to indicate schools that have unacceptably low participation. The Participation Rate has another function in the Overall Rating. Because the Participation Score can only be a positive number for schools with a participation rate above the minimum, the Participation Score may be thought of as a “bonus” to recognize the efforts of schools that have included more students. The more students who participate, up to 100%, the higher the participation score. A school with 100% participation (as defined in the section on School Characteristics) will have 4.5 points added to their Total Score.

Calculating the Annual Test Index

The Performance score includes a test score. An index is calculated to reflect how the school’s students did on the state tests each year. These tests include reading, math, writing, and math problem solving for grades 5, 8, and 10; grade 3 includes only reading and math. A formula is provided for schools that administer all four assessments. A separate formula is provided for schools that test only grade 3 students.

$$\text{Test Index} = (.35 * \text{Reading Index}) + (.35 * \text{Math Index}) \\ + (.2 * \text{Writing Index}) + (.1 * \text{Math Problem Solving Index})$$

$$\text{Test Index}_{\text{Gr. 3 only}} = (.5 * \text{Reading Score}) + (.5 * \text{Math Score})$$

I. Calculating Indices for Each Content Area Test

An index is calculated for each content area test (reading, math, writing, math problem solving) administered in the school. The same general method is used for all tests. The

² These are nominal weights. Effective weights will depend upon variability of the measures. In general, attendance and dropout will have a lower effective weight.

method is based upon the performance levels of students in relation to Oregon standards. The Oregon performance levels are:

- Exceeds the Standard
- Meets the Standard
- Nearly Meets the Standard
- Low
- Very Low

Points, or weights, are assigned for each student. More points are given for higher student performance. The index points given for each performance level are shown in the table below.

Performance Level	Index Points
Exceeds the Standard	133
Meets the Standard	100
Nearly Meets the Standard	67
Low	33
Very Low	0

The formula that gives the school an index for performance of its students in a single content area test is:

$$\begin{aligned} \text{Content Area Test Index} = & \\ & [(0 * \text{Number of Very Low students}) + (33 * \text{No. of Low students}) \\ & + (67 * \text{No. of Nearly Meets students}) + (100 * \text{No. of Meets students}) \\ & + (133 * \text{No. of Exceeds students})] \\ & / \text{Total number of students tested} \end{aligned}$$

The index is rounded to the nearest tenth of a point.

For example, the Reading Index for 2000-01 would be calculated by counting the number of students who scored at the Very Low performance level, the Low performance level, and so on. Then the weights or points would be applied to the number of students at each performance level. Note that this method can be used to calculate an index for a content area test at a particular grade level, or for a content area test across multiple grade levels within a school. For the school report card, the final content area index includes all the students who took a reading test, for example, regardless of grade level. A school with grades 3 and 5, then, would have the scores combined into a single reading index across both grades.

The content area test score represents the average performance of students in the school on that test. A score of 100 indicates that the students, on average, performed at the level of "Meets the Standard." A score of 33 indicates that students, on average, performed at the "Low" level. The maximum score a school could have in a content area tested would be 133, when all the students were at "Exceeds the Standard." The minimum score would be zero, when all students were at "Very Low."

II. Determining the Performance Levels of Students

Students are placed in one of five performance levels based on their scores on the state tests. Corresponding cutscores are set for each content area and grade. Information regarding how the standards and cutscores were set is available from the Department.

The cutscores for each performance level are shown below, by content area and grade.

Performance Levels and Cutscores, by Content Area and Grade Oregon Benchmark Tests					
Content Area and Grade	Scale Score Ranges for Each Performance Level				
	Exceed the Standard	Meet the Standard	Nearly Meet the Standard	Low	Very Low
Reading/Literature					
Grade 3	215 and above	201 – 214	196 - 200	190 – 195	below 190
Grade 5	231 and above	215 – 230	209 – 214	201 – 208	below 201
Grade 8	239 and above	231 – 238	223 – 230	208 – 222	below 208
Grade 10	249 and above	239 – 248	230 – 238	214 – 229	below 214
Math (multiple choice)					
Grade 3	215 and above	202 – 214	196 – 201	186 – 195	below 186
Grade 5	231 and above	215 – 230	210 – 214	202 – 209	below 202
Grade 8	239 and above	231 – 238	225 – 230	216 – 224	below 216
Grade 10	249 and above	239 – 248	229 – 238	219 – 228	below 219
Writing	50 – 60	40 – 49	35 – 39	20 – 34	10 – 19
Math problem solving	40 – 46	32 – 39	29 – 31	16 – 28	2 – 15

For example, a 3rd grade student who received a scale score on the reading test of 198 would be at the “Nearly Meets the Standard” performance level. A grade 10 student who received a scale score of 247 on the math multiple choice test would be designated at the “Meet the Standard” performance level for that content area. (See section on “Definition of ‘Participation Rate’ for Accountability” for discussion of special cases.)

