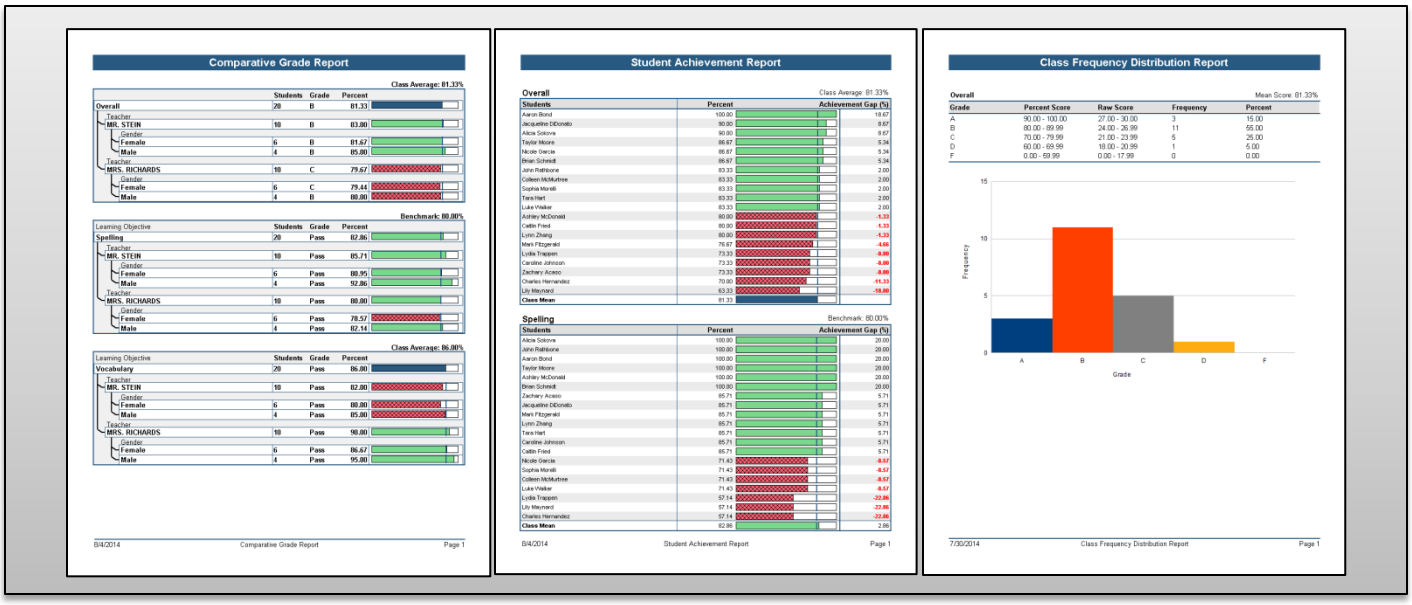
Remark® Office OMR

Remark Quick Stats® Reports – Test Grading



Gravic, Inc.— Remark Products Group

Web: http://www.RemarkSoftware.com

Phone: 1.800.858.0860 or +1.610.647.7850

FAX: +1.610.647.8771

E-Mail: Sales@gravic.com

GRAVIC®
Improving Society Through Innovation®

Remark Quick Stats® Reports – Test Grading

Remark Quick Stats is included with all Remark products and can be used for single test scoring. There are many options available when grading tests, including benchmark scoring and scoring with learning objectives. Both the overall test and any learning objectives can have customized grade scales. Questions can be set as extra credit, if desired. Partial credit point values can be defined, as well. Multiple answer key versions can also be used.

Remark Quick Stats offers many different reports, all of which can be printed and exported for portability. There are a wide variety of statistics that are calculated. All reports can be customized to suit individual needs. It is possible to choose whether to include most statistics. Headers and footers can also be modified, in addition to numerous other settings that can be changed for each report.

This document reviews every report available for grading tests. For each report, a suggested use is provided, as well as a brief description of what is included in the report. An image of an example report is provided with notes pointing out some of the features of the report. Default settings are used for the images provided. The uses described below are only suggestions. You are encouraged to experiment with different settings and reports to find the reports that are best suited to your needs.

Index:

- Student Statistics Report
- Comparative Grade Report
- Class Frequency Distribution Report
- Student Response Report
- Demographic Grade Report
- Class Learning Objectives Report
- Student Achievement Report
- Student Grade Report
- Student Response Similarities Report
- Detailed Item Analysis Report
- Item Analysis Graph Report
- Condensed Item Analysis Report
- Condensed Test Report
- Integrated Item Analysis Report
- Test Statistics Report
- Test Item Statistics
- Comparative Item Report
- Response Report by Item
- Response Report by Respondent
- Comparative Changed Answer Report by Item
- Comparative Changed Answer Report by Student
- Changed Answer Report by Item
- Changed Answer Report by Student
- About Gravic, Inc.

Student Statistics Report

Use	Displays information on how each student did on the test overall and on each learning objective. This report is useful if you want to view class performance overall and on learning objectives, compare performance to a benchmark value or view other statistics.
Description	The Student Statistics report lists each student in the class, their grade, raw score, percent score and scaled score (if applicable). The number of points awarded to each student for objective, multiple choice, and subjective, free-response, questions is also included. Each student's score is compared to a benchmark value (if applicable) to determine if they have met this value. If you are using learning objectives, each objective will be included on a separate page with statistics being calculated for each objective, as well. Additional statistical data available in this report includes Z Score, T Score, ETS Score, Deviation IQ, percentile and the number of questions that a student answered correctly or incorrectly.

		Overall		Objective	Subjective
Student	Grade	Total	Percent	Total	Total
Lynn Zhang	B	24 / 30	80.00	16 / 20	8 / 10
Taylor Moore	B	26 / 30	86.67	16 / 20	10 / 10
Zachary Acaso	C	22 / 30	73.33	15 / 20	7 / 10
Aaron Bond	A	30 / 30	100.00	20 / 20	10 / 10
Lily Maynard	D	19 / 30	63.33	15 / 20	4 / 10
Jacqueline DiDonato	A	27 / 30	90.00	17 / 20	10 / 10
Alicia Sokova	A	27 / 30	90.00	18 / 20	9 / 10
Mark Fitzgerald	C	23 / 30	76.67	13 / 20	10 / 10
Caitlin Fried	B	24 / 30	80.00	16 / 20	8 / 10
Brian Schmidt	B	26 / 30	86.67	18 / 20	8 / 10
Luke Walker	B	25 / 30	83.33	17 / 20	8 / 10
Lydia Trappen	C	22 / 30	73.33	14 / 20	8 / 10
Nicole Garcia	B	26 / 30	86.67	16 / 20	10 / 10
Tara Hart	B	25 / 30	83.33	16 / 20	9 / 10
Mean	B	24.71	82.38	16.21	8.50

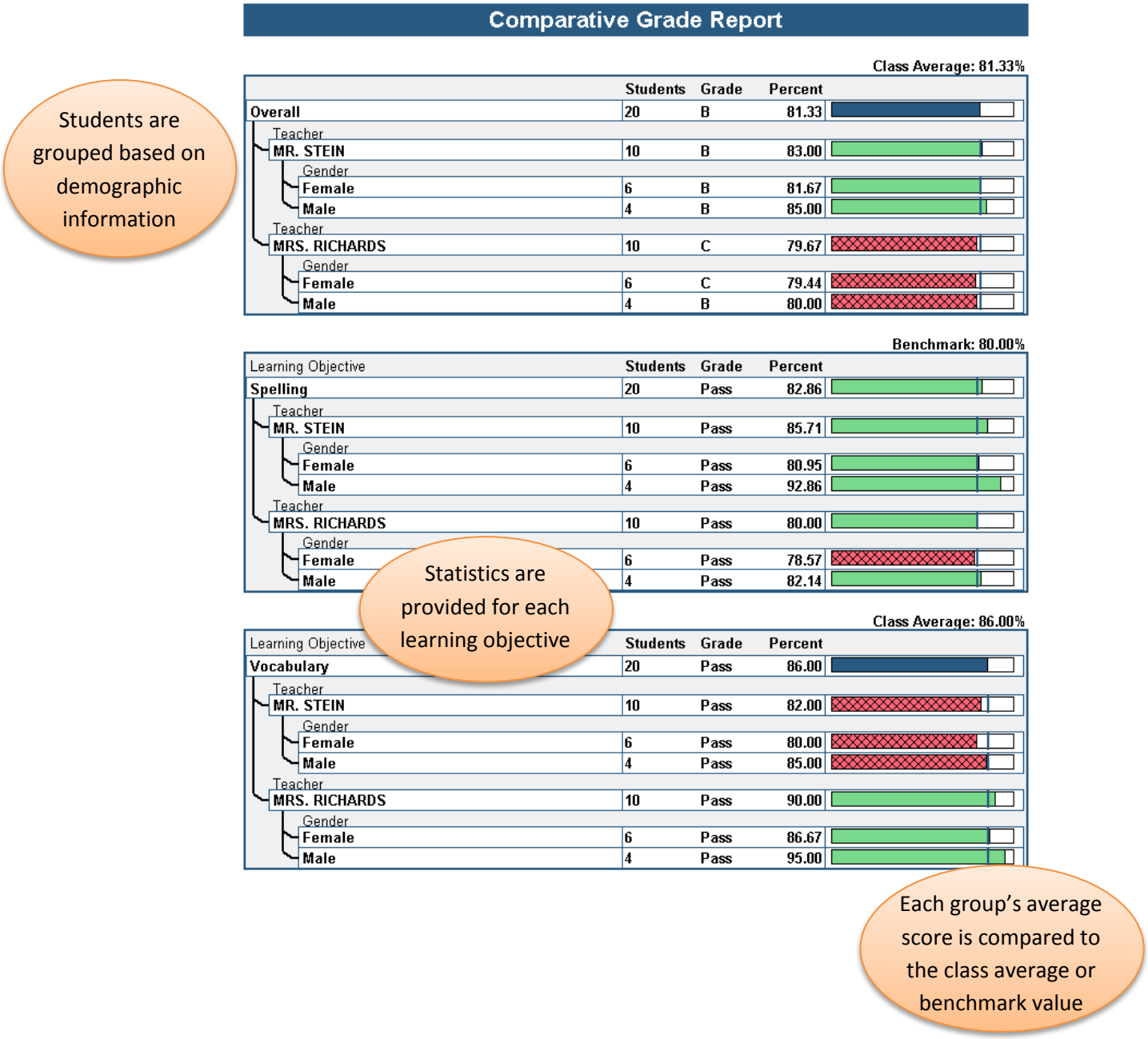
Spelling

: 80.00%

		Overall		Objective	Subjective
Student	Grade	Total	Percent	Total	Total
Lynn Zhang	Pass	6 / 7	85.71	6 / 7	0 / 0
Taylor Moore	Pass	7 / 7	100.00	7 / 7	0 / 0
Zachary Acaso	Pass	6 / 7	85.71	6 / 7	0 / 0
Aaron Bond	Pass	7 / 7	100.00	7 / 7	0 / 0
Lily Maynard	Fail	4 / 7	57.14	4 / 7	0 / 0
Jacqueline DiDonato	Pass	6 / 7	85.71	6 / 7	0 / 0
Alicia Sokova	Pass	7 / 7	100.00	7 / 7	0 / 0
Mark Fitzgerald	Pass	6 / 7	85.71	6 / 7	0 / 0
Caitlin Fried	Pass	6 / 7	85.71	6 / 7	0 / 0
Brian Schmidt	Pass	7 / 7	100.00	7 / 7	0 / 0
Luke Walker	Pass	5 / 7	71.43	5 / 7	0 / 0
Lydia Trappen	Fail	4 / 7	57.14	4 / 7	0 / 0
Nicole Garcia	Pass	5 / 7	71.43	5 / 7	0 / 0
Tara Hart	Pass	6 / 7	85.71	6 / 7	0 / 0
Mean	Pass	5.86	83.67	5.86	0.00

