

# Scoring by Target

Executive Summary of Webinar  
Central Academy  
October 2018  
<https://youtu.be/ZOynmCSF8cA>

## SCORING vs. GRADING Part 1: <https://youtu.be/UTtlceswzVk>





Scoring by target in a Standard Referenced Grading (SRG) system is different from grading by assignment in a traditional grading system. Grading by assignment historically meant collecting points for completing assignments, like getting paid for doing work, instead of specifying the knowledge and skills that needed to be learned. Students and parents knew the subject a student was studying, like “Biology”. But the specific knowledge and skills required to master that subject often varied widely from teacher to teacher and school to school.

Scoring by target is about being specific about what we want students to demonstrate that they know and are able to do. To organize this information, the subject of a class is broken into major topics of study. Within each topic of study are specific learning targets for students to master over the course of the semester. In content-based classes like Science and Mathematics, the topics are sequential—learn this set of ideas before learning the next set. But in skills-based classes such as Languages and Humanities, the topics are parallel—students develop skills simultaneously in reading, writing, speaking, and listening, for example, and continue to work on these skills throughout the semester and from year to year.

At Central Academy, semester grades accurately predict how well students will do on standardized tests such as Advanced Placement exams (AP tests), college placement exams (ACT), or other measures of achievement. It used to be, when we graded by assignment, that a student’s grade on the first assignment was a good predictor of a student’s grade for the entire semester. Now, when we score student progress on specific learning targets, the scores on early assignments do not necessarily predict the semester grade. So, while the semester grade is accurate, parents aren’t always certain DURING the semester how their child is progressing. We are working at clarifying our learning targets and our topics of study to help us clarify student progress and give timely feedback so students can see which ideas and skills they need to work on during the semester.

## TOPICS, TARGETS, & SCALES: THE VOCABULARY OF SRG: Part 2 <https://youtu.be/vGKiQFPTIFE>

A scale is an articulation of the learning targets within a topic of study for a subject. In the example scale below, the subject is Algebra I, the topic is “Create and Solve Equations” and the learning targets are listed under level 3 as A - D. This is an example of a Scale. Remember, there are several topics within the subject.

<b>Create and Solve Equations</b>	
<b>4</b> 	In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond the learning goal.
<b>3</b> 	Students demonstrate they have developed the ability to: <b>A</b> Represent constraints with linear equations, inequalities, and systems of equations or inequalities. (A-CED3) <b>B</b> Determine whether solutions are viable or non-viable options, given the constraints provided in a modeling context. (A-CED3) <b>C</b> Solve formulas for a particular variable of interest. (A-CED4) <b>D</b> Solve multi-step linear equations in one variable with coefficients represented by letters (A-REI3)
<b>2</b> 	Students demonstrate they have developed the ability to: <b>A</b> Recognize or recall specific vocabulary such as: <i>model, represent, solution, coefficient, inverse operations, solution set</i> <b>B</b> Write, solve, and interpret linear equations. (A-CED1) <b>C</b> Solve multi-step linear equations in one variable including equations with coefficients represented by letters. (A-REI3) <b>D</b> Explain and justify each step for solving multi-step linear equations. (A-REI1)
<b>1</b> 	Student’s performance reflects insufficient progress towards foundational skills and knowledge.

The Scale identifies the progression of specific skills within the topic that need to be demonstrated. Level 3 lists the learning targets that students must demonstrate to show they are able to create and solve equations. Level 2 lists the background knowledge a student should have in this topic. Level 2 is a learning aid in case students have gaps in their knowledge. Teachers can add to level 2 for further clarification, as needed.

When we first started moving towards SRG practices, we introduced topic scores from 0 – 4, where a “3” meant the student was proficient in all the learning targets within a single topic. We discovered that people were confusing topics and targets. To distinguish between the two, whole and half numbers 4.0, 3.5, 3.0, 2.5, 2.0, etc. are used when scoring MULTIPLE targets. The letters, ET, AT, PT, NM, and M are used when scoring discrete targets.

