Five Formative Assessment Strategies to Improve Distance Learning Outcomes for Students with Disabilities

Distance learning can be very challenging for teachers, as well as for students with disabilities and their families. Teachers are sometimes having to use unfamiliar technologies while at the same time figuring out how to effectively instruct students who may not be very engaged in an online environment. Similarly, students with disabilities and their families may be frustrated by the technology and the demands created by distance learning. Formative assessment is a process that may help improve the distance learning experience.

Formative assessment is important for all kinds of learning. It may be especially important for distance learning, which can easily turn into a “list of things to do” in the minds of students.
Compliance with directions—doing a list of assignments—leads to completion, but it is not guaranteed to lead to learning. And even if it does, students who merely complete work may not be clear on what, exactly, it is they have learned by doing it. Formative assessment focuses students on learning and evidence of learning. It has the potential to be a powerful antidote to the “check-box” approach some students may bring to online learning.

Formative assessment can be used to improve learning for all students, but is particularly important for students with disabilities. The purpose of this Brief is to describe the use of formative assessment with students with disabilities during distance learning.

Formative assessment can occur every time teachers interact with students with disabilities or their work, either in person or virtually. It is the process of gathering, interpreting, and using information about student learning while the learning is happening. Effective formative assessment happens when teachers, students with disabilities, and parents (when possible) work together on what the students are learning, monitor how the learning is going, and adjust then readjust as the days and situations change.

Formative assessment is important for students with disabilities because its elements correspond with the process of self-regulated learning. It is especially important for students trying to learn content they find difficult because it builds confidence and helps conceptualize what they are learning and what complete understanding looks like. Students who struggle with the content of a lesson may not easily reason backwards from lesson content to learning intentions. As such, the student’s involvement in formative assessment will help counteract these tendencies. Student involvement could look like suggestions for innovations (via emails, survey, phone calls, breakout rooms), individual reflection, or evaluation of learning.

The Formative Learning Cycle

Think of formative assessment as providing information that positions students in a formative learning cycle identified by three questions: Where am I going? Where am I now? Where to next? (See Figure 1.)

The formative learning cycle is based on students with disabilities having at least some idea about what they are trying to learn and what it will look like when they do (Where am I going?). In the formative learning cycle, feedback becomes information students need and want (Where am I now? Where to next?). Feedback sometimes even helps students clarify the goal in their minds (Where am I going?). This is especially important in a distance learning environment where students sometimes struggle to orient to what they are learning. On the other hand, if students are not intentionally trying to learn something, there is no formative learning cycle and feedback is just another set of teacher directions to follow.

Formative Assessment Strategies

Many formative assessment strategies can be used to fuel the formative learning cycle and help make sure students with disabilities know what they are trying to learn and use evidence from their learning to continue to improve. Most of them can be easily adapted for distance learning. The five suggestions presented here represent a good place to start. They were selected because they:

- Are essential to the formative learning cycle
- Are effective for all students and particularly effective with students who struggle with lesson content
- Are the most appropriate first steps for teachers who have not yet begun to use formative assessment routinely

**Definition**

According to the Council of Chief State School Officers’ Formative Assessment for Students and Teachers (FAST) collaborative:

**Formative assessment** is a planned, ongoing process used by all students and teachers during learning and teaching to elicit and use evidence of student learning to improve student understanding of intended disciplinary learning outcomes and support students to become self-directed learners.

Formative assessment is a process. It is not a test that is used at the end of a learning sequence.
Most online classroom platforms are set up to emphasize the things students will do rather than what they will learn. In most distance learning platforms, students log into a course or class. Within each class, there are further subdivisions. Some are relatively simple with only a few tabs, such as for ongoing conversation or discussion, classwork or assignments, and a list of people or classmates. Students using some online learning platforms may have many more choices, including announcements, modules, discussion boards, assignments, badges, conferences, small group workspaces within the class, and so on.

The first job of formative assessment in online learning is to move the focus back to learning. For every lesson, students should know from the outset: What am I trying to learn? Why is it important? Why now—what is so important that I must learn it now even though I cannot be in school? For most lessons, the “why” includes helping students understand not only what they are going to learn in this lesson, but how that is a step in a learning trajectory that leads to some larger learning goal.