The items and scoring rubrics are adjusted for writing and math problem solving so that the same scale score ranges apply to students in grades 5, 8, and 10. Students in grade 3 do not participate in the writing and math problem solving tests.

Calculating the Attendance Score

The Performance Score includes an attendance score. The attendance score is the Attendance Index for 2002. The procedures and rules for calculating the Attendance Index for 2002 are described in the previous section on Student Behavior Rating.

Calculating the Dropout Score

The Performance Score includes a Dropout Score. The Dropout Score is the average of the Dropout Index for 2001 and the Dropout Index for 2000.

The procedures and rules for calculating the Dropout Indices for 2001 and 2000 are described in the previous section on Student Behavior Rating.

Calculating the Improvement Index for One Content Area

The Improvement Score compares the performance of the school's students in the most recent two years to the performance of its students on reading and mathematics tests in the previous two years.

$$\text{Improvement Index} = [(\text{Index 2001} + \text{Index 2000}) / 2] \text{ minus } [(\text{Index 1999} + \text{Index 1998}) / 2]$$

An index is calculated for each content area (i.e., reading, math) for each year, using the procedures described above. The most recent two years (2001 and 2000) are averaged together to provide a more stable estimate of the school's recent performance. The previous two years (1999 and 1998) are averaged to provide a more stable comparison baseline. The baseline is subtracted from the recent performance. A positive Improvement Score indicates that the school improved over the four years. A negative Improvement Score indicates that the school's more recent average score is lower than the average of its scores from three and four years ago.

The same method is used to calculate improvement in attendance rate and dropout rate (for high schools). For attendance each year the highest score given is 120 and the lowest score given is 0. For dropout the highest score possible is 140 and the lowest score possible is 0.

Calculating the Overall Improvement Index

The overall improvement index considers improvement in test performance, attendance, and dropout (for schools with grade 12).

$$\text{Overall Improvement Index} = (.8 * \text{Test Improvement}) + (.2 * \text{Attendance/Dropout Improvement})$$

The Overall Improvement Index is calculated by multiplying the Test Improvement Index (calculated above) by .8. The Attendance/Dropout Improvement Index is multiplied by .2. The sum of the two numbers is the Overall Improvement Index.

Calculating the Test Improvement Index

The School Report Card also reports whether a school's test scores have improved, declined, or stayed the same. This Improvement Rating reflects the change in test scores in reading and math multiple-choice from 1997-1998 to 2000-2001.

An Improvement Index for reading is calculated for the school as described in the section, "Calculating the Improvement Index for One Content Area." An Improvement Index is also calculated for math. These two indices are added together to give a Total Test Improvement Index. The Test Improvement Rating is determined by comparing the Total Test Improvement Index to the table below.

Test Improvement Index	<i>Improvement Rating</i>
less than or equal to - 3.33	Declined
greater than -3.33 and less than 3.33	About the Same
greater than or equal to 3.33	Improved

III. Discussion of Test Improvement Rating

An "Improved" rating indicates that 10% of the students in the school in 1999-2000 scored one performance level higher, on average, than the students in the same school did in 1997-98. The test index is defined such that there is 33-point difference between each performance level. If every student scored one performance level higher than the previous class of students, then the school's index would be 33 points higher. Thus, a difference of 3.3 points indicates that 10% of the students scored one performance level higher, on average. Similarly, an index of -3.3 points indicates that 10% of the students scored one performance level lower, on average.

It would be possible to define improvement/decline in many ways, such as through standard error of the measure (average or with consideration of the specific school/sample size). The decision was made to use this definition as more easily understood and computationally tractable for the report card.

Calculating the Student Behavior Improvement Index

The School Report Card also reports whether a school's attendance and dropout rates have improved, declined, or stayed the same from 1997-1998 to 2000-01.

An Improvement Index is calculated for the school in attendance as described in the section, "Calculating the Improvement Index for One Content Area." An Improvement Index is also calculated for dropout rates (if available). These two indices are averaged together to give a Student Behavior Improvement Index. The Student Behavior Improvement Rating is determined by comparing the Student Behavior Improvement Index to the table below.

Student Behavior Improvement Index	<i>Improvement Rating</i>
less than or equal to – 3.0	Decline
greater than –3.0 and less than 3.0	About the Same
greater than or equal to 3.0	Improve

Adjusting the Overall Performance Rating

There are two cases when a school's Overall Performance Rating will not follow the rules given above and be based upon its overall index score. Those cases are:

- the school has received an Unacceptable School Characteristic rating; or
- the school has performed exceptionally high in student performance on the most recent benchmark tests and displayed exceptional student behavior based on the most recent attendance and dropout rates.