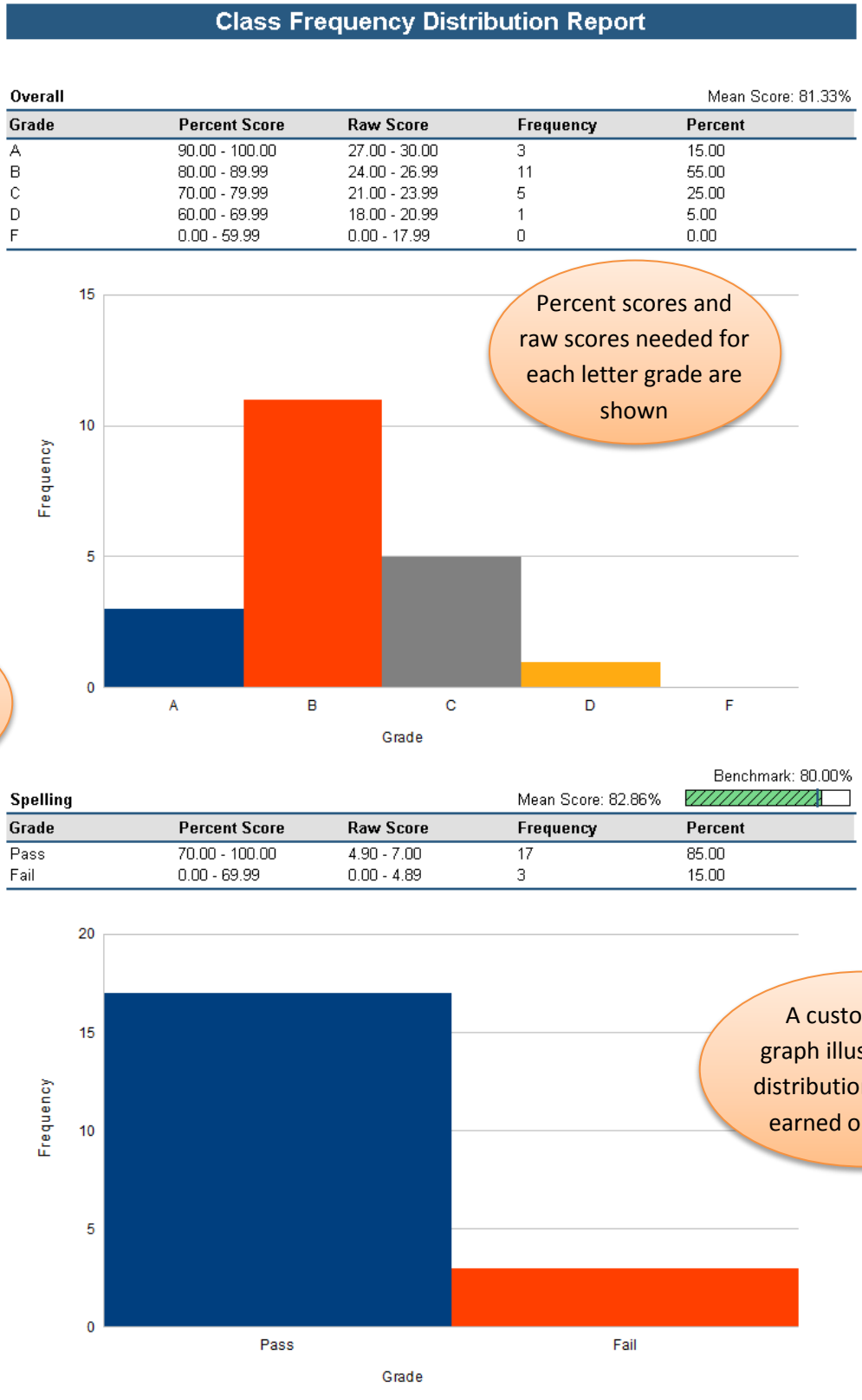
Comparative Grade Report

Use	Compares performance for different groups of students on the whole test and on each learning objective. This report is particularly helpful to ensure that all groups of students are performing well.
Description	The Comparative Grade report allows you to select up to three questions from your data set by which to categorize the students. For example, you can compare schools, instructors, classes or demographic information, such as gender, ethnicity, etc. The report displays the average grade that each subgroup earned on the test overall or on the specified objective. It also displays the number of students within each subgroup, the corresponding grade, percent score benchmark score (if applicable) and scaled score (if applicable). Groups are arranged in a hierarchical format.



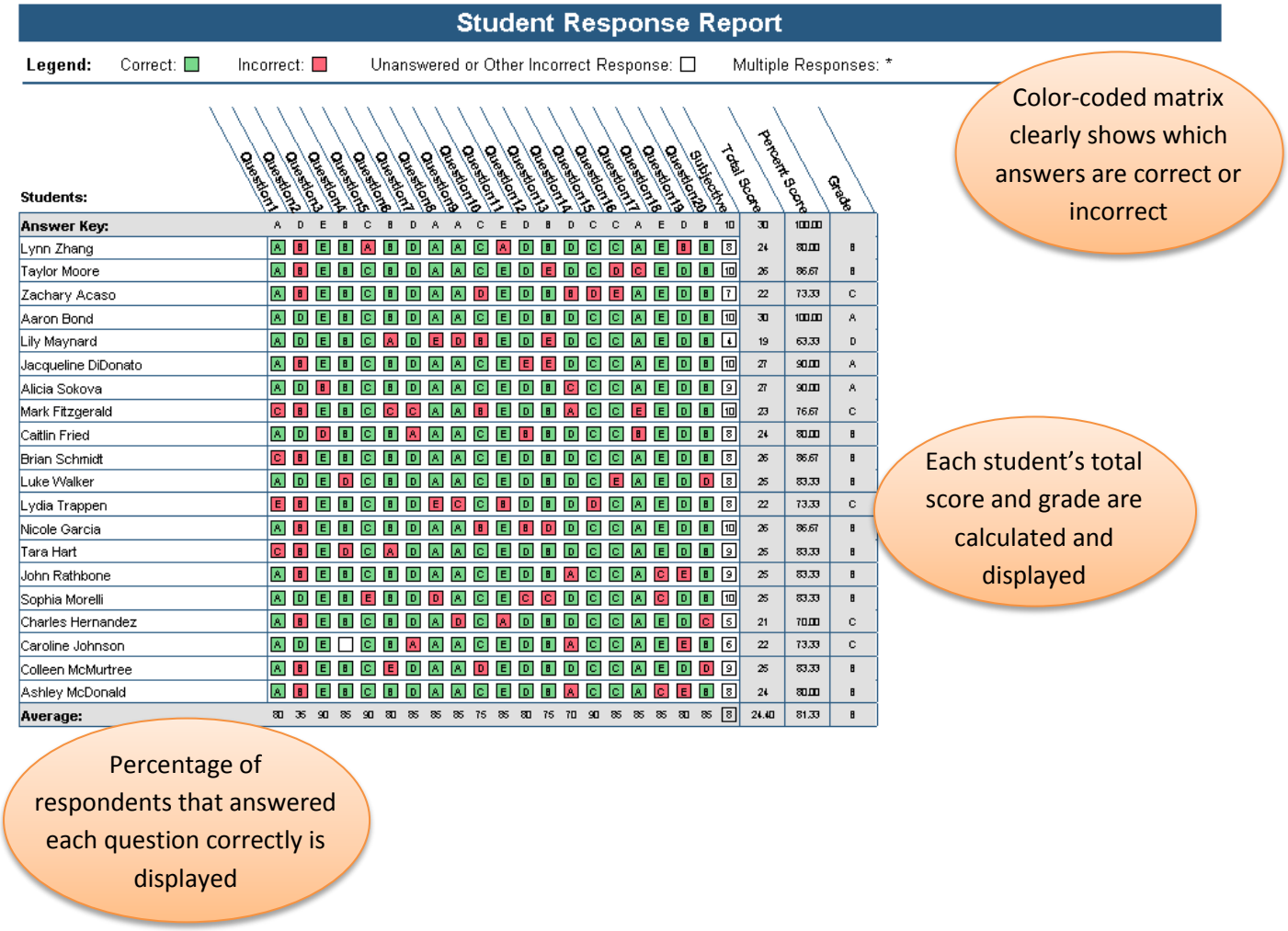
Class Frequency Distribution Report

Use	Provides a distribution of the grades for the entire class on the whole test and on each learning objective. This report is useful for gaining a quick grasp on class performance.
Description	The Class Frequency Distribution report displays a customizable graph of the frequency of each grade. The grade scale for the test, the percent score and raw score for each grade and the frequency of each grade can also be displayed. A corresponding percent is listed for each frequency. In addition, frequencies are calculated for each learning objective (if applicable).



Student Response Report

Use	Provides a graphical view of each student and question on the test in a matrix style. This report allows you to quickly see which questions were answered correctly and which were answered incorrectly.
Description	The Student Response report lists each student down the left and each question across the top. Correct responses are shown in green and incorrect responses are shown in red. This allows you to quickly see how each student answered the questions, as well as how each question performed. Both objective and subjective questions are included. At the end of the report, you can find each student's percent score, total score, grade and scaled score (if applicable). Mean statistics are also available along the bottom of the table for each question and for the summary score information.