In assignment-based learning platforms, students may experience each “assignment” in roughly the same way they experience a “lesson” in face-to-face instruction, as one step on the way to learning something bigger like a unit learning goal. So for each assignment, think of introducing it by answering the question, from a student’s point of view, “What am I going to learn by doing this?”

For example, a learning target might be, We are learning to use vivid verbs to make our sentence more interesting or I can use vivid verbs to make my sentence more interesting. The exact format of the learning target statement makes little difference; use wording that will make the most sense to your students. The important criterion is that students will understand the statement as what they are trying to learn. If a learning target seems to carry over several assignments, students should know what this assignment adds to the learning they have already accomplished. For example, Yesterday we practiced using vivid verbs in simple sentences. Today we’re going to get more practice by using vivid verbs in short descriptive paragraphs to make the whole description more intense. Explain why that learning target is important, how what students learned in yesterday’s lesson prepared them for today’s lesson, and how today’s lesson will lead to tomorrow and beyond.
Here are some suggestions for communicating learning targets in online lessons or assignments. A one-shot announcement of the learning target at the beginning of the lesson will not suffice to keep the learning target top-of-mind as students do their assignment. Use several of these strategies together, as appropriate in each lesson, to help students understand Where am I going? and aim for learning, not just completion, as they work.

- For students who are readers, including those who access print via assistive technology or other accessibility features and accommodations, write the learning target in student-friendly language, right on the assignment page—not in an attachment that the student may not open—and before the directions.
- For students who are not proficient readers, write a learning target for use by parents or caregivers who are helping the students at home. Some simple learning targets may be best communicated to parents in the title of the work (e.g., Learning to Write the Letter A).
- For assignments that include audio or video, be sure to state the learning target in these presentations as well. The learning target can be demonstrated with video, for example by modeling how to solve a problem and thinking aloud. Use the language of the learning target in the description of the assignment, in any modeling of performance, and in assessments.
- If a slide presentation is part of an assignment, insert a slide at the beginning that describes the learning target. As appropriate, insert slides at pause points that contain questions to help students reflect on what they are intending to learn.
- As part of the assignment, have students reflect on what they already know about the learning target and what they think they will be learning in today’s assignment. Ask students whether there are any words or phrases in the learning target that are not clear to them. Students can post these thoughts electronically using whatever function or app is being used for collecting student thoughts. Monitor these posts and respond as needed with questions to help probe students’ thinking. Use what is learned about student conceptions of the learning target to shape feedback and next instructional steps or assignments.
- When differentiating for individual students, keep the same learning target statement for all students but differentiate the assignment or materials. For example, all students may be learning “I can solve problems using multiplication”; however, the assignment for some students involves problems with smaller numbers, or simpler words, or whatever changes are required for their access to the concepts.

**Strategy 2. Establish and communicate clear criteria for success.**

Learning target statements are not complete without criteria that students and teachers can look for in student work. For example, if a student is trying to use vivid verbs in a sentence, how will the child know they are making progress toward this goal? The criteria are the means by which they—and you, their teacher—will know. The criteria for this learning target will also help students form their concept of what a “vivid verb” really is and why they might want to learn to use them in their writing. In terms of this example, the criteria might be one or more of the following: My verb is the main word in the action part of the sentence. My verb makes me think of something I can see, hear, smell, taste, or touch. My verb makes my sentence interesting to read. These criteria give the student specific things to strive and look for in their work. They also embody the learning target in a way that helps clarify for students what exactly it means to use vivid verbs in writing.

Notice that the success criteria are about qualities one would notice in student work, not scores or grades. The criteria do not, for example, say “I can write five sentences with vivid verbs” or “I can substitute vivid verbs in 80% of the sentences on this worksheet” or anything like that. The concept of qualities “showing” in the work is what makes this formative assessment, which is about monitoring work for the evidence it provides about a student’s formative learning cycle. Success criteria support both students’ self-assessment during learning and teachers’ feedback. If success criteria are clear, parents and caregivers can use them as they help their children, and the criteria will focus their help on learning as opposed to just “getting things right.”
In contrast to formative strategies like student self-assessment and teacher feedback, the concept of grading or scoring is a summative assessment concept, which is about measuring where students arrived after instruction. Eventually, of course, these same criteria can be used to evaluate work submitted for grading, but not at this point in the cycle on work performed during, and as part of, learning.