Scoring MULTIPLE targets	Score
Student demonstrated all targets in level 3 &4	4.0
Demonstrates all targets in 3 and partial success in 4	3.5
Demonstrates all targets in level 3	3.0
Demonstrates at least half of targets in level 3	2.5
Demonstrates fewer than half of targets in level 3	2.0
Demonstrates half of level 2 but none of level 3 targets	1.5
Demonstrates some of level 2 but none of level 3 targets	1.0
Produces no evidence of learning in level 2 or level 3	0

Scoring ONE target	Score
Exceeding the Target	ET
Achieving the Target	AT
Progressing towards Target	PT
Target Not Met	NM
Missing Evidence	M

The letters specify progress in each target. But numbers show where a student is within the entire scale for the topic. Teachers use their judgement to determine how well a student has met the targets within each topic and assigns a topic score. Infinite Campus is programmed to average all the topic scores together to determine semester grades. Averaging Topic Scores together is something Infinite Campus does automatically.

**TRANSITIONING TO SCORING BY TARGET Part 3:** <https://youtu.be/rr-5FHrv1hA>

As we transition to scoring by target instead of grading by assignment, we are trying to find the balance between reporting on missing assignments, which are necessary to develop skill, and reporting on missing concepts or skills. Doing both types of reporting requires a lot of data entry, which can cause our reporting to be less timely. Also, switching between reporting the amount of work students have done and assessing the progress students are making in their learning can be tricky in Infinite Campus. As we have clarified the distinction for ourselves, we’ve discovered that some of our scales are difficult to use or lack the specificity to make scoring by target as clear and as timely as we would like. So, our professional development last year and this year has focused on collaboratively rewriting our topics and scales so that by next fall we can more easily score by target in all our SRG courses.

Here are four examples of student progress reports from different subjects that show how we are transitioning from grading by assignment to scoring by target.

1 Creating and Solving Equations Detail					
Category: TOPIC SCORE					
Name	Due Date	Assigned Date	Score	Turned In	Comments
Topic Score	01/15/2019	08/23/2018	3		
Category: BODY OF EVIDENCE					
Name	Due Date	Assigned Date	Score	Turned In	Comments
Assessment 2A	09/07/2018	09/07/2018	2.5		
Assessment 2BC	09/17/2018	09/17/2018	3		
Quiz 2A-2D	10/01/2018	10/01/2018	3		

This example shows assignments in the body of evidence. Each assignment provides evidence for multiple targets, so there are number scores listed in the body of evidence.

In this example, targets assessed in Assessment 2A were reassessed in Quiz 2A-2D. We can see that the student didn’t demonstrate all of targets in the first assessment but did in the second assessment, therefore, a topic score of 3.0 was assigned by the teacher. This example preserves the history of the student’s progress.

1 Writing Construction Detail						
Category: TOPIC SCORE						
Name	Due Date	Assigned Date	Score	Turned In	Comments	
Topic Score	01/15/2019	08/23/2018	2.5			
Category: BODY OF EVIDENCE						
Name	Due Date	Assigned Date	Score	Turned In	Comments	
Summer Essay	09/07/2018	09/06/2018	2.5			
Canvas reflection on summer reading essay	09/26/2018	09/24/2018	AT			
Short Story Assessment	09/21/2018	09/20/2018	PT			
Reading Log 1: Characterization	09/25/2018	09/12/2018	2.5			
Grammar Assessment 1: Subject/Verb Agreement	10/11/2018	10/11/2018	NM			

In this example, there are assignments and targets listed in the body of evidence. Some of the assignments address only one target, so they have the letters; others address multiple targets, so they have numbers.

Because the student has a topic score of 2.5, the student has not yet demonstrated an ability with all the learning targets in this topic. That is to be expected at this point in the semester because this is a skills-based class. Writing Construction is a topic the students will work on from August to January. The student will need to reference the written feedback the teacher has provided on these assignments to understand where to focus efforts in subsequent assignments. Students will have opportunities to continue work on this topic every week throughout the entire semester. This example also preserves the history of the student's progress over the course of the semester. Students won't go back and redo the summer essay. Instead, the student will have opportunities to demonstrate the development of writing construction skills on the assignments that follow.

1 Kinematics Constant Velocity Detail						
Category: TOPIC SCORE						
Name	Due Date	Assigned Date	Score	Turned In	Comments	
Topic Score	01/15/2019	08/23/2018	2.5			
Category: BODY OF EVIDENCE						
Name	Due Date	Assigned Date	Score	Turned In	Comments	
Constant Velocity Target A	09/14/2018	08/23/2018	PT			
Constant Velocity Target B	09/14/2018	08/23/2018	ET			
Constant Velocity Target C	09/14/2018	08/23/2018	AT			
Constant Velocity Quiz 1	09/06/2018	09/06/2018		✓		
Constant Velocity Quiz 2	09/13/2018	09/13/2018		✓		
Constant Velocity Quiz 3	09/21/2018	09/21/2018		✓		
Student Initiated Reassessment	10/31/2018	09/21/2018			targets A	

In this next example, the teacher has set up the gradebook to separate targets from assignments. This can be easier to do in a content-based course. At the top are the targets, A, B, and C. Students have copies of the scale, so they have the exact language of each target. Below that are the assignments, Quizzes 1, 2, and 3.