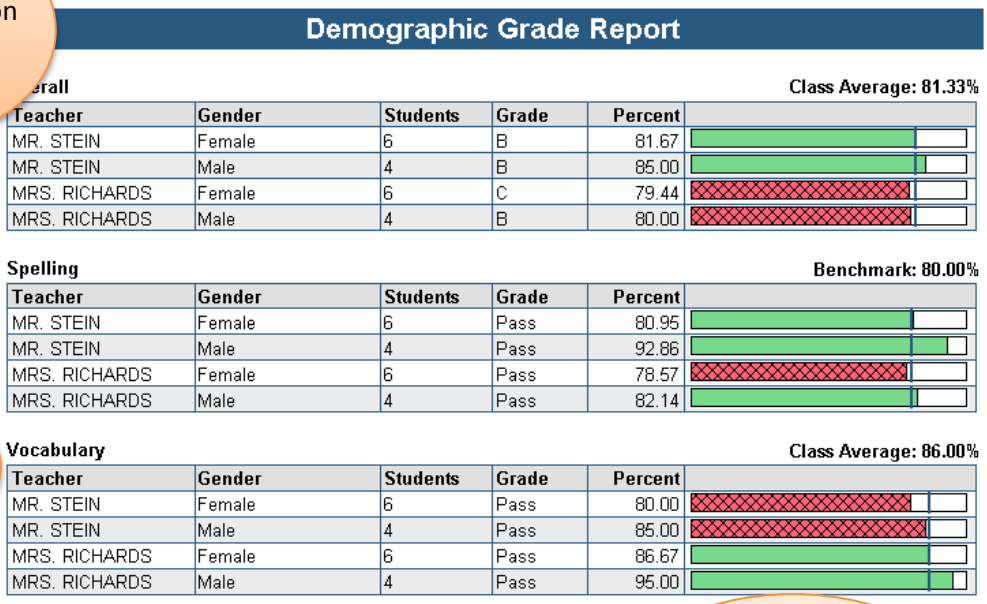


Students:	Question1	Question2	Question3	Question4	Question5	Question6	Question7	Question8	Question9	Question10	Question11	Question12	Question13	Question14	Question15	Question16	Question17	Question18	Question19	Question20	Subjective	Total Score	Percent Score	Grade
Answer Key:	A	D	E	B	C	B	D	A	A	C	E	D	B	D	C	C	A	E	D	B	10	30	100.00	
Lynn Zhang	A	B	E	B	A	B	D	A	A	C	A	D	B	D	C	C	A	E	B	B	8	24	80.00	B
Taylor Moore	A	B	E	B	C	B	D	A	A	C	E	D	E	D	C	D	C	E	D	B	10	26	86.67	B
Zachary Acaso	A	B	E	B	C	B	D	A	A	D	E	D	B	B	D	E	A	E	D	B	7	22	73.33	C
Aaron Bond	A	D	E	B	C	B	D	A	A	C	E	D	B	D	C	C	A	E	D	B	10	30	100.00	A
Lily Maynard	A	D	E	B	C	A	D	E	D	B	E	D	E	D	C	C	A	E	D	B	4	19	63.33	D
Jacqueline DiDonato	A	B	E	B	C	B	D	A	A	C	E	E	E	D	C	C	A	E	D	B	10	27	90.00	A
Alicia Sokova	A	D	B	B	C	B	D	A	A	C	E	D	B	C	C	C	A	E	D	B	9	27	90.00	A
Mark Fitzgerald	C	B	E	B	C	C	C	A	A	B	E	D	B	A	C	C	E	E	D	B	10	23	76.67	C
Caitlin Fried	A	D	D	B	C	B	A	A	A	C	E	B	B	D	C	C	B	E	D	B	8	24	80.00	B
Brian Schmidt	C	B	E	B	C	B	D	A	A	C	E	D	B	D	C	C	A	E	D	B	8	26	86.67	B
Luke Walker	A	D	E	D	C	B	D	A	A	C	E	D	B	D	C	E	A	E	D	D	8	25	83.33	B
Lydia Trappen	E	B	E	B	C	B	D	E	C	C	B	D	B	D	D	C	A	E	D	B	8	22	73.33	C
Nicole Garcia	A	B	E	B	C	B	D	A	A	B	E	B	D	D	C	C	A	E	D	B	10	26	86.67	B
Tara Hart	C	B	E	D	C	A	D	A	A	C	E	D	B	D	C	C	A	E	D	B	9	25	83.33	B
John Rathbone	A	B	E	B	C	B	D	A	A	C	E	D	B	A	C	C	A	C	E	B	9	25	83.33	B
Sophia Morelli	A	D	E	B	E	B	D	D	A	C	E	C	C	D	C	C	A	C	D	B	10	25	83.33	B
Charles Hernandez	A	B	E	B	C	B	D	A	D	C	A	D	B	D	C	C	A	E	D	C	5	21	70.00	C
Caroline Johnson	A	D	E		C	B	A	A	A	C	E	D	B	A	C	C	A	E	E	B	6	22	73.33	C
Colleen McMurtree	A	B	E	B	C	E	D	A	A	D	E	D	B	D	C	C	A	E	D	D	9	25	83.33	B
Ashley McDonald	A	B	E	B	C	B	D	A	A	C	E	D	B	A	C	C	A	C	E	B	8	24	80.00	B
Average:	80	35	90	85	90	80	85	85	85	75	85	80	75	70	90	85	85	85	80	85	8	24.40	81.33	B

Demographic Grade Report

Use	Compares performance for different groups of students on the test, overall, and on each learning objective. This report is particularly helpful to ensure that all groups of students are performing well.
Description	The Demographic Grade report allows you to select up to three questions from your data set by which to categorize the students. For example, you can compare schools, instructors, classes or demographic information, such as gender, ethnicity, etc. The report displays the average grade that each subgroup earned on the test overall or on the specified objective. It also displays the number of students within each subgroup, the corresponding grade, percent score, benchmark score (if applicable) and scaled score (if applicable). Groups are arranged in a table format.

Students are grouped based on demographic information



Demographic Grade Report

erall — Class Average: 81.33%

Teacher	Gender	Students	Grade	Percent
MR. STEIN	Female	6	B	81.67
MR. STEIN	Male	4	B	85.00
MRS. RICHARDS	Female	6	C	79.44
MRS. RICHARDS	Male	4	B	80.00

Spelling — Benchmark: 80.00%

Teacher	Gender	Students	Grade	Percent
MR. STEIN	Female	6	Pass	80.95
MR. STEIN	Male	4	Pass	92.86
MRS. RICHARDS	Female	6	Pass	78.57
MRS. RICHARDS	Male	4	Pass	82.14

Vocabulary — Class Average: 86.00%

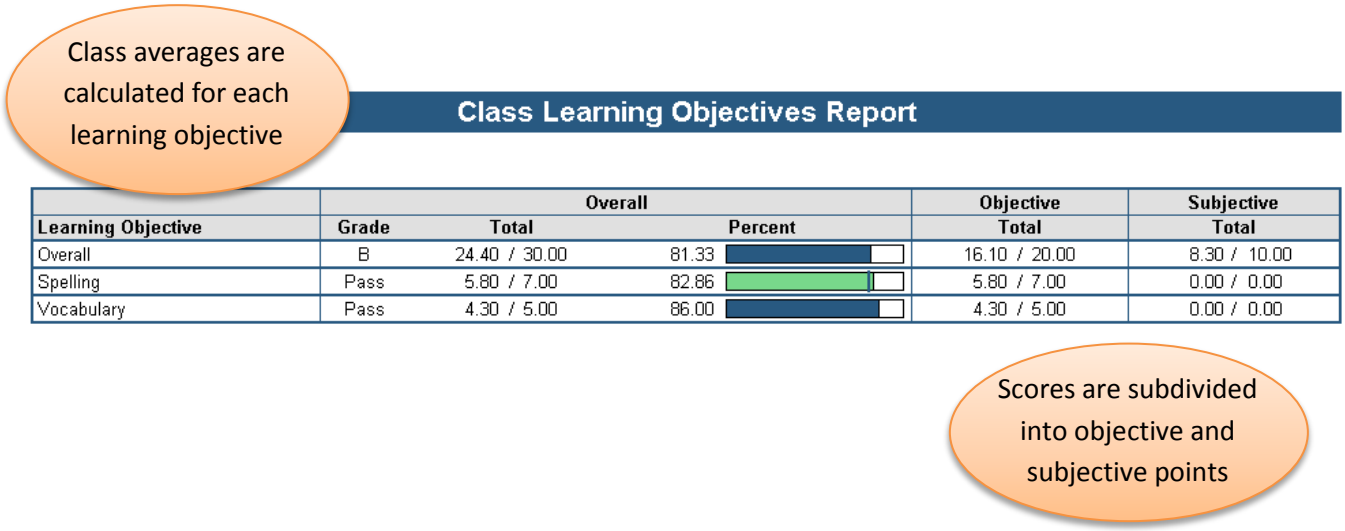
Teacher	Gender	Students	Grade	Percent
MR. STEIN	Female	6	Pass	80.00
MR. STEIN	Male	4	Pass	85.00
MRS. RICHARDS	Female	6	Pass	86.67
MRS. RICHARDS	Male	4	Pass	95.00

Statistics are provided for each learning objective

Each group's average score is compared to the class average or benchmark value

Class Learning Objectives Report

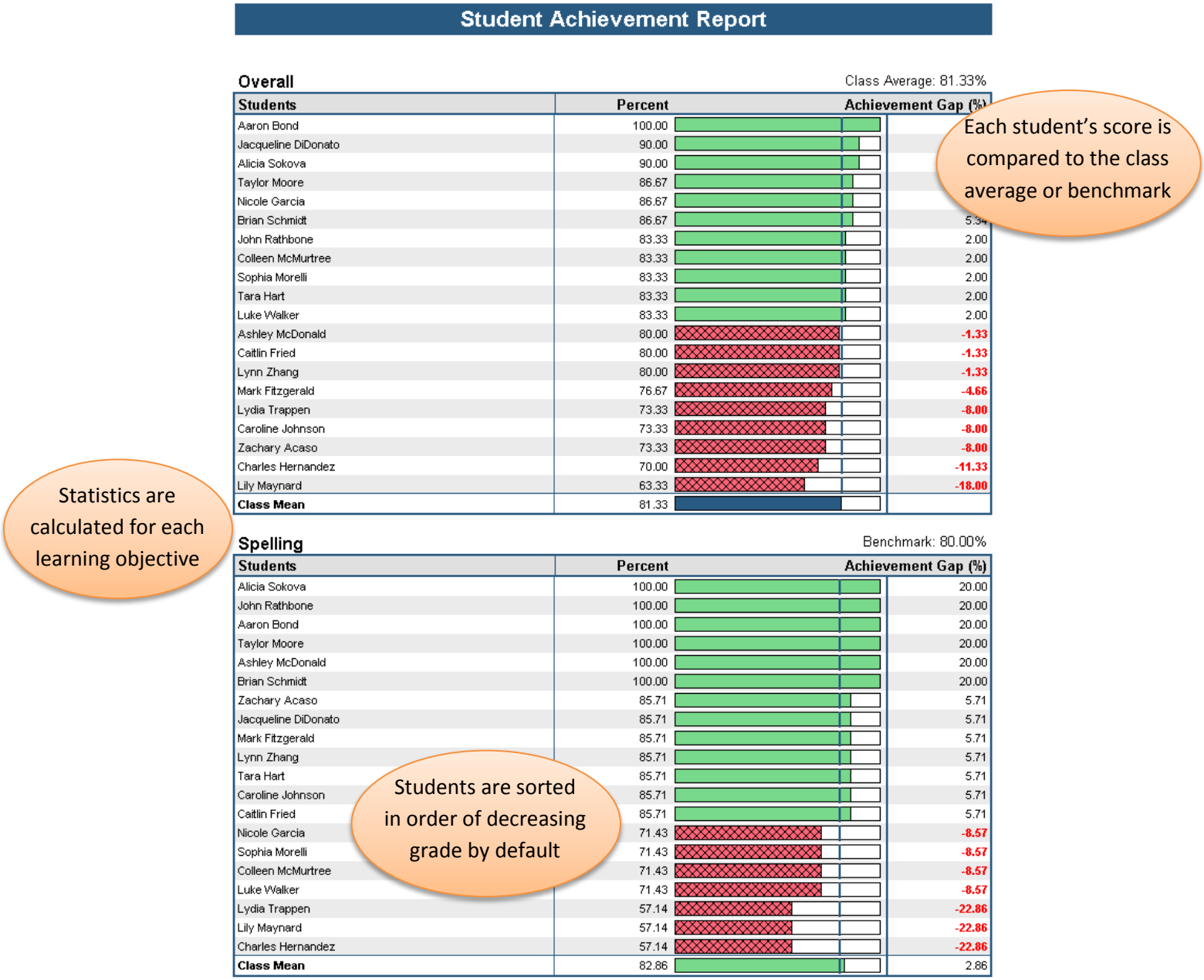
Use	Displays information about the performance of the class on the entire test and on each learning objective. This report is helpful to view the class's progress towards mastering standards specified in the learning objectives.
Description	The Class Learning Objectives report displays the class average percent and grade for each learning objective and for the entire test. It also displays the average number of objective and subjective points awarded within each learning objective. Learning objectives can be sorted by name or by total number of points possible. Additionally the number of questions that were answered correctly or incorrectly can be displayed. This report is only available if learning objectives have been defined.



