



To encourage even greater student engagement, teachers at this school also developed what they called a “Math Matrix” tool for each essential standard in the progression to use as a student self-assessment guide while they work on a particular standard or cluster of standards related to a broader competency statement. These incremental, short-term learning goals—which can be developed in the same way we suggest developing a performance scale—are documented as student-friendly “evidences” of learning.

← Timely Self-Regulatory Feedback (Effect Size = 0.66)



Figure 4.11 shows our adapted version of this school’s student-friendly self-monitoring tool. This is designed as both an assessment and a learning tool for the student, helping learners to articulate and navigate their process of learning as related to the essential standard. In this math example, students are proficient when they reach the Level 3 indicator: “I can tell time to the nearest 5 minutes. I can identify a.m. or p.m.” The tracking tool supports a student’s pace of learning as it provides transparency of the learning process and provides for feedback along the way. Students document their evidence and receive feedback related to what level they are on compared to the proficiency level (Level 3) for that given learning target. As students “level up” (complete a level), they know what learning step is next.

FIGURE 4.11 Sample Student Self-Assessment: Tracking My Learning Pathway

Name		Unit/Project: Measurement	
Tracking My Learning Pathway NH Math Competency #5: Use measurement tools, units, and attributes to describe and compare objects, situations, or events, and to solve authentic applied measurement problems.		2.MD.7  I can tell time to the nearest 5 minutes.	2.NBT.A.2  I can count within 1000 by 5s, 10s, and 100s.
Performance Level	Learning Target	My Evidence (and Dates)	
Extending My Learning 4	I can tell time to the nearest minute in a variety of problem-solving situations.		
Demonstrating Proficiency 3	I can tell time to the nearest 5 minutes. I can identify a.m. or p.m.		
Making Progress 2	I can tell time to the nearest hour, half-hour, and quarter-hour and share my answer in minutes (e.g., 3 = 15, 6 = 30, 9 = 45).		
Working on the Basics 1	I can count by 5s, 10s, and 100s to 1,000. I can identify the hour and minute hand.		

This approach to pacing and documenting learning provides instructional feedback that the teacher can use to plan targeted small-group instruction and to share at student-led parent conferences. (A generic template for creating self-monitoring performance scales in any content area or grade level [Figure 4.12] is available in Appendix A and online.)

FIGURE 4.12 Student Self-Assessment Template: Tracking My Learning Pathway

 Student Self-Assessment Template: Tracking My Learning Pathway 		
Name:		Unit/Project:
Tracking My Learning Pathway Competency Statement:		Standard(s) I Am Working On:
Performance Levels	My Learning Targets	My Evidence (and Dates)
Extending My Learning 4	I can . . .	
Demonstrating Proficiency 3	I can . . .	
Making Progress 2	I can . . .	
Working on the Basics 1	I can . . .	

Every week, teachers at this school have a goals conference with students to offer feedback on their math goals in the learning progression. Teachers have told us that the students are excited to share their learning progress with them and will cheer each other on because they understand that everyone is working on and achieving her or his own learning goals. These classrooms still employ whole-group instruction at times, such as when a new concept or skill is introduced or when providing guided practice for everyone. The primary difference is that now the students know what

their learning goal is and what evidence is required for them to move on to the next level. Students are not asking or relying on the teachers to direct them. Instead, students are working at their pace, which is supported by evidence and growth feedback on their learning.

Student-Friendly Progressions: Pacing Instruction at the Middle and High School Levels

Student-friendly learning progressions can look very similar at the middle and high school levels, sometimes encompassing additional levels of the CB performance scale and connecting daily lesson learning targets. Figure 4.13 illustrates an example of a self-monitoring tool based on a high school science competency in chemistry, developed at Biddeford High School in Maine. Science topics are highlighted at each performance level with the intended rigor (in capital letters).

← Student Strategy Monitoring
(Effect Size = 0.58)

Teachers can use each performance level in the progression to plan and deliver whole-class instruction, as seen in Figure 4.13, an adapted version of Biddeford's Learning Plan Progression (LPP). The teacher's pace and science content for instruction is indicated (by the number of estimated instructional days) in LPPs.

FIGURE 4.13 Sample High School Science CB Self-Monitoring Tool

UNIT 1: Universe and Stars		
Competency Statement: (HS-ESS1-1) DEVELOP A MODEL BASED ON EVIDENCE to illustrate the life span of the sun and the role of nuclear fusion in the sun's core to release energy that eventually reaches Earth in the form of radiation .		
Science Concepts: life span of the sun, nuclear fusion, form of radiation, anatomy of the sun		
Score	Performance Level	Criteria for Evidence of Learning
4.0 Advanced	Analyzing knowledge (Analyzing perspectives)	I can EXPLAIN THE REASONS BEHIND THE EVIDENCE of the life span of the sun and the role of nuclear fusion in the sun's core to release energy that eventually reaches Earth in the form of radiation .
3.0 Proficient	Comprehending knowledge (Symbolize)	I can DEVELOP a model based on evidence to illustrate the life span of the sun and the role of nuclear fusion in the sun's core to release energy that eventually reaches Earth in the form of radiation .
2.0 Developing	Retrieving knowledge (Recall)	I can EXPLAIN <ul style="list-style-type: none"> • The life span of the sun • Nuclear fusion • The forms of radiation • The anatomy of the Sun (internal and atmospheric layers, features)
1.0 Beginning	Retrieving knowledge (Recognize)	I can RECOGNIZE explanations of <ul style="list-style-type: none"> • The life span of the sun • Nuclear fusion • The forms of radiation • The anatomy of the Sun (internal and atmospheric layers, features)