A school's rating may also be asterisked, denoting a special case.

Unacceptable School Characteristic Rating

A school that has received an Unacceptable School Characteristic Rating in 2001 may not receive higher than a "Low" Overall rating.

If the school's rating would have been	and its School Characteristic rating is	then its final Overall rating will be
anything	Satisfactory or higher	unchanged
Satisfactory or higher	Unacceptable	Low
Low or Unacceptable	Unacceptable	Unacceptable

High Current Overall Performance

Some schools have maintained high levels of overall performance over several years. In these cases, it may be more difficult to continue to show improvement. To prevent a school from being penalized for small decreases while still retaining a high level of current performance, Overall Performance may be rated without improvement in cases where Student Performance, Student Behavior and School Characteristics have a rating of at least "Strong" and the removal of improvement from the Overall Performance Calculation results in a higher score.

In cases where the improvement component to Student Performance or Student Behavior would otherwise result in exclusion from the High Current Performance group, Student Performance and Student Behavior will be calculated without improvement to determine if the ratings would otherwise be equivalent to at least a "Strong". Please

note that the rating for Student Performance, Student Behavior and School Characteristics will not change based on the High Current Performance rule.

Asterisked Overall Ratings

A school may receive an asterisk by its Overall Rating. The asterisk denotes a special circumstance. A footnote will indicate the special circumstance, and encourage readers to interpret the rating appropriately.

For the 2001 Report Card, schools that had a significant change in population level due to a boundary change or grade configuration will be noted with an asterisk. Significant change is defined as at least 20%, where $\text{Change} = \text{absolute value of } [(2000-01 \text{ average daily membership} - 1999-2000 \text{ average daily membership}) \text{ divided by } 1999 \text{ average daily membership}]$. In cases where there was a population change of at least 40%, the institution will be considered a new school and an Overall Performance, Student Performance, and Student Behavior rating will not be computed until sufficient historical data is again accumulated.

The number of students eligible for standard tests is used instead of enrollment in cases where complete membership information is not available.

The intention of noting these schools is to encourage readers to note that the rating should be interpreted with caution because the school has grown or decreased in population by a substantial amount. Note that this applies only to boundary/organizational changes, as indicated by increases or decreases of student benchmark grades, i.e., the school added or lost a grade where a benchmark test was administered.

Examples of Calculating a School Overall Rating

Introduction

The school rating system considers many components—tests in several subject areas for potentially several grades, as well as attendance, dropout, and participation rates on the test. The rating system provides a way to condense all these numbers to a single number, which is used to provide the rating.

Although there are many numbers, the calculations themselves are quite simple. The calculations can be done with a four-function calculator, the assessment reports returned to the school, and the attendance/dropout data reported by the school to the Department.

This section provides two examples. The first example shows the calculations for an elementary school used to determine the Overall Rating for the School Report Card. The second example builds on the first and shows how an Overall Rating would be calculated for a high school (a school that includes grade 12).

Background: Example for Elementary School

For this example, assume that the school tests grades 3 and 5, so it has scores for reading, math, writing, and math problem solving. It has attendance data. Dropout does not apply to this school.

Calculating the Overall School Performance Rating: Elementary School

The Overall Rating formula is:

$$\begin{aligned} \text{Overall Rating} = & \text{Performance Index} \\ & + 2 * \text{Improvement Index} \\ & + 3 * \text{Participation Index} \end{aligned}$$

To calculate the Overall Rating we need to calculate the three elements: Performance Index, Improvement Index, and Participation Index. The example will show how this is done for each element in order.

Calculating the Performance Index: Elementary School

The Performance Score is calculated for this school from test scores and the attendance rate. These are converted into indices so they can be combined. We will first calculate the test index, and then the attendance index. The steps will be:

1. Calculate a test index for one content area. We will use Reading in our example.
2. Calculate a total test index for all content areas.
3. Calculate an attendance score.
4. Calculate a Performance Score.

Calculating a Test Index for 2002 (Reading) – grades 3 and 5

Performance Level	Number of Students	Points	Total
Exceeds	7	133	931
Meets	16	100	1600
Nearly Meets	14	67	938
Low	9	33	297
Very Low	4	0	0
Total	50		3766
		Score	75.3

1. **Count** the numbers of students at each Performance Level. In the example, there were seven students who scored “Exceeds 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.
2. **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 Exceeds Performance Level. Since there were seven students who scored Exceeds, the school calculates $7 * 133 = 931$. This is done for each Performance Level.
3. **Add** the total points for all the Performance Levels. In the example, the school had $(931 + 1600 + 938 + 297 + 0) = 3766$ total points.
4. **Add** the total number of students for all the Performance Levels. In the example the school had $(7 + 16 + 14 + 9 + 4) = 50$ total students for the reading test.
5. **Divide** the total points by the total students to get the Index. In the example, the school had 3766 total points, divided by 50 total students = 75.3 (rounded to the nearest tenth of a point).