	Overall			Objective	Subjective
Learning Objective	Grade	Total	Percent	Total	Total
Overall	B	24.40 / 30.00	81.33	16.10 / 20.00	8.30 / 10.00
Spelling	Pass	5.80 / 7.00	82.86	5.80 / 7.00	0.00 / 0.00
Vocabulary	Pass	4.30 / 5.00	86.00	4.30 / 5.00	0.00 / 0.00

Student Achievement Report

Use	Compares each student's performance on the whole test and on each learning objective to the corresponding benchmark value. This report allows you to quickly see which students are meeting standards and which students might be falling behind.
Description	The Student Achievement report displays each student's score overall and on each learning objective and compares the score to the benchmark score. Students are sorted by percent score by default, but can also be sorted by name. Several other statistics can also be displayed on this report, including the number of objective and subjective points earned by the student, the student's grade, the scaled score (if applicable), the total number of points earned by the student, the Z Score, T Score, ETS Score, Deviation IQ, percentile and number of questions answered correctly or incorrectly.



Student Grade Report

Use	Provides complete test information for each student, including which questions were answered incorrectly. It also includes an image of the test form to view marked responses. This report is helpful if you want to give a student or parent feedback on test performance.
Description	The Student Grade report has one student on each page. For each student, the report displays the grade, total score, percent score and scaled score (if applicable). Benchmark values are compared to the student's score (if applicable). It also displays learning objective performance (if applicable). Each question can be listed with the student's response, with incorrect responses highlighted. Finally, an image of the scanned test form is included in order to verify the student's response selection.

Only one student is included on each page

The student's score overall and on each learning objective is included

Clearly shows the student's response to each question and highlights incorrect answers

An image of the student's test is included for answer verification

Student Grade Report

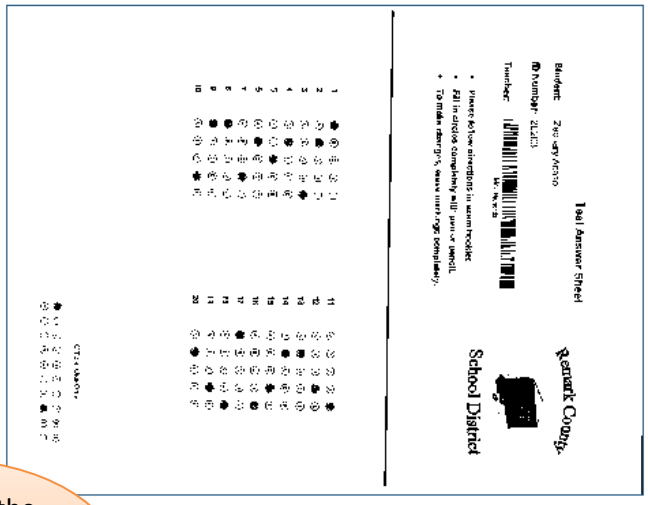
Legend: Incorrect: Partial Credit:

Student: Zachary Acaso

	Grade	Total Score	Score (%)
Overall	C	22 / 30	73.33
Spelling	Pass	6 / 7	85.71
Vocabulary	Pass	5 / 5	100.00

Responses

Question	Response	Correct Answer
Question1	A	
Question2	B	D
Question3	E	
Question4	B	
Question5	C	
Question6	B	
Question7	D	
Question8	A	
Question9	A	
Question10	D	C
Question11	E	
Question12	D	
Question13	B	
Question14	B	D
Question15	D	C
Question16	E	C
Question17	A	
Question18	E	
Question19	D	
Question20	B	
Subjective	7 / 10	



Student Response Similarities Report

Use	Compares each student's test to every other student's test and determines how similar they are to each other. This report is useful when attempting to identify students that may be cheating.
Description	The Student Response Similarities report compares all of the students' tests and displays any pairs of tests that have a percent similar above a certain threshold, set to 90% similar by default. It also displays the percent score, the number of questions that were answered similarly between the two students, broken down into correct similar and incorrect similar, and which questions had different responses.

Each pair of students with a similarity percentage above the threshold is listed

Student Response Similarities Report

Student: Aaron Bond

Similar Students	Similar (%)	Correct Similar	Incorrect Simila	Number Different	Different Responses
Alicia Sokova	90.00	18	0	2	Question3, Question14
Brian Schmidt	90.00	18	0	2	Question1, Question2

Any questions with different answers are indicated

Student: Alicia Sokova

Similar Students	Similar (%)	Correct Similar	Incorrect Simila	Number Different	Different Responses
Aaron Bond	90.00	18	0	2	Question3, Question14

Student: Brian Schmidt

Similar Students	Similar (%)	Correct Similar	Incorrect Simila	Number Different	Different Responses
Aaron Bond	90.00	18	0	2	Question1, Question2
Tara Hart	90.00	16	2	2	Question4, Question6

Student: Tara Hart

Similar Students	Similar (%)	Correct Similar	Incorrect Simila	Number Different	Different Responses
Brian Schmidt	90.00	16	2	2	Question4, Question6

Student: John Rathbone

Similar Students	Similar (%)	Correct Similar	Incorrect Simila	Number Different	Different Responses
Ashley McDonald	100.00	16	4	0	

Student: Ashley McDonald

Similar Students	Similar (%)	Correct Similar	Incorrect Simila	Number Different	Different Responses
John Rathbone	100.00	16	4	0	

Similar (%) indicates the percentage of questions that had the same answers

In this report, it is clear that John Rathbone and Ashley McDonald have all the same correct and incorrect responses. This suggests that there may have been cheating that occurred during this test. This would be something to look into further.

Detailed Item Analysis Report

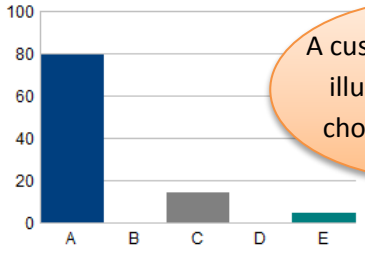
Use	Provides answer choice frequency information for each question, which can be useful for question validity. If problems are found (e.g., the question was poorly worded), you can choose not to include the question or to allow additional responses to be considered correct without rescanning test forms. In particular, this report provides more detailed information on each answer choice, including point biserial statistics.
Description	The Detailed Item Analysis report displays all of the answer choices for each question. For each answer choice, the frequency, percent and point biserial statistic are calculated. A customizable graph of the answer choice frequencies is also included in this report.

Statistics are calculated for each answer choice

Detailed Item Analysis Report

Question1

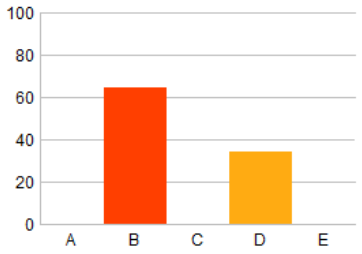
Response	Frequency	Percent	Point Biserial	Graph
***A**	16	80.00	0.29	
B	0	0.00	-	
C	3	15.00	-0.13	
D	0	0.00	-	
E	1	5.00	-0.33	
Total	20	100.00		



A customizable graph illustrates answer choice frequencies

Question2

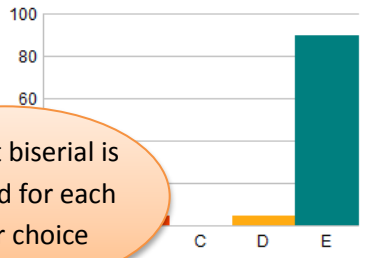
Response	Frequency	Percent	Point Biserial	Graph
A	0	0.00	-	
B	13	65.00	-0.31	
C	0	0.00	-	
***D**	7	35.00	0.31	
E	0	0.00	-	
	20	100.00		



The correct answer is bold and starred

Question3

Response	Frequency	Percent	Point Biserial	Graph
A	0	0.00	-	
B	1	5.00	0.30	
C	0	0.00	-	
D	1	5.00	-0.02	
***E**	18	90.00	-0.21	
Total	20	100.00		



