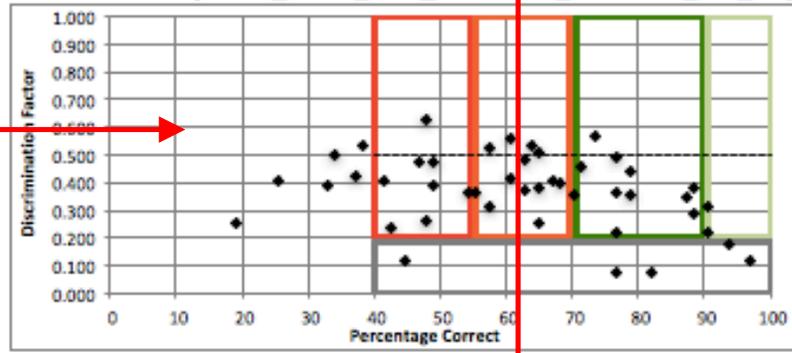


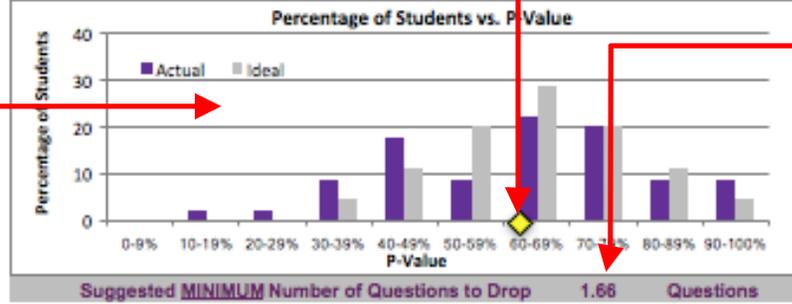
Item Analysis Tab

The **BLUE** squares can be adjusted. Everything else on the spreadsheet is protected.

Scatter Plot
Scatter plot of the discrimination factors



Histogram
Gray bars are the ideal distribution of question percentages; Purple bars are the assessment's distribution



Discrimination Factor
Measures how well a question correlates to student performance; target value is > 0.2

P-Value
Percentage correct

Black Highlights
Questions identified as review, rewrite or replace

Difficulty Rating
How the students performed, based on the set passing rates

	Question	Percentage Correct	Discrimination Factor
T	1	96.8	0.117
E	2	76.6	0.277
M	3	64.9	0.251
E	4	81.9	0.073
HR	5	48.9	0.392
E	6	76.6	0.079
HR	7	44.7	0.116
M	8	67.0	0.411
T	9	93.6	0.180
T	10	90.4	0.311
P	11	19.1	0.255
R	12	38.3	0.533
E	13	70.2	0.356
E	14	76.6	0.361
T	15	90.4	0.219
HR	16	41.5	0.404
HR	17	46.8	0.473
R	18	33.0	0.394
E	19	88.3	0.290
E	20	87.2	0.348
E	21	78.7	0.445
E	22	73.4	0.565
E	23	88.3	0.383
M	24	62.8	0.372
R	25	25.5	0.409

	Question	Percentage Correct	Discrimination Factor
M	26	68.1	0.399
M	27	64.9	0.379
M	28	57.4	0.312
E	29	78.7	0.358
HR	30	47.9	0.625
M	31	64.9	0.506
M	32	60.6	0.558
M	33	60.6	0.413
E	34	55.3	0.365
M	35	76.6	0.488
M	36	57.4	0.524
HR	37	48.9	0.477
M	38	63.8	0.530
HR	39	54.3	0.368
R	40	34.0	0.501
E	41	71.3	0.456
HR	42	47.9	0.265
M	43	62.8	0.486
HR	44	42.6	0.236
R	45	37.2	0.422
	46		
	47		
	48		
	49		
	50		

Test Difficulty 6.0

1-Easy to 10-Hard

Too Easy 90 %
Passing Rate

Easy 70 %
Passing Rate

Medium 55 %
Passing Rate

Hard 40 %
Passing Rate

Test Difficulty
Scaled between 1 and 10; 1 is easy, 10 is hard; target value is 5. The score is plotted on the bar graph as a yellow dot

Passing Rates
Percentages align with district exams

Minimum Drop
Number of SUGGESTED questions to drop to balance the purple and gray bars

Teacher Count*

Easy	12
Medium	20
Hard	13

Teacher Count
Counts the number of easy, medium and hard questions based on the teacher's evaluation of the assessment

*Default Settings
20% - 60% - 20%
Adjust by entering E, M or H into the BLUE cells beside the question numbers to the right.