Students will try to produce what is asked for, so it is important to take a lot of care in crafting success criteria and to ask for qualities that really indicate things worth learning. Many teachers find identifying clear criteria much more difficult than writing a learning target statement, but despite the challenge, this step should not be skipped. In some ways the success criteria are more important to the formative learning cycle than the learning target. Here are some suggestions for establishing and communicating clear success criteria.

- When designing a lesson or assignment, consider what will be looked for in students’ work when they return it. List those things as success criteria at the top of the assignment, right after the learning target. Points or grades do not need to be attached to these criteria on the assignment as long as it is made clear they are what students should look for in their work.

- When possible, show students examples of good work and poor work and ask them to reflect on why the good one is better than the poor one before they start their own work. This reflection can be a separate post or part of the assignment. If real student examples are not available, create fictional student work if possible. Make sure that the differences between good and poor work reflect differences in the success criteria, not differences in surface features of the work like neatness. Examples can be in documents, in video (especially good for demonstrating processes), or in demonstrations in web conferences.

- If the lesson or assignment is part of a larger learning goal (e.g., math problem solving, narrative writing) for which a rubric is used, use those criteria or focus on a subset of them (e.g., Today we will focus on using clues to identify the problem).

- Use criteria that will transfer to other lessons if possible, especially for future lessons in the same learning trajectory. Learning is facilitated when students can apply the same criteria they have already learned to new work.

- If students are using a rubric for the assignment, check to make sure that the criteria on the rubric are about things that provide evidence of learning, not about following directions or surface features of the work. Use those as your success criteria. Give students the rubric at the same time they get the assignment.

- If a learning target is procedural (a skill, for example, using appropriate end punctuation for sentences in language arts, making a frequency table or bar graph in mathematics), consider creating a checklist of ordered steps for students.

**Strategy 3. Build in opportunities for students to self-assess or ask questions, based on criteria.**

Clear, appropriate, and effective success criteria are the key to most other formative assessment strategies, especially student-centered ones. Here are some suggestions for ways to incorporate self-assessment and student questioning into online lessons.

- Format the success criteria into a tool students can use as they do their lesson or assignment: a simple bulleted list, a checklist, or a rubric. Include one or more self-assessment loops in the assignment directions, where students review their work using the tool and make adjustments to their work.

- If the learning target is knowledge-based, use the success criteria to create self-checking quizzes or smart flashcards that students can use for self-assessment.
• Make sure the assignment directions tell students to use the success criteria as a guide while they are working.

• Include a "mid-point reflection" as a middle step in a document-based lesson or assignment, or include one or more pause points in a video or slide-based lesson or assignment. This can be very structured (Look at the list of success criteria you have been using as you were working. Which one has been the easiest for you? Why? Which one has been the most difficult for you? Why?) so that students’ reflections are specific enough to provide useful information.

• When students are first shown the learning target and success criteria or when they are looking at work samples—typically but not always at the beginning of the lesson or assignment—ask students to formulate questions about the success criteria and post them. Make sure to answer these posts with different wording, explanations, or examples from those that were given in the first place. If introducing the lesson via web conferencing, use the same checking for understanding strategies that would be used in a classroom when presenting the learning target, such as calling on students randomly.

Strategy 4. Give brief, clear, actionable feedback based on the criteria

Feedback is more important than ever for students working alone or with parents or caregivers, or even when working in small groups within an online learning platform. Whether mandated by a district or not, make sure to give feedback of some sort on everything students do. Feedback is effective if it helps students move along in the formative learning cycle toward a learning goal. It does not have to be long, but it needs to be precise. “Nice job” does not help promote the formative learning cycle. The words chosen are important, and one of the nice things about online feedback is that it can be read and edited before sending.

The precision—and thus the helpfulness—of feedback comes from using the same success criteria that the students have been using. Success criteria focus teacher feedback on the student learning shown in their work. Without them, feedback turns into a teacher’s free-association response to student work, which is not likely to help the student move along the formative learning cycle. Or it may turn into copyediting or supplying correct answers, neither of which helps students learn much. Here are some suggestions for giving brief, clear, actionable feedback based on criteria in online learning.