The point biserial is calculated for each answer choice

The total number of respondents for each question is shown

Item Analysis Graph Report

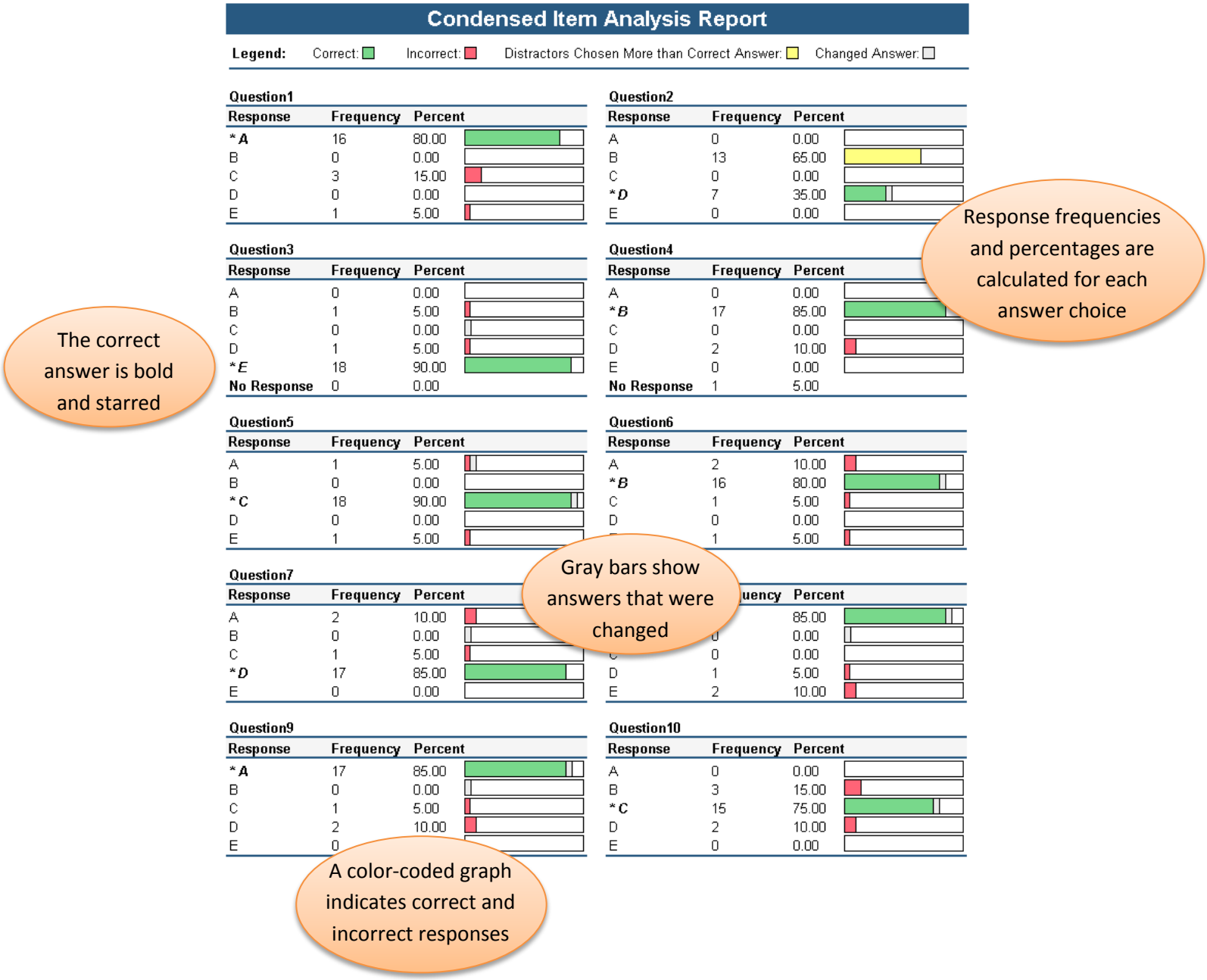
Use	Provides answer choice frequency information for each question, which can be useful for question validity. If problems are found (e.g., the question was poorly worded), you can choose not to include the question or to allow additional responses to be considered correct without rescanning test forms. In particular, this report only provides response frequencies for each question.
Description	The Item Analysis Graph report displays all of the answer choices for each question. For each answer choice, the frequency percent is calculated. A customizable graph of the answer choice frequencies is also included in this report.

A customizable graph illustrates answer choice frequencies

Response frequencies are calculated for each answer choice

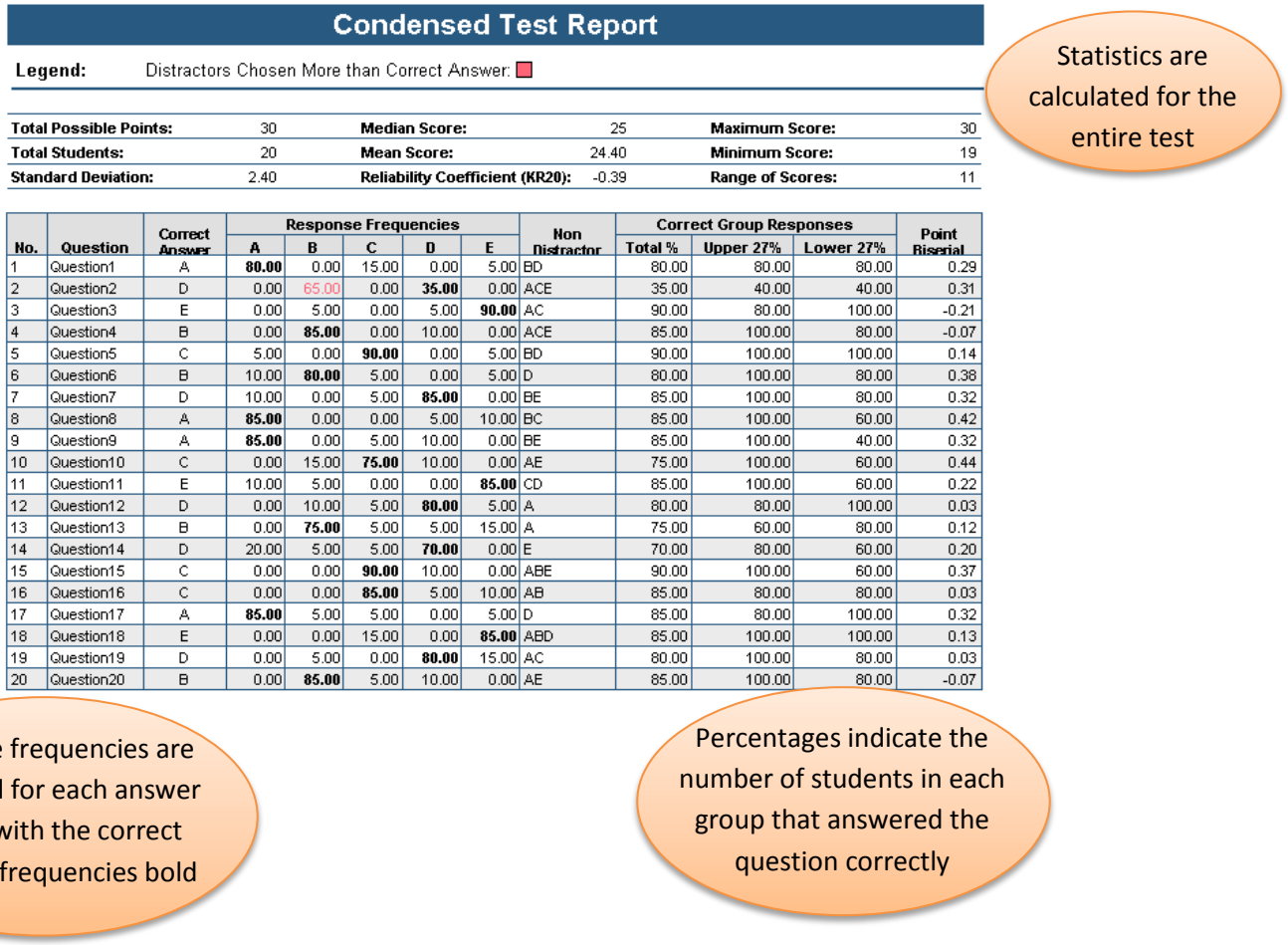
Condensed Item Analysis Report

Use	Provides answer choice frequency information for each question, which can be useful for question validity. If problems are found (e.g., the question was poorly worded), you can choose not to include the question or to allow additional responses to be considered correct without rescanning test forms. In particular, this report highlights any answer choices that were changed and any incorrect answer choices that were chosen more than the correct answer.
Description	The Condensed Item Analysis report displays all of the answer choices for each question. For each answer choice, the frequency and corresponding percent are calculated. A color-coded bar chart of the frequencies for each question is also included in this report. By default, incorrect answers are shown in red, correct answers are shown in green and answers chosen more often than the correct answer are shown in yellow. If an answer was changed, the original answer choice is shown in gray, and only the final choice is counted in the question's statistics.



Condensed Test Report

Use	Provides answer choice frequency information for each question, including distractor and class score information. This report is a great way to see question and class performance.
Description	The Condensed Test report lists each question on the test, along with the frequencies for each answer choice. Incorrect answer choices chosen more frequently than the correct answer are shown in red test. Class score data, including total possible points, total students, standard deviation, median score, mean score, reliability coefficient, maximum score, minimum score and range of scores, are also included. You can also display non distractors, point biserial statistics and upper/lower correct percentages for each question.



Condensed Test Report

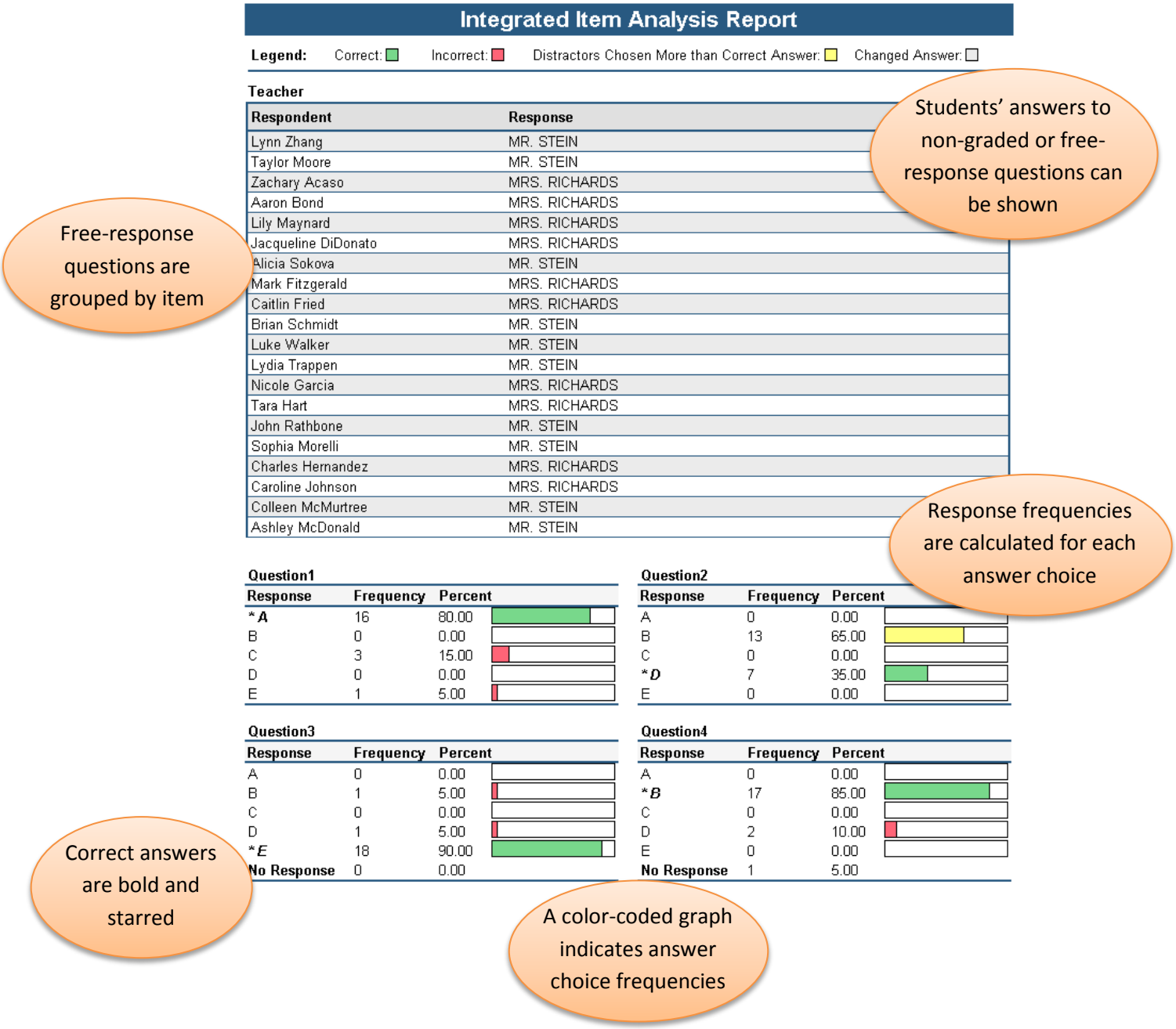
Legend: Distractors Chosen More than Correct Answer:

Total Possible Points:	30	**Median Score:**	25	**Maximum Score:**	30
Total Students:	20	**Mean Score:**	24.40	**Minimum Score:**	19
Standard Deviation:	2.40	**Reliability Coefficient (KR20):**	-0.39	**Range of Scores:**	11

No.	Question	Correct Answer	Response Frequencies					Non Distractor	Correct Group Responses			Point Biserial
			A	B	C	D	E		Total %	Upper 27%	Lower 27%	
1	Question1	A	**80.00**	0.00	15.00	0.00	5.00	BD	80.00	80.00	80.00	0.29
2	Question2	D	0.00	65.00	0.00	**35.00**	0.00	ACE	35.00	40.00	40.00	0.31
3	Question3	E	0.00	5.00	0.00	5.00	**90.00**	AC	90.00	80.00	100.00	-0.21
4	Question4	B	0.00	**85.00**	0.00	10.00	0.00	ACE	85.00	100.00	80.00	-0.07
5	Question5	C	5.00	0.00	**90.00**	0.00	5.00	BD	90.00	100.00	100.00	0.14
6	Question6	B	10.00	**80.00**	5.00	0.00	5.00	D	80.00	100.00	80.00	0.38
7	Question7	D	10.00	0.00	5.00	**85.00**	0.00	BE	85.00	100.00	80.00	0.32
8	Question8	A	**85.00**	0.00	0.00	5.00	10.00	BC	85.00	100.00	60.00	0.42
9	Question9	A	**85.00**	0.00	5.00	10.00	0.00	BE	85.00	100.00	40.00	0.32
10	Question10	C	0.00	15.00	**75.00**	10.00	0.00	AE	75.00	100.00	60.00	0.44
11	Question11	E	10.00	5.00	0.00	0.00	**85.00**	CD	85.00	100.00	60.00	0.22
12	Question12	D	0.00	10.00	5.00	**80.00**	5.00	A	80.00	80.00	100.00	0.03
13	Question13	B	0.00	**75.00**	5.00	5.00	15.00	A	75.00	60.00	80.00	0.12
14	Question14	D	20.00	5.00	5.00	**70.00**	0.00	E	70.00	80.00	60.00	0.20
15	Question15	C	0.00	0.00	**90.00**	10.00	0.00	ABE	90.00	100.00	60.00	0.37
16	Question16	C	0.00	0.00	**85.00**	5.00	10.00	AB	85.00	80.00	80.00	0.03
17	Question17	A	**85.00**	5.00	5.00	0.00	5.00	D	85.00	80.00	100.00	0.32
18	Question18	E	0.00	0.00	15.00	0.00	**85.00**	ABD	85.00	100.00	100.00	0.13
19	Question19	D	0.00	5.00	0.00	**80.00**	15.00	AC	80.00	100.00	80.00	0.03
20	Question20	B	0.00	**85.00**	5.00	10.00	0.00	AE	85.00	100.00	80.00	-0.07

Integrated Item Analysis Report

Use	Combines the Condensed Item Analysis report with the Response Report by Item. This report is an easy way to view answers to multiple choice questions and free response questions in the same report.
Description	The Integrated Item Analysis report displays each student's answers to the selected free-response questions or any questions that were not graded. It displays all of the answer choices for each graded multiple choice question. For each answer choice, its frequency and corresponding percent are calculated. A color-coded bar chart of the frequencies for each question is also included in this report. Correct answers are shown in green and incorrect answers are shown in red. Incorrect answer choices selected more than the correct answer are highlighted in yellow.



Integrated Item Analysis Report

Legend: Correct: Incorrect: Distractors Chosen More than Correct Answer: Changed Answer:

Teacher

Respondent	Response
Lynn Zhang	MR. STEIN
Taylor Moore	MR. STEIN
Zachary Acaso	MRS. RICHARDS
Aaron Bond	MRS. RICHARDS
Lily Maynard	MRS. RICHARDS
Jacqueline DiDonato	MRS. RICHARDS
Alicia Sokova	MR. STEIN
Mark Fitzgerald	MRS. RICHARDS
Caitlin Fried	MRS. RICHARDS
Brian Schmidt	MR. STEIN
Luke Walker	MR. STEIN
Lydia Trappen	MR. STEIN
Nicole Garcia	MRS. RICHARDS
Tara Hart	MRS. RICHARDS
John Rathbone	MR. STEIN
Sophia Morelli	MR. STEIN
Charles Hernandez	MRS. RICHARDS
Caroline Johnson	MRS. RICHARDS
Colleen McMurtree	MR. STEIN
Ashley McDonald	MR. STEIN

Question1

Response	Frequency	Percent
***A**	16	80.00
B	0	0.00
C	3	15.00
D	0	0.00
E	1	5.00

Question2

Response	Frequency	Percent
A	0	0.00
B	13	65.00
C	0	0.00
***D**	7	35.00
E	0	0.00

Question3

Response	Frequency	Percent
A	0	0.00
B	1	5.00
C	0	0.00
D	1	5.00
***E**	18	90.00
No Response	0	0.00

Question4

Response	Frequency	Percent
A	0	0.00
***B**	17	85.00
C	0	0.00
D	2	10.00
E	0	0.00
No Response	1	5.00

Free-response questions are grouped by item

Students' answers to non-graded or free-response questions can be shown

Response frequencies are calculated for each answer choice

Correct answers are bold and starred

A color-coded graph indicates answer choice frequencies

Test Statistics Report

Use	Provides statistical calculations on the test as a whole and on each learning objective. Some statistics are also provided for all objective questions and any subjective question and extra credit questions. This report is useful for gaining information on performance and statistical analysis.
Description	The Test Statistics report displays various statistics for the overall test and for each learning objective. Some statistics are also calculated for all objective question and any subjective questions and extra credit questions. Statistics used in this report include: *Score Data:* number of graded items, total points possible, maximum and minimum score. *Statistics:* mean score, mean percent score, benchmark, range, standard deviation and variance *Percentiles:* 25th and 75th percentiles, interquartile range and median score *Confidence Intervals:* upper and lower bound estimates for a 95% and for a 99% confidence interval *Test Reliability:* Kuder-Richardson formulas 20 and 21, Cronbach Alpha and standard error of measurement

Statistics are calculated for each learning objective

Test Statistics Report

	Overall	Objective	Subjective	Spelling	Vocabulary
Score Data					
Number of Graded Items	21	20	1	7	5
Total Points Possible	30	20	10	7	5
Maximum Score	30	20	10	7	5
Minimum Score	19	13	4	4	3
Statistics					
Mean Score	24.40	16.10	8.30	5.80	4.30
Mean Percent Score	81.33	80.50	83.00	82.86	86.00
Benchmark	-	-	-	80.00	-
Range of Scores	11.00	7.00	6.00	3.00	2.00
Standard Deviation	2.40	1.45	1.68	1.03	0.71
Variance	5.74	2.09	2.81	1.06	0.51
Percentiles					
Percentile (25)	22.50	-	-	5.00	4.00
Median Score	25.00	16.00	8.50	6.00	4.00
Percentile (75)	26.00	-	-	7.00	5.00
Inter Quartile Range	3.50	-	-	2.00	1.00
Confidence Intervals					
1%	22.87	-	-	5.14	3.84
5%	23.28	-	-	5.32	3.97
95%	25.52	-	-	6.28	4.63
99%	25.93	-	-	6.46	4.76
Test Reliability					
Kuder-Richardson Formula 20	-0.39	-	-	0.08	-0.21
Kuder-Richardson Formula 21	3.76	-	-	0.07	-0.23
Coefficient (Cronbach) Alpha	-0.39	-	-	0.08	-0.21
Standard Error of Measurement	1.71	-	-	0.99	0.79

Information is categorized by type of statistic

Test Item Statistics Report

Use	Displays basic statistical information for each question. This report allows you to quickly see which questions were answered correctly or incorrectly. It also includes information on question reliability.
Description	The Test Item Statistics report displays basic statistics for each question. These statistics include the point value, number of responses that were graded, the number of students that answered it correctly, incorrectly or did not answer and the percent of students who answered the question correctly. The point biserial is also calculated. Questions can be sorted by name, percent correct or point biserial.

Statistics are calculated for each question

Test Item Statistics Report

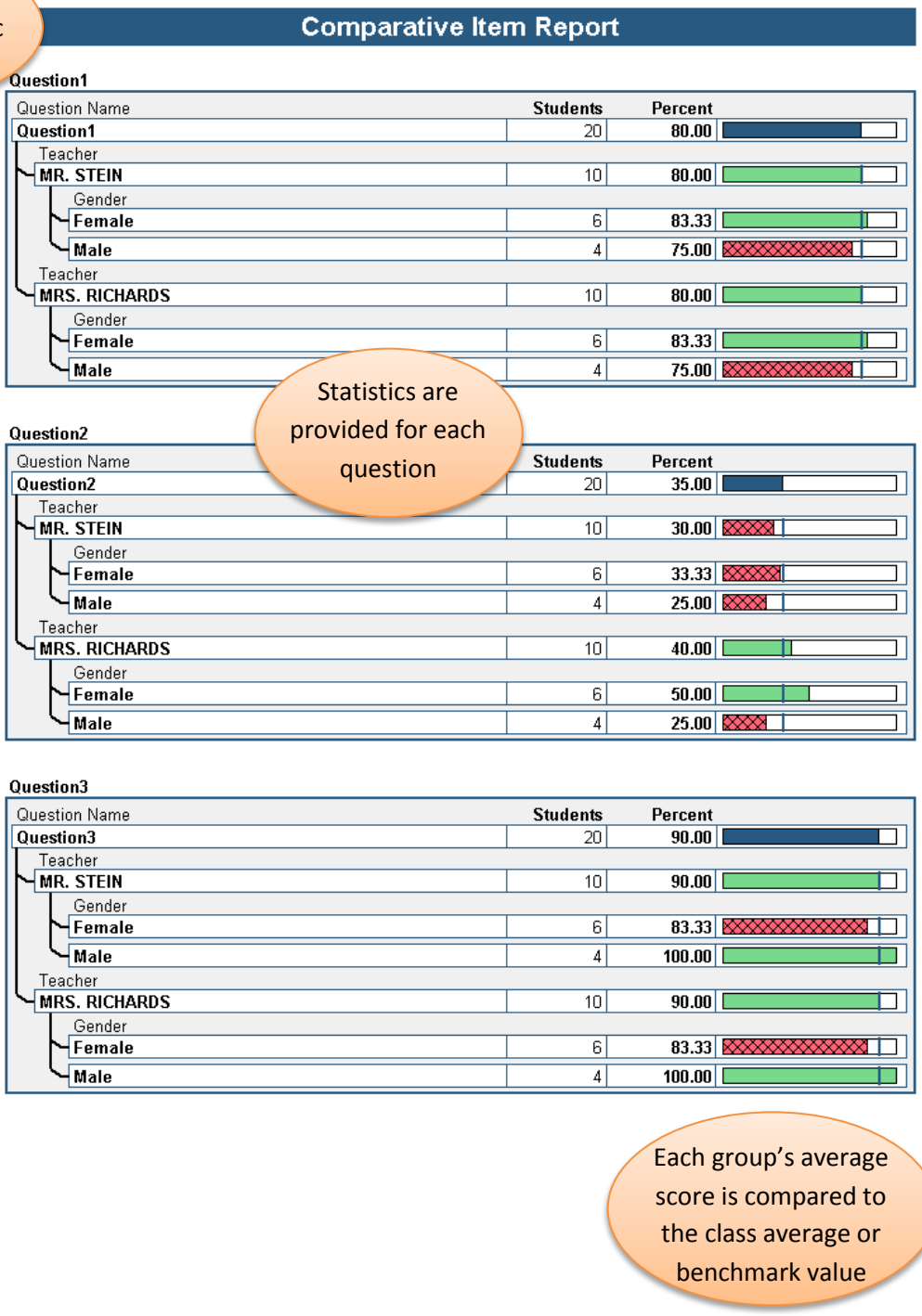
		Summary Statistics				Reliability	
Question	Points	Graded	Correct	Incorrect	Missing	Point Biserial	Percent Correct
Question1	1	20	16	4	0	0.29	80.00
Question2	1	20	7	13	0	0.31	35.00
Question3	1	20	18	2	0	-0.21	90.00
Question4	1	20	17	2	1	-0.07	85.00
Question5	1	20	18	2	0	0.14	90.00
Question6	1	20	16	4	0	0.38	80.00
Question7	1	20	17	3	0	0.32	85.00
Question8	1	20	17	3	0	0.42	85.00
Question9	1	20	17	3	0	0.32	85.00
Question10	1	20	15	5	0	0.44	75.00
Question11	1	20	17	3	0	0.22	85.00
Question12	1	20	16	4	0	0.03	80.00
Question13	1	20	15	5	0	0.12	75.00
Question14	1	20	14	6	0	0.20	70.00
Question15	1	20	18	2	0	0.37	90.00
Question16	1	20	17	3	0	0.03	85.00
Question17	1	20	17	3	0	0.32	85.00
Question18	1	20	17	3	0	0.13	85.00
Question19	1	20	16	4	0	0.03	80.00
Question20	1	20	17	3	0	-0.07	85.00