Calculating a Total Test Index for 2002

Once a school has calculated a score for each content area tested, it calculates a Total Test Index by multiplying the score for each area by its assigned weight, and adding the weighted scores.

Test Area	Score	Weight	Total
Reading	75.3	35%	26.4
Math	82.6	35%	28.9
Writing	68.5	20%	13.7
Math PS	70.8	10%	7.1
Total		100%	76.1
		Total Test Index	76.1

Calculating an Attendance Index for 2002

Number Days Attendance	29160
Total Daily Membership	31500
Attendance Rate	92.57
times 10	925.7
minus 860	65.7
Attendance Score	65.7

The Attendance Rate is calculated by dividing the Total days attendance (days present) as a percentage of total days membership, grades 1-12 (as applicable), for the academic year. These two numbers are reported by the school/district to the Department of Education.

The Attendance Rate, which is an average daily percentage, is converted to an Attendance Index by multiplying the attendance rate by 10 and then subtracting 860. Note that 840 is subtracted when calculating the high school attendance index.

The Attendance Score then is equal to zero (0) when a school has an Attendance Rate of 86%, and is equal to 100 when the Attendance Rate is 96%. The rule is that the lowest Attendance Score that will be reported (and used in calculations) is 0, and the highest score is 120. This means that a school can get additional credit, up to an index of 120, for a higher attendance rate up to 98%. (It was assumed that attendance rates reasonably might not reach 100%.) Schools with attendance rates less than 84% will not get negative scores.

Calculating a Performance Score for 2002

Component	Index	Weight	Total
Total Tests	76.1	80%	60.9
Attendance	65.7	20%	13.1
Total Performance Index			74.0

The school calculates its Performance Score for the 2002 card by multiplying the weights by the index scores for each component—tests, attendance, (and dropout for schools with grade 12). In the example, the school's Total Test Score of 76.1 times 0.8 = 60.9. The Attendance Score of 65.7 times 0.2 = 13.1. These two numbers, added together, give the school's Total Performance Index for 2000 of 74.0.

We have calculated the total Performance Index for the school. We now have two more elements to calculate: the Improvement Index and the Participation Index.

Calculating the Overall Improvement Index: Elementary School

The formula for the Improvement Index is:

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

We will calculate the Overall Improvement Index through the following steps:

1. Calculate a Test Improvement Index
2. Calculate the Average Test Improvement Index
3. Calculate the Attendance Improvement Index
4. Calculate the Overall Improvement Index

Calculating A Test Improvement Index

The Test Improvement Index considers improvement in test performance over the past four years.

Reading Year	Index	Average	Difference
2000-01	80.2	Average of 2000 & 2001 79.8	between 2000-01 And 1998-99
1999-2000	79.4		
1998-99	78.0	Average of 1998 & 1999 77.1	
1997-98	76.2		
		Test Improvement Index	2.7

The improvement in Reading is calculated by:

1. Calculate a Reading Index for the four years 2001, 2000, 1999, and 1998 using the same procedures as discussed previously.
2. Add the Reading Index 2001 and the Reading Index 2000.
3. Divide the sum by 2 to get an average index for those two years.
4. Add the Reading Index 1999 and the Reading Index 1998.
5. Divide the sum by 2 to get an average index for those two years.
6. Subtract the average index for 2000 and 2001 from the average index for 1998 and 1999. This is the difference, or amount of improvement over the four years.

The same procedure is used to calculate the Test Improvement Index for Math multiple choice.

Calculating the Average Test Improvement Index

The Average Test Improvement index is the average of the index scores from reading and math.

Content Area	Test Improvement Index
Reading 1998-2001	2.7
Math 1998-2001	2.3
Average Test Improvement Index	2.5

In the example above, the Test Improvement Index for reading was 2.7 points. Assume that the Test Improvement Index for math was 2.3 points. The Average Test Improvement Index for the school would be 2.5 points.

The Average Test Improvement Index is calculated by doing the following:

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

Calculating the Attendance Improvement Index

The Attendance Improvement Index reflects improvement in attendance over the past four years. It is calculated by comparing the average of the most recent two years to the average of the previous two years, similar to the test improvement index.