Assessment Count

Too Easy	2
Easy	11
Medium	13
Hard	8
Weak	5
Review Rewrite Replace	6
Total	45

Assessment Count
Counts the number of questions in each category



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Item Analysis Tab

The **BLUE** squares can be adjusted. Everything else on the spreadsheet is protected.

Black Cells
Identifies the "TOP 10" questions to review

Gray Cells
Answer selection was not chosen by any students

Red Cell
The most picked incorrect answer and the percentage chosen

Difficulty Rating
Teacher's evaluation of the questions based on a well-defined rubric

Green Cell
The correct answer and the p-value

Black Cells
Highlighted selected Target

Target Number
Teacher's evaluation of the learning target related to each question.

LT	DIF	Question	A	B	C	D	E	Multiple Responses	
2A	E	1	97	3	0	0	0	-	-
1	E	2	77	23	0	0	0	-	-
3	E	3	65	35	0	0	0	-	-
4	M	4	18	82	0	0	0	-	-
3	E	5	51	49	0	0	0	-	-
5B	M	6	77	23	0	0	0	-	-
2B	M	7	55	45	0	0	0	-	-
2C	H	8	33	67	0	0	0	-	-
3	E	9	6	94	0	0	0	-	-
4	E	10	90	10	0	0	0	-	-
6	H	11	19	2	67	9	3	-	-
7	H	12	33	52	1	0	7	-	-
6	H	13	15	1	70	11	3	-	-
8	E	14	4	7	77	3	9	-	-
9	M	15	0	1	9	90	0	-	-
8	M	16	21	7	7	41	22	-	-
5C	E	17	1	1	47	33	17	-	-
7	H	18	33	6	47	11	0	-	-
8	H	19	3	2	88	1	3	-	-
4	H	20	5	0	4	87	3	-	-
2E	M	21	12	4	79	3	2	-	-
2F	M	22	0	3	2	73	20	-	-
4	F	23	0	88	4	7	0	-	-
5	F	24	9	63	0	9	20	-	-
7	H	25	26	28	31	15	0	-	-
6	E	26	2	68	18	12	0	-	-
3	M	27	5	13	65	11	5	-	-
8	M	28	4	2	57	7	29	-	-
9	M	29	7	5	79	6	2	-	-
10A	H	30	32	9	11	1	48	-	-
10B	H	31	10	10	5	11	65	-	-
2A	H	32	61	5	17	10	4	-	-
3	E	33	61	6	14	13	3	-	-
5C	E	34	1	11	55	1	31	-	-
6	M	35	5	7	77	1	10	-	-
7	M	36	57	15	16	4	6	-	-
8	H	37	23	14	49	5	6	-	-
4	M	38	9	15	10	64	2	-	-
1	M	39	1	19	16	54	9	-	-
4	H	40	7	17	24	14	34	-	-
5E	M	41	2	18	71	5	1	-	-
6	M	42	5	20	48	6	18	-	-
8	M	43	63	16	11	6	2	-	-
7	M	44	2	43	16	24	13	-	-
10C	H	45	15	11	20	37	13	-	-
		46							
		47							
		48							
		49							
		50							

COLOR KEY

- # Correct Answer
- # Most Picked Incorrect Answer
- # 100% Score = Review, Rewrite, Replace
- # Not Selected at All
- # Identified Questions

Identify the TOP*
10
Questions to Review
*(Calculated from ALL Teacher Data)

How are questions identified?
The relative change between the most picked incorrect answer and the correct answer is calculated for each question.
Most Incorrect - Correct
Correct
When the top "N" questions have been selected, the questions with the "N" largest relative changes are identified.

NUMBER OF FORMS 1
Percentage of Form A 100.0%
Percentage of OTHER FORMS 0.0%

The table to the immediate left is an analysis of **JUST FORM A** data. The table to the far left is an analysis of **ALL FORMS**. There may be differences in the percentages if students performed differently between forms.

View **Form A** data for **ALL Teachers**

IMPORTANT - The intent behind viewing teachers' data is to promote discussion for the **SOLE** purpose of advancing curriculum and improving instruction. It is **NOT** to encourage competition between teachers or identification of teachers. When teachers compete or are singled out students lose.

Identify the TOP
Select between 1 and 10 questions to review for misconceptions. Identify questions are highlighted

Number of Forms
Select either "1" or "2" or MORE" forms. It adjusts the choice percentages to add up to 100 percent.

View Form A data for
Display the choice selections of either: the average of all teacher data or the data of an individual teacher.