Point biserial and percent correct statistics indicate question reliability

Comparative Item Report

Use	Compares performance for different groups of students on each question. This report is particularly helpful to determine which students may be struggling with a certain question.
Description	The Comparative Item report allows you to select up to three questions from your data set by which to categorize the students. For example, you can compare schools, instructors, classes or demographic information, such as gender, ethnicity, etc. For all of the graded questions, the percentage of students in each subgroup that answered the question correctly is displayed. It also displays the number of students within each subgroup and any benchmarks. Groups are organized in a hierarchical format.

Students are grouped based on demographic information



Statistics are provided for each question

Each group's average score is compared to the class average or benchmark value

Response Report by Item

Use	Lists responses to open-ended questions and any questions that are not graded. This report is typically used to view data from free response questions, with answers grouped by question.
Description	The Response by Item report provides a listing of responses to available questions of your choosing. Available questions include any free-response questions and any questions that are not graded. Other questions can also be included. This report organizes the question data by question. A respondent identifier is optional.

Responses are grouped by question

Response Report by Item

Question: Teacher

Respondent	Response
Lynn Zhang	MR. STEIN
Taylor Moore	MR. STEIN
Zachary Acaso	MRS. RICHARDS
Aaron Bond	MRS. RICHARDS
Lily Maynard	MRS. RICHARDS
Jacqueline DiDonato	MRS. RICHARDS
Alicia Sokova	MR. STEIN
Mark Fitzgerald	MRS. RICHARDS
Caitlin Fried	MRS. RICHARDS
Brian Schmidt	MR. STEIN
Luke Walker	MR. STEIN
Lydia Trappen	MR. STEIN
Nicole Garcia	MRS. RICHARDS
Tara Hart	MRS. RICHARDS
John Rathbone	MR. STEIN
Sophia Morelli	MR. STEIN
Charles Hernandez	MRS. RICHARDS
Caroline Johnson	MRS. RICHARDS
Colleen McMurtree	MR. STEIN
Ashley McDonald	MR. STEIN

Question: Question1

Respondent	Response
Lynn Zhang	A
Taylor Moore	A
Zachary Acaso	A
Aaron Bond	A
Lily Maynard	A
Jacqueline DiDonato	A
Alicia Sokova	A
Mark Fitzgerald	C
Caitlin Fried	A
Brian Schmidt	C
Luke Walker	A
Lydia Trappen	E
Nicole Garcia	A
Tara Hart	C
John Rathbone	A
Sophia Morelli	A
Charles Hernandez	A
Caroline Johnson	A
Colleen McMurtree	A
Ashley McDonald	A

Each student's response is displayed

Response Report by Respondent

Use	Lists responses to open-ended questions and any questions that are not graded. This report is typically used to view data from free-response questions, with answers grouped by respondent.
Description	The Response by Item report provides a listing of responses to available questions of your choosing. Available questions include any free-response questions and any questions that are not graded. Other questions can also be included. This report organizes the question data by respondent. A respondent identifier is optional.

Responses are grouped by respondent

Response Report by Respondent

Respondent: Lynn Zhang

Question	Response
Teacher	MR. STEIN
Question1	A

Respondent: Taylor Moore

Question	Response
Teacher	MR. STEIN
Question1	A

Respondent: Zachary Acaso

Question	Response
Teacher	MRS. RICHARDS
Question1	A

Respondent: Aaron Bond

Question	Response
Teacher	MRS. RICHARDS
Question1	A

Respondent: Lily Maynard

Question	Response
Teacher	MRS. RICHARDS
Question1	A

Each student's responses for the selected questions are displayed

Respondent: Jacqueline DiDonato

Question	Response
Teacher	MRS. RICHARDS
Question1	A

Respondent: Alicia Sokova

Question	Response
Teacher	MR. STEIN
Question1	A

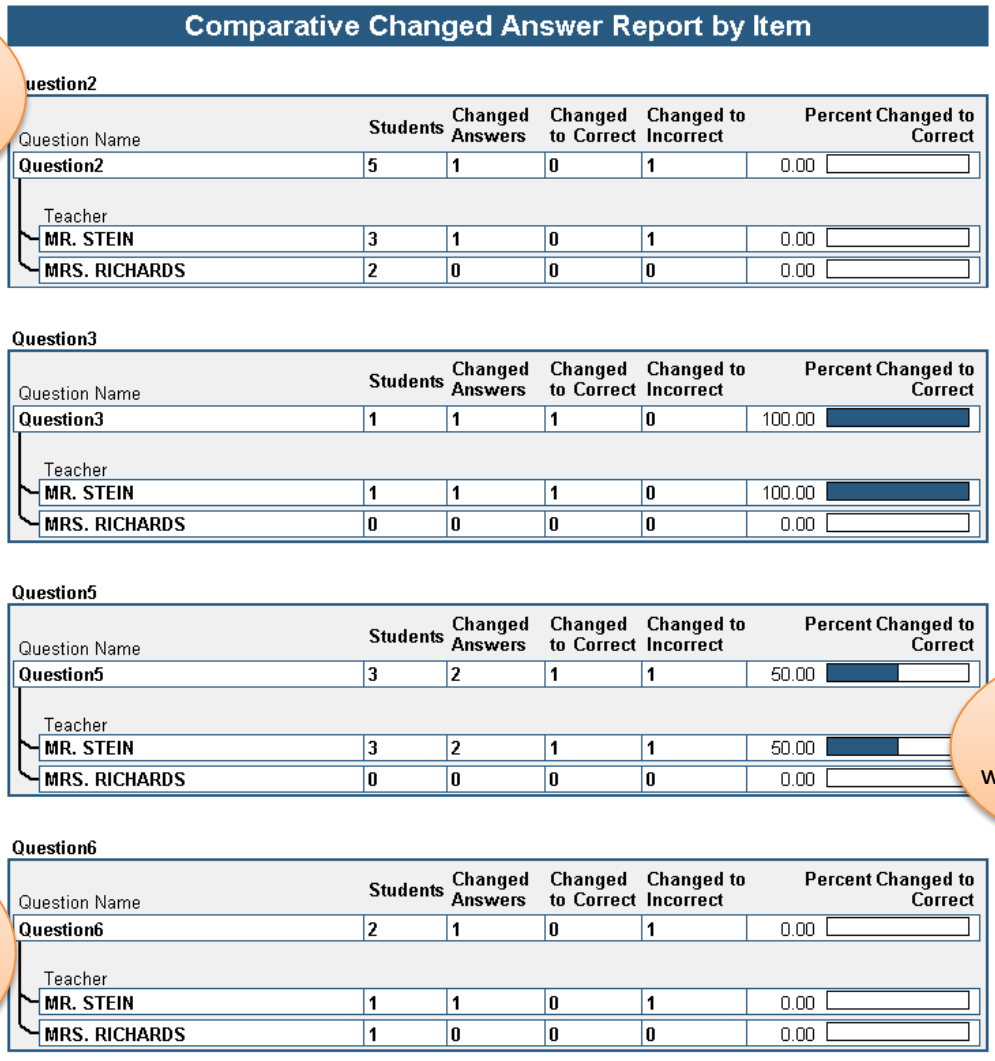
Respondent: Mark Fitzgerald

Question	Response
Teacher	MRS. RICHARDS
Question1	C

Comparative Changed Answer Report by Item

Use	Displays information about questions where one or more students' answers were changed, either by crossing out a response on the test form or by changing the processed data. This report would be useful if you wanted to know for which questions students changed their answers and what groups of students changed their answers.
Description	The Comparative Changed Answer by Item report allows you to select up to three questions from your data set by which to categorize students. For example, you can compare schools, instructors, classes or demographic information, such as gender, ethnicity, etc. It then displays the percentage of changed answers that were changed to the correct answer for each subgroup. This report also can display the number of students within each subgroup, the total number of answers that were changed, the number that were changed to correct and the number that were changed to incorrect. Groups are arranged in a hierarchical format under any question with a changed answer.