Year	Attendance Index	Average	Difference
2000-01	100.8	Average of 2000 & 2001 99.5	between 2000-01
1999-2000	98.2		
1998-99	95.3	Average of 1998 & 1999 95.9	and 1998-99
1997-98	96.5		
Attendance Improvement Index			3.6

The improvement in Attendance is calculated by:

1. Calculate an Attendance Index for the four years 2001, 2000, 1999, and 1998, using the procedures discussed previously. (Note: do *not* use the Attendance Rates.)

2. Add the Attendance Index 2001 and the Attendance Index 2000. [100.8 + 98.2 = 199.0]
3. Divide the sum by 2 to get an average index for those two years. [199.0 / 2 = 99.5]
4. Add the Attendance Index 1999 and the Attendance Index 1998. [95.3 + 96.5 = 191.8]
5. Divide the sum by 2 to get an average index for those two years. [191.8 / 2 = 95.9]
6. Subtract the sum from Line 5 from the sum from Line 3. This is the difference, or average amount of improvement over the four years. [99.5 – 95.9 = 3.6]

The Attendance Improvement Index in this example is 3.6.

Example: Overall Improvement Index

The Overall Improvement Index combines the test improvement and attendance improvement, as discussed previously.

For the example:

Element	Index Score		Weight		Weighted Index
Test Improvement	2.5	x	.8	=	2.0
Attendance Improvement	3.6	x	.2	=	0.72
					2.7

We have calculated the Improvement Index. Now we will calculate the last element, the Participation Index.

Calculating the Participation Index: Elementary School

The Participation Index reflects the participation of eligible students on the state test above a minimum percentage of 85%.

$$\text{Participation Index} = .1 * (\text{Participation Rate} - 85)$$

$$\text{Minimum index} = 0$$

Participation Rate		Minimum				Weight		
90.0	-	85	=	5.0	x	.1	=	0.5
Participation Index								0.5

The Participation Index is calculated by the following steps:

1. Calculate the Participation Rate, using the steps described previously [number of students attempting test under regular conditions divided by (those students plus number absent who should have taken the test under regular conditions)]

2. Subtract the minimum, 85%, from the Participation Rate. [The example Participation Rate is 90.0%. $90.0 - 85 = 5.0$]
3. Multiply Line 2 by 0.1. [$5.0 \times 0.1 = 0.5$]
4. The Participation Index in the example is 0.5 points.

Note that if a school had had a participation rate of 85% it would have a Participation Index of 0.0. If a school had had a participation rate less than 85% it would have been less than zero. However, the minimum score used in calculations and reported is zero, so its index would have been rounded to 0.0.

Calculating an Overall Rating Index: Elementary School

The Overall Rating Index combines the indices for Performance, Improvement, and Participation.

The formula is:

$$\text{Overall Rating Index} = \text{Performance} + (2 * \text{Improvement}) + (3 * \text{Participation})$$

We have previously calculated the Performance Index as 74.0, the Improvement Index as 2.7, and the Participation Index as 0.5. For the example:

Element	Index		Weight		
Performance	74.0	x	1	=	74.0
Improvement	2.7	x	2	=	5.4
Participation	0.5	x	3	=	1.5
Overall Rating Index					80.9

1. Each element is multiplied by the designated weight.
2. The weighted indices are added together.
3. The sum is the Overall Rating Index.

In the example, the Overall Rating Index is 80.9.

Generating the Overall Rating: Elementary School

The Overall Rating is generated by comparing the Overall Rating Index to the criteria, or cutscores.

Overall Performance Rating	
Rating	Total Index Score
Exceptional	125.0 or above
Strong	100.0 – 124.9
Satisfactory	60.0 – 99.9
Low	40.0 – 59.9
Unacceptable	less than 40.0

In the example, the school had an Overall Rating Index of 80.9. Because its total index score is between 60.0 and 99.9, the school would receive an Overall Performance Rating of “Satisfactory.”

Background: Example for High School

For this example, assume that the school consists of grades 9 – 12. It tests students on the state benchmark tests in grade 10, so it has scores for reading, math multiple choice, writing, and math problem solving. It has attendance data and dropout data. Note that these same procedures apply to all schools with a grade 12; that is, schools with high school grades K-12, 7-12, and so on are treated as high schools 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 dropout rates. Dropout rates are incorporated into the Performance and Improvement elements.

Calculating the Overall School Performance Rating: High School

The Overall Rating formula is:

$$\begin{aligned} \text{Overall Rating} = & \text{Performance Index} \\ & + 2 * \text{Improvement Index} \\ & + 3 * \text{Participation Index} \end{aligned}$$

To calculate the Overall Rating we need to calculate the three elements: Performance Index, Improvement Index, and Participation Index. The example will show how this is done for each element in order.