Item Analysis Tab

The **BLUE** squares can be adjusted. Everything else on the spreadsheet is protected.

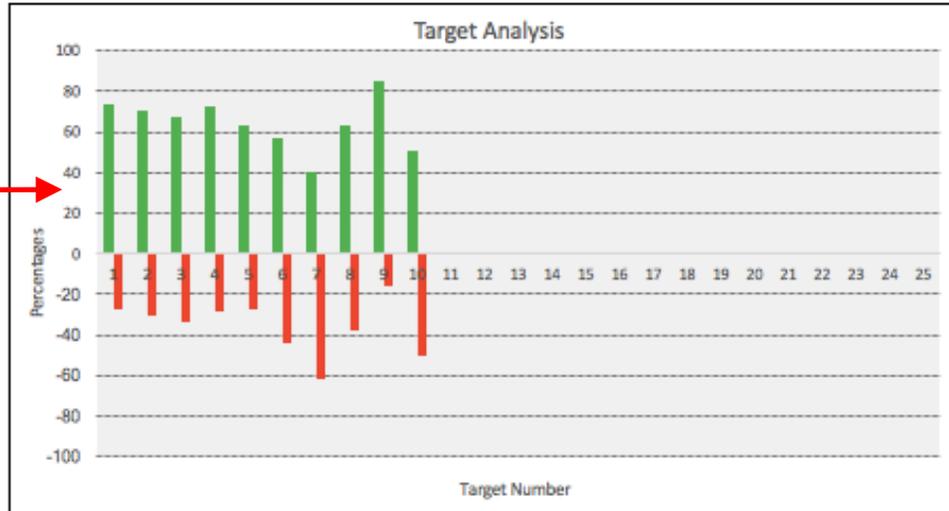
Number of Testable
Enter the number of testable targets for the assessment

Number of Testable (NOT Tested) Targets **10**

Highlight Learning Target **7** in Table

Target Number
Enter the number of the target to highlight

Histogram
Green bars are the average percentage correct; red bars are the average percentage incorrect for the learning targets



Tables
Tables show target counts, target percentages and difficulty counts.

Learning Target Averages										
Learning Target	1	2	3	4	5	6	7	8	9	10
Number of Questions	3	6	5	5	5	5	5	6	2	3
Percentage Correct	73	70	67	72	63	56	39	63	85	50
Percentage Incorrect	27	30	33	28	37	44	61	37	15	50

Difficulty Count										
Learning Target	1	2	3	4	5	6	7	8	9	10
Easy	1	1	4	2	3	1		1		
Medium	2	3	1	2	2	2	2	3	2	
Hard	2		1		2	3	2		3	

Color Key
Explanation of colored cells in the table above

- Color Key**
- # There MAY be too few questions over this target.
 - # There MAY be too many questions over this target.
 - # The average percentage correct for questions over this target.
 - # The average percentage incorrect for questions over this target.
 - # There may be too many EASY questions.
 - # There may be too many HARD questions.



Choice Analysis Tab

The **BLUE** squares can be adjusted. Everything else on the spreadsheet is protected.

Question Number
Select by either typing the number in the blue box or using the up/down arrows

Grade Breaks
Enter the grade breaks from your final scale selection.

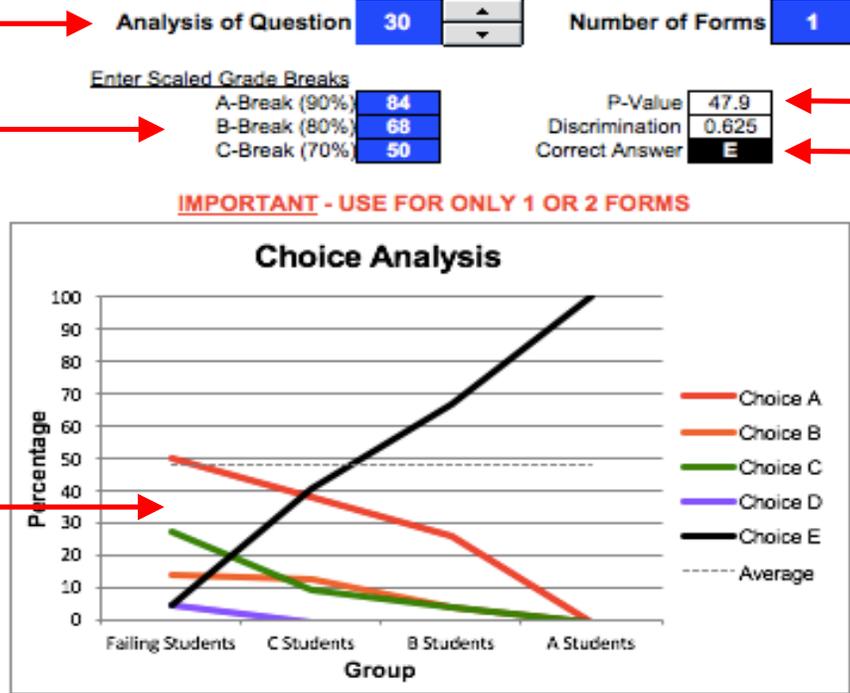
Graph
Displays the trends in the answer choices for A, B, C and failing students. It's a graphical representation of the data in gray beneath the graph. The question's average is displayed as a dotted line.