Because the student has not yet achieved all the targets in the topic, the overall topic score is a 2.5. Even though the student is exceeding expectations in target B, he or she has not yet mastered target A. This student has completed all 3 quizzes, which have provided several opportunities to demonstrate all 3 learning targets, and the student has initiated a reassessment of target A that hasn't been turned in yet. Hopefully, the student's focus on target A, will help this student bring that PT up to an AT. When that happens, the teacher will change the rating for target A and update the topic score to a 3.0, showing that the student has successfully met all the targets within this topic. It should be noted, that unlike the previous example from an English class, this class will not be focused on Kinematics and Constant Velocity for the remainder of the semester. Primary instruction in this class has moved on to the next topic in the sequence even as this student is reassessing in target A of this topic.

1 Comparison and Contextualization Detail						
Category: TOPIC SCORE						
Name	Due Date	Assigned Date	Score	Turned In	Comments	
Topic Score	01/15/2019	08/23/2018	2.5			
Category: BODY OF EVIDENCE						
Name	Due Date	Assigned Date	Score	Turned In	Comments	
Comparing and Contrasting Sources	01/15/2019	08/23/2018	AT		AT	
Comparing and Contrasting Events	01/15/2019	08/23/2018	AT		AT, AT	
Contextualization	01/15/2019	08/23/2018	PT		PT, AT, PT	

In this final example, the course has both skills-based targets (like the English class) and content-based targets (like the Science and Mathematics classes).

1 Key Concepts Detail						
Category: TOPIC SCORE						
Name	Due Date	Assigned Date	Score	Turned In	Comments	
Topic Score	01/15/2019	08/23/2018	2			
Category: BODY OF EVIDENCE						
Name	Due Date	Assigned Date	Score	Turned In	Comments	
Indigenous Societies	01/15/2019	08/23/2018	NM		NM	
Columbian Exchange	01/15/2019	08/23/2018	PT		AT, PT	
European Colonization	01/15/2019	08/23/2018	PT		AT, NM	
The British Colonies	01/15/2019	08/23/2018	PT		PT, AT, AT, PT	
American Revolution	01/15/2019	08/23/2018	AT		AT	
Democracy and Republicanism	01/15/2019	08/23/2018	AT		PT, AT, AT	
Migration and Conflict	01/15/2019	08/23/2018	M		<b>*Missing</b> M	
Growth of American Democracy	01/15/2019	08/23/2018				

The topic at the top, “Comparison and Contextualization” is skills-based, and like the English class, students will work on these specific skills all semester. The targets are listed in the body of evidence for these skills.

The bottom topic “Key Concepts” is content-based, like

the Mathematics and Science classes. Students will progress through these key concepts in sequence using the comparison and contextualization skills.

Instead of listing all the assignments—each of which contribute to multiple targets in both the Key Concepts topic and the Comparison and Contextualization topic—the teacher has listed in the comments how the student has done on the portions of the assignments that meet each target. In this way, the teacher can tease out how the student is progressing in specific areas of knowledge and skills. In this example, the student has a 2.5 topic score in Comparison and Contextualization, and by looking at the body of evidence, we see the student needs to focus on contextualization. Under Key Concepts, we see that this student has mastered the content in the American Revolution and Democracy and Republicanism, but is still working on the Columbian Exchange, European Colonization, and the British Colonies. Early on, the student’s work did not demonstrate an understanding of Indigenous Societies and the student has not turned in the most recent assignment on Migration and Conflict.

**CONCLUSION:**

Most Academy courses have been converted to the SRG format which articulates specific expectations of learning in topics and scales. Only a few upper level courses are still in the traditional grading format. The teachers at Academy are actively working to both refine our existing topics and scales to make scoring by target clearer and faster, and to create topics and scales for those few classes that have not been converted, yet. It takes a lot of careful thinking to create and refine the topics and scales to communicate what students know and are able to do. We take this work very seriously. The curriculum department of Des Moines Public Schools and Heartland AEA provide us with resources and support as we go through this transition. Our semester grades are accurate; now we are working to make student progress during the semester more transparent so students and families know where to focus their efforts.