Calculating the Performance Index: High School

The Performance Score is calculated for this school from test scores and the attendance rate. These are converted into indices so they can be combined. We will first calculate the test index, and then the attendance index. The steps will be:

1. Calculate a test index for one content area. We will use Reading in our example.
2. Calculate a total test index for all content areas.
3. Calculate an attendance index.
4. Calculate the dropout index.
5. Combine the attendance and dropout indices.
6. Calculate a Performance Index.

Calculating a Reading Score for 2002 – grade 10

Performance Level	Number of Students	Points	Total
Exceeds	7	133	931
Meets	16	100	1600
Nearly Meets	14	67	938
Low	9	33	297
Very Low	4	0	0
Total	50		3766
		Score	75.3

1. **Count** the numbers of students at each Performance Level. In the example, there were seven students who scored “Exceeds 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.
2. **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 Exceeds Performance Level. Since there were seven students who scored Exceeds, the school calculates $7 * 133 = 931$. This is done for each Performance Level.
3. **Add** the total points for all the Performance Levels. In the example, the school had $(931 + 1600 + 938 + 297 + 0) = 3766$ total points.
4. **Add** the total number of students for all the Performance Levels. In the example the school had $(7 + 16 + 14 + 9 + 4) = 50$ total students for the reading test.
5. **Divide** the total points by the total students to get the Reading Index. In the example, the school had 3766 total points, divided by 50 total students = 75.3 (rounded to the nearest tenth of a point).

Calculating a Total Test Index for 2002

Test Area	Score	Weight	Total
Reading	80.2	35%	28.1
Math	77.8	35%	27.2
Writing	68.5	20%	13.7
Math PS	70.8	10%	7.1
Total		100%	76.1
		Total Test Index	76.1

Once a school has calculated a score for each content area tested, it calculates a Total Test Index by multiplying the score for each area by its assigned weight, and adding the weighted scores.

The example has shown how to calculate a Total Test Index. This involved several steps, beginning with the raw student score and performance levels on several tests.

To calculate the Performance Index, we need three parts: Total Test Index, Attendance Index, and Dropout Index. Next the example shows how to calculate the necessary attendance index.

Calculating an Attendance Index for 2002

Number Absences	29160
Total Membership	31500
Attendance Rate	92.6
times 10	925.7
minus 840	85.7
Attendance Score	85.7

The Attendance Rate is calculated by dividing the Total days attendance (days present) as a percentage of total days membership, grades 1-12 (as applicable), for the academic year. These two numbers are reported by the school/district to the Department of Education.

The Attendance Rate, which is an average daily percentage, is converted to an Attendance Index by multiplying the attendance rate by 10 and then subtracting 840. Note that the formula for the high schools is slightly different from that for elementary and middle schools. The high schools may have 2% lower attendance and get the same index points as the elementary and middle schools.

The Attendance Score then is equal to zero (0) when a school has an Attendance Rate of 84%, and is equal to 100 when the Attendance Rate is 94%. The rule is that the lowest Attendance Score that will be reported (and used in calculations) is 0, and the highest score is 120. This means that high schools may get credit for higher attendance, up to 96%. Schools will not get negative scores, even if their attendance rates are lower than 84%.

Calculating a Dropout Index for 2002

The Dropout Index for a single year is calculated using the following formula:

$$\text{Dropout Index}_{\text{HS}} = 140 - (10 * \text{Dropout Rate})$$

Maximum of 140.0, minimum of 0.0

The Participation Rate uses the average of two years of dropout data.

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

Year				Dropout Rate		Index	Average	
2000	140	-	(10 *)	7.0) =	70.0		
1999	140	-	(10 *)	7.6) =	64.0		
Dropout Index							67.0	

For the example, assume the school has a dropout rate of 7.0% in 2001 and 7.6% in 2000. The Dropout Index for the 2002 card is 70.0. The Dropout Index for 2000 is 64.0. The average of the two years is 67.0. The Dropout Index for the school is 67.0.

Combining the Attendance and Dropout Indices

The Attendance and Dropout Indices are averaged together for use in the Performance Index.

$$\text{Combined Attendance/Dropout Index} = \frac{(\text{Attendance}_{2001} + \text{Dropout}_{2001-2000})}{2}$$

Element	Index
Attendance (2001)	85.7
Dropout (Average of 2001 and 2000)	67.0
Combined Attendance/Dropout	76.4

In the example, the Attendance Index (for 2001) is 85.7. The Dropout Index (for 2001 and 2000 averaged together) is 67.0. Adding these two numbers together and dividing by two gives the Combined Attendance/Dropout Index of 76.4.