White Numbers
The white numbers highlighted in black are the number of students that selected answer choices: A, B, C, D and E.

Number of Forms
Select between 1 or 2 forms.

Statistics
P-Value and discrimination factor

Correct Answer
The correct answer for the selected question



****KEY****
The correct answer for the selected question

Black Numbers
The black numbers highlighted in gray are the percentages of A, B, C and failing students that selected answer choices: A, B, C, D and E.

Option	N	Group Percentages				Color	Key
		Failing	C	B	A		
A	30	50.0	37.5	25.9	0.0	Red	
B	8	13.6	12.5	3.7	0.0	Orange	
C	10	27.3	9.4	3.7	0.0	Green	
D	1	4.5	0.0	0.0	0.0	Purple	
E	45	4.5	40.6	66.7	100.0	Black	**KEY**
		22	32	27	13		

Total Number of Students **94**

SORTING - BOTH THE "STANDARD FORM" AND "FULL FORMAT" FORM MUST HAVE IDENTICAL SORTS.



Total Number of Students
The number of students that answered the selected question



MC Scale Tab

The **BLUE** squares can be adjusted. Everything else on the spreadsheet is protected.

Set Break Points
Set the letter grade breaks
Power
Used with the power scale
65%
Where to set the 65% break point

Lowest Passing Percentages
Ideally, student and teacher scores should be close to one another

Scale Selection
Choose between 7 different scaling methods

Lowest Passing Percentage
Teacher LPP in red text; student LPP highlighted in red with white text. Neither appear in this picture, sorry.

Number of Questions – Enter the number of questions on the assessment
Number of Dropped Questions – Moves the scaled score downward
Bottom Out Adjusted Score – Lowest grade given on the assessment
Adjust 69 – Change a score of 69 to either a 68 or 70

Test Statistics Assessment average, failure percentage, letter grade percentages, mean, median, mode and standard deviation

Questions Dropped from Scale
Moves the scale upward

Class Averages
Highest average in green; lowest average in red

Test Reliability
Target score is between 0.6 and 0.9

Manual Scale
Enter scores then select manual scale

Scale Description
Brief description of each of the 7 scaling methods

MC Scale for 50_Team_with_Individual_Teachers_MC_FR_NIWE

Number of Questions: **45** Average: **80** % **18** % are As
 Number of Dropped Questions: **2** Failure Rate: **15** % **29** % are Bs
 Bottom OUT Adjusted Score at: **50** % **14** out of **94** Students Failed **38** % are Cs
 Adjust 69 to: **70**

Power: **0.45** Set Break Points: A-B Break **84** %, B-C Break **68** %, C-F Break **50** %, **65** % Break **35** %

Score Frequency: 5% or Greater, 2% to 5%, 0 to 2%

Student LPP: **56** % (Norm-Referenced), Teacher LPP: **55** % (Criterion-Referenced)

Test Reliability: **0.86**

Test Statistics: 13 % between 69 and 65, 2 % less than 65, 0 Questions Dropped from Scale

Period	Average
Zero	
First	81.9
Second	76.9
Third	75.9
Fourth	
Fifth	83.0
Sixth	
Seventh	
Eighth	

Scaling Descriptions:
LPP - Lowest Passing Percentage
 A weighted calculation of the number of EASY, MEDIUM and HARD questions with their associated passing rates.
NO Scale
 Traditional 70% to pass
Linear Scale
 Uniform scale between 100% and the "Bottom OUT Adjusted Score"
70 Break Point
 Bi-Uniform Scale between
 1. 100% and the "C-F Break"
 2. "C-F Break" and "Bottom OUT Adjusted Score"
A-B-C Break Point Scale

Colored Frequencies
Each color represents a range of scores within a standard deviation.



MC Summary Tab

The **BLUE** squares can be adjusted.

