

Classroom or Benchmark Test Standards Mastery

The Standards Mastery report can be one of the most effective resources to assist teachers in focusing instruction and addressing student weaknesses. The report provides summary data for a group of students that can be useful in evaluating the effectiveness of instruction, and identifying areas for further instruction.

Purpose of the report

This report is used to show performance of the group as a whole on specific standards. The report allows teachers to determine which standards were mastered by a majority of the class. It also allows teachers to easily identify students who did not master a standard, regardless of how well the class did overall. This report supports grouping for differentiated instruction.

Parts of the Report

The default **Score Group** view provides an opportunity to compare performance by standard. The number of test items covered by each standard is indicated. Cut scores are visible in the report key. Depending on the number of questions and the cut scores it may be mathematically impossible to have students in all score group(s). For example, in the first standard shown, students either got a 0%, 33%, 67%, or 100%. So even though the report indicates that 7 students were in the 'Excellent' score group, we can tell that this is based on only three questions and these students got all of these questions correct.

View: [Currently Enrolled Students](#) | [All Students](#)




Tools	Standard	# of Test Items	Excellent	Proficient	Not Proficient
	MA.8.111.24.8.2.D: use multiplication by a given constant factor (including unit rate) to represent and solve problems involving proportional relationships including conversions between measurement systems.	3	7	4	1
	MA.8.111.24.8.3.A: compare and contrast proportional and non-proportional linear relationships; and	3	5	4	3
	MA.8.111.24.8.3.B: estimate and find solutions to application problems involving percents and other proportional relationships such as similarity and rates.	4		4	8

Clicking on one of the score group numbers for a standard brings up the **Student Mastery Groupings** section for that standard. From this screen, the teacher can visually scan the students by score group and use any to create a student group either for remediation or enrichment. If surprised to see a student in a particular group, the teacher could click on the student name to access the profile and see how a student did on other assessments for comparison.

Add to Group... Select a Score Group to add to a Student Group.

<input checked="" type="radio"/> Excellent	<input type="radio"/> Proficient	<input type="radio"/> Not Proficient
ABDI, ERIC ADAMS, SAMIRA ALFORD, HOMER JR ALI, LATAYA ASAHA, NICHOLAS BADGLEY, MARK BISH, JENNA	ADAMS, LACHELLE ALEXANDER, STEFFANIE ALI, CHLOE ALLEN, JOSEPH	BERRYMAN, ANDREW
<input checked="" type="radio"/> Greater than 80% Correct	<input type="radio"/> 60-80% Correct	<input type="radio"/> Less than 60% Correct

The **Section Average** indicates what percent of questions on a standard the class as a whole answered correctly. While convenient for an overall sense of performance by standard, it does not provide a way to break out results by students.

Tools	Standard	# of Test Items	Section Average
	MA.8.111.24.8.2.D: use multiplication by a given constant factor (including unit rate) to represent and solve problems involving proportional relationships including conversions between measurement systems.	3	83.3%
	MA.8.111.24.8.3.A: compare and contrast proportional and non-proportional linear relationships; and	3	69.4%
	MA.8.111.24.8.3.B: estimate and find solutions to application problems involving percents and other proportional relationships such as similarity and rates.	4	43.8%

Try it Out

Run a benchmark standards mastery report on your site. Answer the following questions.

1. Do you see a particular standard on which students performed most poorly?
2. On what standard did student score the best? Why do you think this occurred?
3. How many questions are tested for most standards? Do you think this is enough to determine mastery? What other ways do you have to determine student mastery on a particular standard?

Classroom or Benchmark Test Item Analysis

Item analysis can be one of the most effective resources to assist teachers in focusing instruction and addressing student weaknesses. The report provides summary data for a group of students that can be useful in evaluating the effectiveness of instruction, and identifying areas for further instruction.

Purpose of the Report

This report is used to show performance of the group as a whole on specific test questions. The item analysis provides specific information about the exact questions with which students struggled. The report allows teachers to distinguish between questions answered incorrectly by a majority of students, versus those answered incorrectly by only a few students. Additionally, teachers can identify which wrong answer was selected most frequently in order to determine why the students may have missed the item. The item analysis shows teachers detail about standards that need to be addressed across the class, before narrowing the focus to individual students and their specific needs.