Calculating a Performance Score for 2002

Component	Index	Weight	Total
Total Tests	76.1	80%	60.9
Attendance/Dropout	76.4	20%	15.3
Total Performance Index			76.2

The school calculates its Performance Score for the 2002 card by multiplying the weights by the index scores for each component—tests, attendance, and dropout for schools with grade 12. In the example, the school's Total Test Index of 76.1 times 0.8 = 60.9. The Combined Attendance/Dropout Index of 76.4 times 0.2 = 15.3. These two numbers, added together, give the school's Total Performance Index for 1999 of 76.2.

We have calculated the total Performance Index for the school. Two more elements are needed to calculate the Overall Rating: the Improvement Index and the Participation Index.

Calculating the Overall Improvement Index

The formula for the Improvement Index is:

$$\text{Overall Improvement Index} = (.8 * \text{Test Improvement Index}) \\ + (.2 * \text{Attendance/Dropout Improvement Index})$$

We will calculate the Overall Improvement Index through the following steps:

1. Calculate Test Improvement Index
2. Calculate Attendance Improvement Index
3. Calculate the Dropout Improvement Index
4. Combine to calculate Overall Improvement Index

IV. Calculating A Test Improvement Index

The Test Improvement Index considers improvement in test performance over the past four years.

Reading Year	Index	Average	Difference
2000-01	80.2	Average of 2000 & 2001 79.8	between 2000-01 and 1998-99
1999-2000	79.4		
1998-99	78.0	Average of 1998 & 1999 77.1	
1997-98	76.2		
		<u>Test Improvement Index</u>	2.7

The improvement in Reading is calculated by:

7. Calculate a Reading Index for the four years 2001, 2000, 1999, and 1998, using the same procedures as discussed previously.
8. Add the Reading Index 2001 and the Reading Index 2000.
9. Divide the sum by 2 to get an average index for those two years.
10. Add the Reading Index 1999 and the Reading Index 1998.
11. Divide the sum by 2 to get an average index for those two years.
12. Subtract the sum from Line 5 from the sum from Line 3. This is the difference, or amount of improvement over the four years.
13. The Test Improvement Index for Reading is 2.7.

The same procedure is used to calculate the Test Improvement Index for Math multiple choice.

V. Calculating An Overall Test Improvement Index

The overall Test Improvement index is the average of the index scores from reading and math.

Content Area	Test Improvement Index	Average
Reading 1998-2001	2.7	
Math 1998-2001	2.3	
Overall Test Improvement Index		2.5

In the example above, the Test Improvement Index for reading was 2.7 points. Assume that the Test Improvement Index for math was 2.3 points. The overall Test Improvement Index for the school would be 2.5 points.

The overall Test Improvement Index is calculated by doing the following:

4. Add the Test Improvement Index for Reading and the Test Improvement Index for Math.
5. Divide by 2.
6. Round to the nearest tenth of a point.

VI. Calculating an Attendance Improvement Index

The Attendance Improvement Index reflects improvement in attendance over the past four years. It is calculated by comparing the average of the most recent two years to the average of the previous two years, similar to the test improvement index.

Year	Attendance Index	Average	Difference
2000-01	100.8	Average of 2000 & 2001 99.5	between 2000-01 and 1998-99
1999-2000	98.2		
1998-99	95.3	Average of 1998 & 1999 95.9	
1997-98	96.5		
Attendance Improvement Index			3.6

The improvement in Attendance is calculated by:

7. Calculate an Attendance Index for the four years 2001, 2000, 1999, and 1998, using the procedures discussed previously.
8. Add the Attendance Index 2001 and the Attendance Index 2000. [$100.8 + 98.2 = 199.0$]
9. Divide the sum by 2 to get an average index for those two years. [$199.0 / 2 = 99.5$]
10. Add the Attendance Index 1999 and the Attendance Index 1998. [$95.3 + 96.5 = 191.8$]
11. Divide the sum by 2 to get an average index for those two years. [$191.8 / 2 = 95.9$]
12. Subtract the sum from Line 5 from the sum from Line 3. This is the difference, or average amount of improvement over the four years. [$99.5 - 95.9 = 3.6$]
13. The Attendance Improvement Index in this example is 3.6.