Statistics are provided for each question with at least one changed answer



Comparative Changed Answer Report by Item

uestion2

Question Name	Students	Changed Answers	Changed to Correct	Changed to Incorrect	Percent Changed to Correct
Question2	5	1	0	1	0.00
Teacher					
MR. STEIN	3	1	0	1	0.00
MRS. RICHARDS	2	0	0	0	0.00

Question3

Question Name	Students	Changed Answers	Changed to Correct	Changed to Incorrect	Percent Changed to Correct
Question3	1	1	1	0	100.00
Teacher					
MR. STEIN	1	1	1	0	100.00
MRS. RICHARDS	0	0	0	0	0.00

Question5

Question Name	Students	Changed Answers	Changed to Correct	Changed to Incorrect	Percent Changed to Correct
Question5	3	2	1	1	50.00
Teacher					
MR. STEIN	3	2	1	1	50.00
MRS. RICHARDS	0	0	0	0	0.00

Question6

Question Name	Students	Changed Answers	Changed to Correct	Changed to Incorrect	Percent Changed to Correct
Question6	2	1	0	1	0.00
Teacher					
MR. STEIN	1	1	0	1	0.00
MRS. RICHARDS	1	0	0	0	0.00

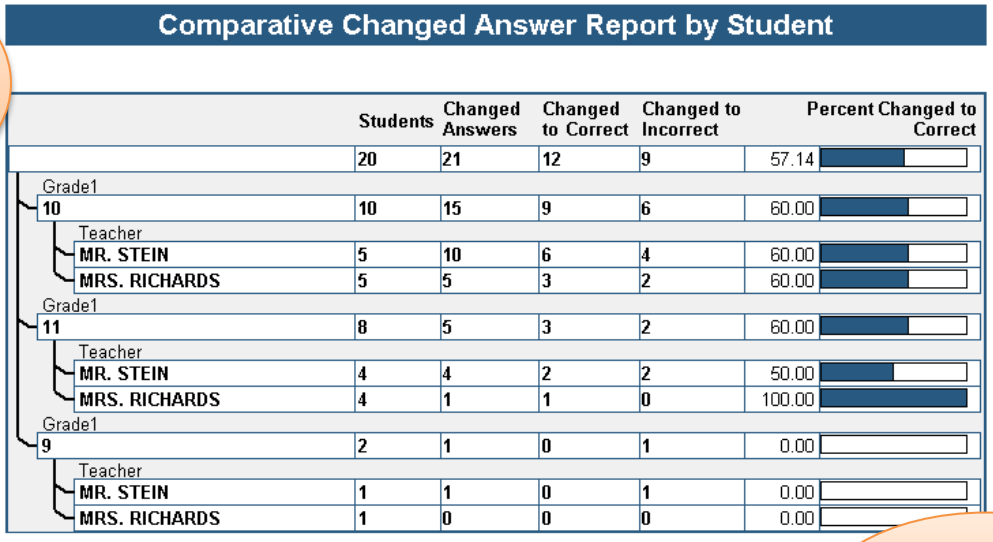
The percentage of changed answers that were changed to correct is shown

Students are grouped based on demographic information

Comparative Changed Answer Report by Student

Use	Displays information about students and whether or not any of their answers on the test were changed, either by crossing out a response on the test form or by changing the processed data. This report would be useful if you wanted to know which students changed their answers and what groups of students changed their answers.
Description	The Comparative Changed Answer by Student report allows you to select up to three questions by which to categorize students. For example, you can compare schools, instructors, classes or demographic information, such as gender, ethnicity, etc. It then displays the percentage of changed answers that were changed to the correct answer for each subgroup. This report also can display the number of students within each subgroup, the total number of changed answers, the number that were changed to correct and the number that were changed to incorrect. Groups are arranged in a hierarchical format, and all students are included.

Students are grouped based on demographic information



Comparative Changed Answer Report by Student

	Students	Changed Answers	Changed to Correct	Changed to Incorrect	Percent Changed to Correct
	20	21	12	9	57.14
Grade1					
10	10	15	9	6	60.00
Teacher					
MR. STEIN	5	10	6	4	60.00
MRS. RICHARDS	5	5	3	2	60.00
Grade1					
11	8	5	3	2	60.00
Teacher					
MR. STEIN	4	4	2	2	50.00
MRS. RICHARDS	4	1	1	0	100.00
Grade1					
9	2	1	0	1	0.00
Teacher					
MR. STEIN	1	1	0	1	0.00
MRS. RICHARDS	1	0	0	0	0.00

The percentage of changed answers that were changed to correct is shown

Changed Answer Report by Item

Use	Displays information regarding whether any answers were changed for a question, either by crossing out a response on the test form or by changing the processed data. This report would be useful if you wanted to know for which questions students changed their answers.
Description	The Changed Answer by Item report lists all of the questions on the test, and it displays the percentage of changed answers that were changed to the correct answer. This report can also display, for each question, the total number of changed answers, the number of answers that were changed to correct and the number of answers that were changed to incorrect. At the end of the report are mean and total information for each of these statistics.

Statistics are calculated for each question

Changed Answer Report by Item

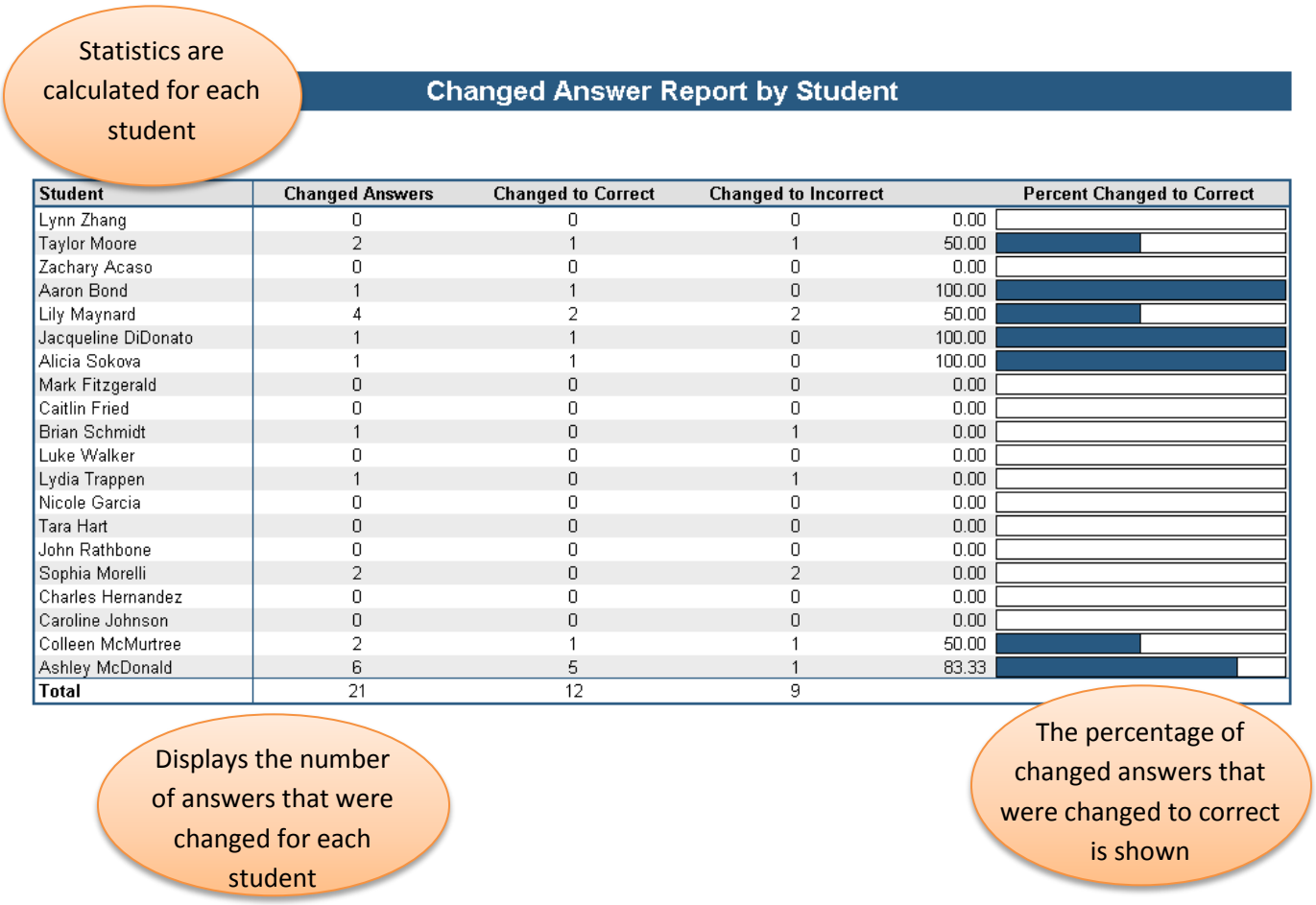
Question	Changed Answers	Changed to Correct	Changed to Incorrect	Percent Changed to Correct
Question1	0	0	0	0.00
Question2	1	0	1	0.00
Question3	1	1	0	100.00
Question4	0	0	0	0.00
Question5	2	1	1	50.00
Question6	1	0	1	0.00
Question7	1	1	0	100.00
Question8	2	1	1	50.00
Question9	2	1	1	50.00
Question10	1	0	1	0.00
Question11	1	0	1	0.00
Question12	1	1	0	100.00
Question13	2	1	1	50.00
Question14	0	0	0	0.00
Question15	0	0	0	0.00
Question16	2	2	0	100.00
Question17	1	1	0	100.00
Question18	1	0	1	0.00
Question19	1	1	0	100.00
Question20	1	1	0	100.00
Total	21	12	9	

Displays the number of answers that were changed for each question

The percentage of changed answers that were changed to correct is shown

Changed Answer Report by Student

Use	Displays information about students and whether or not any of their answers on the test were changed, either by crossing out a response on the test form or by changing the processed data. This report would be useful if you wanted to know which students changed their answers.
Description	The Changed Answer by Student report lists all of the students that took the test, and it displays the percentage of changed answers that were changed to the correct answer. This report can also display, for each student, the number of changed answers, the number of answers that were changed to correct and the number of answers that were changed to incorrect. At the end of the report are mean and total information for each of these statistics.



About Gravic, Inc.

Gravic, Inc. is a privately-held corporation located in Malvern, PA, about ten miles (16km) west of Philadelphia, PA USA. We make a number of computer software products for data collection, transformation and distribution uses. Customers for our products include schools (Primary and Higher Education), hospitals, large and small businesses, health care, government agencies, market researchers, trainers, meeting planners, brokerages, travel agencies, stock exchanges, electric utilities and telcos.

The Remark Products Group of Gravic, Inc. was founded as Principia Products in 1991. We have worked in the area of image processing and pattern recognition since the early 1980's. Our early work in OCR and ICR sold thousands of licenses. In 1991, we began to focus on OMR (optical mark recognition) with image scanners (Remark Office OMR® 1.0 release). Our strength is in our ability to innovate and develop solutions for common problems, while maintaining easy-to-use and affordable software.

In 2001, we renamed Principia Products, Inc. to Gravic, Inc. and began a merger of our other entities (ITI and Compucon Services). We completed the merger in 2003 and now all product groups are run by common management.

Please visit our website to learn more about our company, values, and purpose.

Gravic, Inc.— Remark Products Group

Web: http://www.RemarkSoftware.com

Phone: 1.800.858.0860 or +1.610.647.7850

FAX: +1.610.647.8771

E-Mail: Sales@gravic.com

Mail: 17 General Warren Blvd.

Malvern, PA 19355-1245 USA

Copyright © 2015 Gravic, Inc. , 17 General Warren Blvd., Malvern, PA 19355 - 1245 USA. All Rights Reserved. Gravic, Remark, Remark Office OMR, Remark Web Survey and Remark Quick Stats are registered trademarks of Gravic, Inc. All other products mentioned are trademarks of their respective holders. Specifications subject to change without notice.