

Synergy Grade Book Calculations - From a Humanities Teacher

Before exploring the multiple ways teachers can set up their Synergy Grade Book, here's a [short video](#) from Synergy trainer Travis McKenna to explain the difference between *Max. Score* and *Points*.

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Scenario 1: Total Points Calculation

The total points option is often the default setting for grading programs (e.g., *Making the Grade*) - and also the easiest to explain to a parent. Teachers assign point values to each assignment as they set up the assignment. The more important an assignment, the more points assigned to it. The score for an individual assignment is determined by dividing the student's score by the maximum point value. At the end of a grading period, students' total points earned are divided by the total points possible.

Example: If a student scores 191 points out of 220 possible points for a subject (e.g., Science), the final grade would equal 86%.

With a total points calculation, each time you set up a new assignment, you will determine how much the assignment is worth by entering the points in the *Max. Score* box (shown in the screenshot below). The *Max. Score* is the maximum number of points a student can earn for an assignment. It's also the denominator for the assignment when calculating the percentage points earned. You will also change the *Points* box from the default setting of 1 to match your *Max. Score* for the assignment, as reflected in the screenshot below. For *total points* scoring, the *Max. Score* and *Points* are always equal.

Category Values

TYPE	POINTS	# ASGN.
Homework	10.00	1
Assignment	50.00	1
Project	100.00	1
Test	20.00	1

Assignment Settings

Assignment Name

From Seed to Seed - Garden Observations

Description

Now that you have planted a vegetable in our school garden, you will record your observations ...

Assignment Type

Assignment

Subject

Science

Score Type

Raw Score

Max. Score	Points
50	50

Rubric

<< select >>

Date of Assignment

5/27/2017

Assignment Category

Normal

Due Date

6/14/2017

Parent/Student Portal

Show Assignment in Portal

Show Rubric Score In Portal

Show only when scored

Assignment Drop Box

Enable Assignment Drop Box

Although the math is easy to explain with total points, it's important to be aware of and think about the value you are giving individual assignments. If, for instance, you gave two quizzes on fractions, the first with 10 questions worth 10 total points and the second with 15 questions worth 15 total points, the second quiz would have a greater impact on a student's grade than the first one.

In the sample below (from [Travis McKenna](#)), the teacher has assigned and graded four assignments, each with *Max Score* equal to *Points*. In this scenario, the 20-point assignment has twice the weight of the 10-point assignment, and the 90-point assignment is worth more than all of the other assignments combined. A poor score on the 90-point assignment would drastically alter a student's grade.

	Assignment Max Score	Assignment Points	Example: Student Score/Max Score	Student Percentage /Decimal	Grade Book Value (weight): Student Percentage x Points	Student total point value in Grade Book	Student total point value /Total Points
Assignment 1	20	20	18/20	90% / 0.9	0.9 x 20	18	$18+36+6+5=65$ $65/125$ Student Overall Class Grade: 52%
Assignment 2	90	90	36/90	40% / 0.4	0.4 x 90	36	
Assignment 3	10	10	6/10	60% / 0.6	0.6 x 10	6	
Assignment 4	5	5	5/5	100% / 1	1 x 5	5	

When parents check on their child's progress by accessing Grade Book on through the ParentVUE app, they will be able to see how the grades have been calculated. In the sample below, the teacher is using total points.

The screenshot shows the BFirst Grade Book interface. At the top, there are navigation tabs for 'Home' and 'My Account', and a user greeting: 'Good morning, FirstMO O>Last, 6/10/2017'. The main header includes the BFirst logo and school name 'Anna Kirchgater Elementary (916-689-9150)'. Below this, a breadcrumb trail reads 'Trimester 3 :: Reading / Language Arts :: The Forbidden Treasu'. The central section is titled 'Grade Book Assignment Detail' and contains a table with the following information:

Course	4TH GRADE (00040)	Period	1	Teacher	Gail Desler	
Assignment	The Forbidden Treasure - A Hmong Folktale	Type	Project	Date	05/14/2017	
Score	98 out of 100.00	Score Type	Raw Score	Points	98.00 / 100.00	
Description					Due Date	05/26/2017
				Notes		

In this next sample, the teacher is weighting assignments with a *Points* value (weight) of 1, as explained in **Option/Scenario 2**.