Statistics
All statistical and curve data is copied from the Curve Calculator tab.

Numbering
Lists the "TOP 10" questions in numerical order. Comments can be typed in the cell to the right.

Summary of 50_Team_with_Individual_Teachers_MC_FR_NEWE

Scaling Summary

80	Average Score
18	% Earned an A
29	% Earned a B
38	% Earned a C
15	% Below 70
13	% between 69 and 65
2	% Below 65

TOP 10 Questions to Review
(Listed in NO Particular Order)

#	Notes
5	
7	
11	
12	
17	

Raw Score | Scaled Score

45	100
44	100
43	100
42	99
41	97
40	96
39	94
38	93
37	91
36	90
35	88
34	87
33	85
32	84
31	83
30	81
29	80
28	78
27	77
26	76
25	75
24	73
23	72
22	71

Grade Distribution

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UNLOCK the spreadsheet to sort the data to the right. PASSWORD is "gk".

Target Number	Teacher Level Evaluation	Student Level Performance	Click on the BLUE cell below to order by percentage correct	Click on the BLUE cell below to order by question number
1	E	T	97	1
2A	E	E	77	2
4	M	M	65	3
3C	M	E	82	4
5A	E	H	49	5
6	M	E	77	6
6	M	H	45	7
1	H	M	67	8
2B	E	T	94	9
8	E	T	90	10
9	H	R	19	11
10	H	R	38	12
2E	H	E	70	13
3B	E	E	77	14
2E	M	T	90	15
8	M	H	41	16
5B	E	H	47	17
4	H	R	33	18
5C	H	E	88	19
6	M	E	87	20
7	M	E	79	21
6	M	E	73	22
7	E	E	88	23
7	E	M	63	24
8	H	R	26	25
9	E	M	68	26

Blue Cells
Unlocking the spreadsheet will allow the questions to be sorted; password is "gk".

Black Cells
The "TOP 10" questions are highlighted in black.

Learning Target
The teacher's evaluation is copied from the Item Analysis tab.

Teacher Evaluation
The teacher's evaluation is copied from the Item Analysis tab.

P-Value
Score are copied from Item Analysis tab.

Student Evaluation
The students' performance are copied from the Item Analysis tab.



Student Scores Tab

The **BLUE TEXT** can be adjusted. Everything else on the spreadsheet is protected.

SORT before making any changes to the "Raw Score"

Period	MC Score	MC Scale	FR Score	FR Scale	Combined Scores	Combined Scale	Last Name	First Name
1	24	73	45	90	35	73	Anderson	Lois
1	39	94					Bailey	Diana
1	33	85					Cooper	Samuel
1	31	83					Gonzales	Louise
1	27	77					Griffin	Martin
1	27	77					Henderson	Christopher
1	22	71					Hill	Matthew
1	31	83					James	Shirley
1	41	97					Jones	Carl
1	31	83					King	Pamela
1	32	84					Morgan	Sarah
1	27	77					Morris	Alice
1	41	97					Patterson	Shawn
1	31	83					Sanders	Gloria
1	21	70					Torres	Michael

Sorting
Sort by period then by last name before entering any MC or FR Scores. Sort the data on the Standard Form tab

Scaled Scores
The scaled scores are copied from the MC, FR and Combined Scale tabs.

MC Score
The MC Score can be entered manually if needed.

FR Score
The MC Score must be entered manually

Combined Scores
The calculated weighted average of the MC and FR Scores



FR and Combined Scale Tabs

The **BLUE** squares can be adjusted. Everything else on the spreadsheet is protected.

The **FR Scale** tab functions like the **MC Scale** tab.

The **Combined Scale** tab functions like the **MC Scale** tab expect the weight of the multiple-choice and free response must be entered. The default setting is 100% multiple-choice.

Number of Points	<input type="text" value="45"/>
Number of Dropped Questions	<input type="text" value="0"/>
Bottom OUT Adjusted Score at	<input type="text" value="50"/> %
Adjust 69 to	<input type="text" value="69"/>
Power	Set Break Points
n= <input type="text" value="0.45"/>	A-B Break <input type="text" value="84"/> %
$0 < n < 1$	B-C Break <input type="text" value="68"/> %
$100^{1-n}x^n$	C-F Break <input type="text" value="50"/> %
	<input type="text" value="65"/> % Break <input type="text" value="40"/> %
Multiple-Choice Weight	<input type="text" value="100"/> %
Free Response Weight	<input type="text" value="0"/> %

Weights
Enter the weight of the multiple-choice portion of the assessment.