Parts of the Report

The first section of the Item Analysis report provides an opportunity to compare, by question, section performance to that of the school and district as a whole. The percent of students selecting the correct answer is indicated both for the overall test and each question. In this example, the report is for a 24 item math test (truncated screen shot for visibility purposes). In this example, there is a wide difference in performance between this class from that of the school and district. There is a check box to highlight low performing students.

From this part of the report, it is easy to see that students struggled on question #2 with only 33% of the section getting it correct.

Item Analysis		Order by: Item Number Standards Performance Percent Correct				Highlight: <input type="checkbox"/> Low Performing Students
	Total Score	Item 1	Item 2	Item 3	Item 4	
Section-Wide Percent Correct	56.9%	100.0%	33.3%	100.0%	66.7%	
School-Wide Percent Correct	70.7%	90.2%	70.7%	87.8%	70.7%	
District-Wide Percent Correct	70.9%	81.5%	82.8%	75.9%	73.3%	
Primary Standard ID	-	MA.8.111.24.8.2.D	MA.8.111.24.8.2.D	MA.8.111.24.8.2.D	MA.8.111.24.8.3.A	
Point Value	24	1	1	1	1	
Correct Answer	-	B	D	C	A	

There is a toggle to display standards performance by question. In the example below, there was one question (Item 22) on the first standard and 0% of the students in this class answered this question correctly.

Item Analysis		Order by: Item Number Standards Performance Percent Correct				Highlight: <input type="checkbox"/> Low Performing Students	View: Currently Enrolled Students All Students
	Total Score	Item 22	Item 21	Item 7	Item 8	Item 9	Item 10
Section-Wide Percent Correct	56.9%	0.0%	33.3%	33.3%	0.0%	66.7%	66.7%
School-Wide Percent Correct	70.7%	51.2%	51.2%	46.3%	46.3%	65.9%	63.4%
District-Wide Percent Correct	70.9%	65.7%	58.2%	54.7%	62.0%	57.1%	61.3%
Primary Standard ID	-	MA.8.111.24.8.14.C 0.0% Correct	MA.8.111.24.8.14.A 33.3% Correct	MA.8.111.24.8.3.B 41.7% Correct			
Common Core Math	-						
Point Value	24	1	1	1	1	1	1
Correct Answer	-	D	B	C	D	C	B

The second section of the Item Analysis report is student by student data and indicates what each student answered: green check for a correct response or a red letter to indicate an incorrect response.

The teacher can click on a question number in the top part of the report to view the item content. This allows the teacher to think about why students chose the wrong answer C for question #2. For example, Nicholas Asaha did poorly overall, but managed to answer #2 correctly unlike Stephanie Alexander. It is worth looking at item discrimination – did each question discriminate between students who knew the content (received high scores) and those who did not (received low scores)? For further information, the teacher could click on the student name to access the profile and see how a student did on other assessments for comparison.

Student Name ↑	Total Score	Sort	Sort	Sort	Sort
 ADAMS, LACHELLE	62.5%	✓	C	✓	✓
 ALEXANDER, STEFFANIE	62.5%	✓	C	✓	B
 ASAHA, NICHOLAS	45.8%	✓	✓	✓	✓

The **Standards Alignment** chart shows the standard that is assessed by each question and is essential knowledge to interpreting the item analysis and making instructional adjustments.

Standards Alignment		
Question #	ID	Skill Text
1	7.EE.1	Apply properties of operations as strategies to add, su
2	8.EE.4	Perform operations with numbers expressed in scienti notation are used. Use scientific notation and choose quantities (e.g., use millimeters per year for seafloor s technology.
3	8.NS.1	Know that numbers that are not rational are called irra expansion; for rational numbers show that the decima repeats eventually into a rational number.
4	8.EE.1	Know and apply the properties of integer exponents to 5 power) = (3 to the -3 power) = $1/3^3 = 1/27$.

Try it Out

Run an Item Analysis report on your site. Answer the following questions:

1. Are there any questions on which this class did significantly better or worse than the school? If so, why might that be the case?
2. Which four questions were missed most often? Were any questions aligned to the same standard?
3. Look at the most frequently missed question. Was one wrong answer picked more often than others? If so, why do you think this occurred?