Grade Book Summary for S2

Assignment Details for Creative Writing & Thinking (20170912) / Period: 2 / Gail Deslar / A- (90.0%)

Date	Assignment	Assignment Type	Resources	Score	Score Type	Points	Notes	Drop Box
06/30/2017	In Response to EO 9006	Assignment	2	50 out of 50.00	Raw Score	1.00/1.00		5/20/2017 - 5/21/2017
06/30/2017	On Coming to America - Small Moments Big Meanings	Project	0	80 out of 100.00	Raw Score	0.80/1.00		-
Totals						1.80 out of 2.0000 Current Score A- (90.0%)		

Score Highlight Legend:
Score is not used in grade calculation.

Scenario 2: Using Points for Weighting Individual Assignments or Assignment Types When Creating Assignments

Changing the *Points* value is a very flexible option for teachers who use total points, but want to identify and weight certain assignments or an assignment type/category (Homework, Quiz, Assignment, Project, Test) when creating an assignment.

Scenario 2: In the sample below (from [Travis McKenna](#)), when setting up individual assignments, the teacher entered total points in the *Max. Score* field and left the *Points* field at the default setting of 1. Because all of the assignments have equal weight, at 1 point, a poor score on *Assignment 2* minimally affects the student's grade, as it is worth only 1 point in the grade book, the same as the other three assignments.

	Assignment Max Score	Assignment Points	Example: Student Score/Max Score	Student Percentage /Decimal	Grade Book Value (weight): Student Percentage x Points	Student total point value in Grade Book	Student total point value /Total Points
Assignment 1	20	1	18/20	90% / 0.9	0.9 x 1	0.9	$0.9+0.4+0.6+1=2.9$ $2.9/4$ Student Overall Class Grade: 72.5%
Assignment 2	90	1	36/90	40% / 0.4	0.4 x 1	0.4	
Assignment 3	10	1	6/10	60% / 0.6	0.6 x 1	0.6	
Assignment 4	5	1	5/5	100% / 1	1 x 1	1	

Teachers who prefer to give each *Assignment Type* (e.g., Assignment, Homework, Project, Quiz, Test) a different weight can do that by changing the default

Points field from 1 to whatever they wish. If you wanted tests, for instance, to be worth 3 times more than Homework, you could leave the *Points* field for a homework assignment at 1 (10, 15, etc.), but for a Test, change the *Points* field to 3 (30,35, etc).

The screenshot shows the 'Grade Book Assignment' interface. At the top, there's a search bar and navigation links (Lock, Sign Out, Support, Help). Below that, the current assignment is identified as 'Assignment in (S2) Writing SEC:20170912-1'. There are 'Save Assignment' and 'Cancel' buttons. The main area is divided into 'Category Values' and 'Assignment Settings'. The 'Assignment Settings' section includes fields for 'Assignment Name', 'Date of Assignment' (5/27/2017), 'Description', 'Assignment Category' (Normal), 'Due Date' (5/27/2017), 'Assignment Type' (Test), and 'Score Type' (Raw Score). A red box highlights the 'Max. Score' field (100) and the 'Points' field (3). There are also toggle switches for 'Show Assignment in Portal' (ON), 'Show Rubric Score In Portal' (ON), and 'Show only when scored' (OFF).

Scenario 3: The Max Score and Points Are NOT Equal and the Assignments Are Weighted Using Their Point Value

The sample below (from [Travis McKenna](#)) shows how assignment scores would be calculated when *Points* values are changed according to *Assignment Types*. In this scenario, the assignments are weighted by assigning them different Point values. A low score Assignment 2 minimally affects the student's grade, as it is worth only one *Point*, just 20% of what *assignment 4* is worth. Likewise, as *Assignment 4* is worth the most *Points*, and therefore holds the most weight. A score of 100% on this assignment will greatly affect the student's overall grade.