• Think of feedback as a task of “naming and noticing” using the criteria. Name one criterion on which something good in the student’s work was noticed. Then name one criterion on which the student could improve. (The words you chose in this essay really showed me how much you care about recycling. When you revise, try to find a few more details to support your ideas.)

• Do not worry that the feedback does not say everything that could be said about any one piece of student work. Keeping feedback brief is not just a timesaver—it actually makes the feedback more effective. The purpose of feedback is to help students move along the formative learning cycle, and there will be additional opportunities for more feedback. Long, involved feedback on one piece of work can easily bog students down, whereas one or two actionable suggestions are likely to be taken if students are given appropriate support.

• If the online learning platform supports it (for example, if video conferencing is available), make some of the feedback a dialogue with students. For students who are proficient readers, this can be in addition to the written “naming and noticing” feedback, perhaps after they have received it. Discussions can be held with students individually or in small groups. Ask them what they noticed about their work, using the language of the success criteria, rather than telling them what they should have noticed. Consider a feedback dialogue successful if something is learned about the student’s understanding that was not apparent just from looking at the student’s work. Sometimes feedback dialogues are also sources of useful information about your instruction and assignments.

Strategy 5. Give students opportunities to revise assignments or re-do similar assignments.

Feedback cannot be effective if students are not able to use it. Sometimes teachers think students will mentally file away their comments and remember them when
they are doing similar work again. That rarely happens for any student. For feedback to be effective in moving students along the formative learning cycle, students must have an opportunity to use the feedback. Those opportunities should be planned as part of instruction. Online learning may have an advantage over face-to-face learning in this regard because much of the work is done asynchronously. This makes the amount and timing of students’ individual work less dependent on what other classmates are doing. Here are some suggestions for helping all students use feedback in online learning.

- For complex, open-ended assignments, build at least one feedback-and-revision cycle into the assignment directions. “Complex” does not necessarily mean long—even student paragraphs or comic strips are open-ended and can be improved with revisions. In the directions for the assignment, after the student has self-assessed and done their best first draft, build in a step where the students turn in the work for feedback and then revise the work based on the feedback. This extra loop will dramatically increase what students get out of the lesson or assignment and improve the quality of their work.

- If the lesson or assignment involves doing work with correct answers, for example, a practice set on multiplying fractions, feedback should still be naming and noticing, even if problems are marked incorrect. For example, one student might be told that they seem to understand how to multiply numerators and denominators but make errors in calculation. But once the work is returned, redoing the same problems no longer requires the same student understanding. For this kind of work, assign a few additional similar problems and ask the student to do those new problems with the feedback in front of them. It will not take another whole page of problems for the student to apply the feedback; a few problems may be sufficient. This extra loop can be built into practice exercises in all disciplines.

- For either kind of revision or improvement exercises, consider adding a brief reflection that helps the student tie their new work to feedback received and to the success criteria. For example, say, In one sentence, tell what you did differently in this work that makes it better.

Conclusion

The five strategies suggested here do not cover all of formative assessment, but they are absolutely essential to the formative learning cycle for students with disabilities, just as they are for all students. For this reason, these five strategies are the most appropriate first steps for teachers beginning to incorporate formative assessment into online learning. Because these strategies privilege student understanding of their learning, they can become an antidote to the “getting done” mentality some students may bring to online learning.

For these two main reasons—supporting student understanding of their own learning and combating a “just get it done” approach to online learning—we recommend prioritizing these five strategies as formative assessment is incorporated into online teaching for students with disabilities. Teach your students how to focus on what they are trying to learn. Notice how they use these methods and respond to them. Once these strategies are used successfully in every online lesson, additional formative assessment strategies can be explored, such as student goal-setting, students tracking their own progress, and peer assessment. The Further Reading section provides some resources that give more explanation and examples of the strategies included here and information about additional formative assessment strategies as well.

Ultimately, the most important reason to use formative assessment is that it helps students learn. Students with disabilities, like all students, should know what it is they are learning, and they should know how they are doing, even as they learn.

Further Reading


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