VII. Calculating the Dropout Improvement Index

The Dropout Improvement Index reflects improvement in dropouts over the previous four years when available. It is calculated by comparing the average of the most recent two years to the average of the previous two years, similar to the Attendance Improvement index.

$$\text{Dropout Improvement Index} = \text{Dropout Index}_{2001} - \text{Dropout Index}_{2000}$$

Year	Index	Average	Difference
2000	74.2	Average of 2001 & 2000 72.1	between 2001-00 and 1999- 98
1999	70.0		
1998	68.2	Average of 1998 & 1999 66.9	
1997	64.0		
I. Dropout Improvement Index			6.0

The improvement in Dropout is calculated by:

14. Calculate a Dropout Index for the four years 2001, 2000, 1999, and 1998, using the procedures discussed previously.
15. Add the Dropout Index 2001 and the Dropout Index 2000. [74.2 + 70.0 = 144.2]
16. Divide the sum by 2 to get an average index for those two years. [144.2 / 2 = 72.1]
17. Add the Dropout Index 1999 and the Dropout Index 1998. [68.2 + 64.0 = 132.2]
18. Divide the sum by 2 to get an average index for those two years. [132.2 / 2 = 66.1]
19. Subtract the sum from Line 5 from the sum from Line 3. This is the difference, or average amount of improvement over the four years. [72.1 – 66.1 = 6.0]
20. The Dropout Improvement Index in this example is 6.0.

VIII. Example: Overall Improvement Index

The Overall Improvement Index combines the test improvement, attendance improvement, and dropout improvement, as discussed previously.

$$\text{Overall Improvement Index} = (.8 * \text{Test Improvement}) + (.2 * \text{Attendance/Dropout Improvement})$$

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

For the example:

Element	Index Score		Weight		Weighted Index
Test Improvement	2.5	x	.8	=	2.0
Attendance Improvement	3.6				
Dropout Improvement	6.0				
Combined Attendance/DO	4.8	x	.2	=	1.0
Overall Improvement Index					3.0

The average of the Attendance and Dropout Improvement indices is 4.8. By applying the weights to the Test Improvement Index and Combined Attendance/Dropout Index, we can calculate the Overall Improvement Index as 3.0 points.

We have calculated the Improvement Index. Now we will calculate the last element, the Participation Index.

Calculating the Participation Index

The Participation Index reflects the participation of eligible students on the state test above a minimum percentage of 85%.

Participation Index = .1 * (Participation Rate – 85)
 Minimum index = 0

Participation Rate		Minimum				Weight		
90.0	-	85	=	5.0	x	.1	=	0.5
Participation Index								0.5

The Participation Index is calculated by the following steps:

1. Calculate the Participation Rate, using the steps described previously [number of students attempting test under regular conditions divided by (those students plus number absent who should have taken the test under regular conditions)]
2. Subtract the minimum, 85%, from the Participation Rate. [The example Participation Rate is 90.0%. 90.0 – 85 = 5.0]
3. Multiple Line 2 by 0.1. [5.0 x 0.1 = 0.5]
4. The Participation Index in the example is 0.5 points.

Note that if a school had had a participation rate of 85% it would have a Participation Index of 0.0. If a school had had a participation rate less than 85% it would have been less than zero. However, the minimum score used in calculations and reported is zero, so its index would have been rounded to 0.0.

Calculating an Overall Rating Index

The Overall Rating Index combines the indices for Performance, Improvement, and Participation.

The formula is:

$$\text{Overall Rating Index} = \text{Performance} + (2 * \text{Improvement}) + (3 * \text{Participation})$$

We have previously calculated the Performance Index as 76.2, the Improvement Index as 3.0, and the Participation Index as 0.5. For the example:

Element	Index		Weight		
Performance	76.2	x	1	=	76.2
Improvement	3.0	x	2	=	6.0
Participation	0.5	x	3	=	1.5
Overall Rating Index					83.7

1. Each element is multiplied by the designated weight.
2. The weighted indices are added together.
3. The sum is the Overall Rating Index.
4. In the example, the Overall Rating Index is 83.7.

Generating the Overall Rating

The Overall Rating is generated by comparing the Overall Rating Index to the criteria, or cutscores.

Overall Performance Rating	
Rating	Total Index Score
Exceptional	125.0 or above
Strong	100.0 – 124.9
Satisfactory	60.0 – 99.9
Low	40.0 – 59.9
Unacceptable	less than 40.0

In the example, the school had an Overall Rating Index of 83.7. Because its total index score is between 60.0 and 99.9, the school would receive an Overall Performance Rating of “Satisfactory”.

If the school had met the High Current Overall Performance requirements, then the Overall Performance Rating would appear as Strong.

VI. Resources and Background Materials

There are many Oregon School Report Card resources available. Most of these can be accessed from 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 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/toolkit.htm>
6. A PowerPoint presentation that provides general information on the background, rating system and next steps of the Oregon School Report Card
<http://reportcard.state.or.us>
7. A video presentation on the background and rating system can be obtained by calling (503) 378-3600 ext. 2644 or by e-mail at report.card@state.or.us
8. Information on the Oregon Statewide Assessments
<http://www.ode.state.or.us/asmt/index.htm>
9. Information on the extended assessment system
<http://www.ode.state.or.us/asmt/Administration/index.htm>
10. How to read the Oregon School Report Card
<http://reportcard.ode.state.or.us>