Assign. Types	Assignment Max Score	Assignment Points	Example: Student Score/Max Score	Student Percentage/Decimal	Grade Book Value (weight): Student Percentage x Points	Student total point value in Grade Book	Student total point value / Total Points
Assign. 1	20	3	18/20	90% / 0.9	0.9 x 3	2.7	2.7+0.4+1.2+5=9.3 9.3/11 Student Overall Class Grade: 84.5%
Assign. 2	90	1	36/90	40% / 0.4	0.4 x 1	0.4	
Assign. 3	10	2	6/10	60% / 0.6	0.6 x 2	1.2	
Assign. 4	5	5	5/5	100% / 1	1 x 5	5	

If for any assignment, you wish to increase or decrease the weight, you can change the *Points* field. Changing the *Points* field for a particular homework assignment, for instance, will not affect other homework assignments (which would be the case if you weighted *Assignment Types* when doing your *Grade Book Setup*, as shown in **Option 3**). Through StudentVUE and ParentVUE, students and parents can view the *Assignment Type* for individual assignments to see both the *Max. Score* and the *Point* values.

Weighting Assignment Types in Grade Book Setup

You really want to think this option through before implementing it. Unlike Options 1 and 2, you should set up the weighted value of each *Assignment Type* (e.g., Assignment, Homework, Project, Quiz, Test) at the start of a grading period. Note that the total weighting for your *Assignment Types* must equal 100%. You will see an error message instead of the *Success* message (which appears in a green box on top right) if your totals do not equal 100%.

The screenshot shows the 'Grade Book Setup' interface. At the top right, a green success message reads: 'Success: Weighting total: 100%, Remaining weight: 0%'. Below this, the 'Assignment Weighting' section is active. It includes a question 'Which assignment types would you like to use?' with two radio button options: 'Only Show My Types' and 'Add My Types to the District Types' (which is selected). An 'Update' button is next to the second option. Below this is a table with the following columns: 'Assignment Type', 'Weight (%)', 'Drop Scores', 'Default Points Possible', and 'Display Color'. The table contains five rows: 'Assignment' (Weight: 10, Drop Scores: 0, Default Points Possible: 1.00, Display Color: Assignment), 'Homework' (Weight: 10, Drop Scores: 0, Default Points Possible: 1.00, Display Color: Homework), 'Project' (Weight: 30, Drop Scores: 0, Default Points Possible: 1.00, Display Color: Project), 'Quiz' (Weight: 20, Drop Scores: 0, Default Points Possible: 1.00, Display Color: Quiz), and 'Test' (Weight: 30, Drop Scores: 0, Default Points Possible: 1.00, Display Color: Test). The 'Weight (%)' column is highlighted with a red box. At the bottom, there is a checkbox for 'Also apply the above weighting settings to the following classes' and another checkbox for 'Allow class weighting to be set up by grading period'.

Assignment Type	Weight (%)	Drop Scores	Default Points Possible	Display Color
Assignment	10	0	1.00	Assignment
Homework	10	0	1.00	Homework
Project	30	0	1.00	Project
Quiz	20	0	1.00	Quiz
Test	30	0	1.00	Test

Scenario 4: Non-Scaled Weighting - Max Score and Points are NOT equal and all Points are set to 1

Once you have set up your *Assignment Weighting* for the grading period, you can start entering individual assignments. When you create a new assignment, be sure to select the *Assignment Type* from the drop-down menu to ensure that the corresponding *Points* value is calculated into a percentage of the overall category value. At the end of a grading period, points earned in each weighted category determine a student's grade.

Enter the *Max Score* for the assignment. Leave the *Points* field at the default setting of 1, since you have already assigned the weight for that *Assignment Type* when you did your *Grade Book Setup*. Note: If you increase the *Points* from 1, to 3, for instance, that assignment will be weighted at 3 X the weight listed in your *Assignment Weighting* screen (*Grade Book Setup*).

Assignment Settings

Assignment Name

Inside Out and Back Again - 5th Rule

Description

Interview an immigrant or refugee about a 5th illogical rule that makes learning English difficult....

Assignment Type

Project

Score Type

Raw Score

Max. Score

Points

50

1

In the screenshot below (from [Travis McKenna](#)), the teacher has started the grading period by going into *Grade Book Setup* and assigning weights to each *Assignment Type*. When creating individual assignments, he/she has set the *Max. Score* for each assignment and left the *Points* at 1.

Assign. Types	Assignment Max Score	Assignment Points	Example: Student Score/ Max Score	Student Percentage /Decimal	Grade Book Value (weight): Student Percentage x Points	Student total point value in Grade Book	Assignment Type Weight via Grade Book Setup	Points scored/Possible points TIMES the Category Weight	Points earned in each category adds up to your overall score
									.13+.3+.3 = .73
Assign. 1	20	1	18/20	90% / 0.9	0.9 x 1	0.9	20	1.3/2 = 0.65 x 0.2 = 0.13	Student Overall Class Grade: 73%
Assgin. 2	90	1	36/90	40% / 0.4	0.4 x 1	0.4	20		
Assign. 3	10	1	6/10	60% / 0.6	0.6 x 1	0.6	50	0.6/1 = 0.6 x 0.5 = 0.3	
Assign. 4	5	1	5/5	100% / 1	1 x 1	1	30	1/1 = 1 x 0.3 = 0.3	

Scenario 5: Scaled Weighting - Max. Score and Points Are equal and Assignment Types Are Weighted (like SchoolLoop)

As in the Scenario 4, start by going into *Grade Book Setup* and assigning percentages to your assignment types/categories. Remember that the total percentage must = 100%

If you used scaled weighting in SchoolLoop, please note that Synergy does not automatically match *Points* to *Max. Score* (as SchoolLoop did). You will need to change *Points* to match *Max. Score*, as shown in the sample below. The *Assignment Type*, Project, has already been weighted in *Grade Book Setup*.

Assignment Settings

Assignment Name

On Coming to America - Small Moments Big Meanings

Description

This hyperdoc is an invitation to listen to and learn from the stories of immigrants and refugees and, in the process, document and celebrate small moments in history from your own community.

Assignment Type

Project

Score Type

Raw Score

Max. Score

25

Points

25

A poor score in the second assignment, with a pre-assigned weight for that assignment type set at 20 and the additional 90 points assigned when the assignment was created, can drastically impact a student's grades, as demonstrated in Travis McKenna's chart below.

Assign. Types	Assignment Max Score	Assignment Points	Example: Student Score/Max Score	Student Percentage /Decimal	Grade Book Value (weight): Student Percentage x Points	Student total point value in Grade Book	Assignment Type Weight via Grade Book Setup	Points scored/Possible points TIMES the Category Weight	Points earned in each category adds up to your overall score
									.3+.3+.098 = .698
Assign. 1	20	20	18/20	90% / 0.9	0.9 x 20	18	20	54/110 = .4909 x 0.2 = .0981	.698
Assign. 2	90	90	36/90	40% / 0.4	0.4 x 90	36	20		
Assign. 3	10	10	6/10	60% / 0.6	0.6 x 10	6	50	6/10 = 0.6 x 0.5 = 0.3	Student Overall Class Grade: 69.8%
Assign. 4	5	5	5/5	100% / 1	1 x 5	5	30	5/5 = 1 x 0.3 = 0.3	

One More: Scenario 6 - Max Score and Point are NOT equal and the assignments are weighted using their point value AND you have weighted categories

Assign. types	Assignment Max Score	Assignment Points	Example: Student Score/Max Score	Student Percentage/Decimal	Grade Book Value (weight): Student Percentage x Points	Student total point value in Grade Book	Assignment Type Weight via Grade Book Setup	Points scored/Possible points TIMES the Category Weight	Points earned in each category adds up to your overall score
									.155+.3+.3
Assign. 1	20	3	18/20	90% / 0.9	0.9 x 3	2.7	20	3.1/4 = 0.775 x 0.2 = 0.155	.755
Assign. 2	90	1	36/90	40% / 0.4	0.4 x 1	0.4	20		
Assign. 3	10	2	6/10	60% / 0.6	0.6 x 2	1.2	50	1.2/2 = 0.6 x 0.5 = 0.3	Student Overall Class Grade: 75.5%
Assign. 4	5	5	5/5	100% / 1	1 x 5	5	30	5/5 = 1 x 0.3 = 0.3	

As you can see from the above **Options/Scenarios**, the first step in the grading process is for you to decide how you will calculate student grades. Understanding the calculation process is essential to effectively and efficiently maximizing *Grade Book* options to complement your teaching practices.