





## Six factors define assessment-capable learners who are cognitively engaged

By Douglas Fisher and Nancy Frey

hen students engage, they learn more—and who doesn't want that? The problem is that there are far too many tricks, tools for manipulation, and threats of consequence in teaching strategies that encourage students to pretend to engage, even though they aren't learning much.

The focus on engagement has led principals to watch for its cues, but quick observations tend to highlight behavioral engagement rather than cognitive engagement. You can sit up straight and lean forward and never learn a thing. What we want instead is cognitive engagement that allows engaged behaviors to follow.

We have identified six factors that ask students to cognitively engage in their learning, and thus in the tasks that their teachers plan for them. These six factors require adjustments in teacher action as students assume more responsibility for their learning. Students who are assessment-capable—meaning that these six factors are present in their learning environment—perform better on tests. But more importantly, they see themselves as learners and take responsibility to continue learning.

In this article, we'll explore each of the six factors and how teachers can be supported in implementing them in their classrooms. We'll use Sandra Ledezma's third-grade class as an example of the implementation of these ideas.

1. Assessment-capable learners know their current level of understanding. It's hard to know where you're going if you don't know where you're starting from. Teachers can help students understand their current level of understanding or performance in a number of ways. For example, teachers can provide students with self-assessments that allow them to determine what they already know (and what they still need to learn). They can also meet with students individually to discuss current levels of performance, or administer a pre-assessment and discuss the results.

During a unit of study on life forms in different environments, Ledezma gave her students a pre-assessment, then reviewed each student's performance with them individually while the rest of the class engaged in collaborative and independent learning. As part of their

conversations, Ledezma talked with students about what they already knew and adjusted lesson plans accordingly.

2. Assessment-capable learners know where they're going and are ready for the challenge. Once current performance levels have been identified, teachers need to be clear about what students still need to learn. Some of this is wholeclass learning, and some is limited to small groups. There is no need to teach the whole class something that half the students already know. It's a waste of time and causes disengagement.



Based on her pre-assessment data, Ledezma knew that all of her students could describe the conditions of ocean and desert biomes and the life forms that thrive in those environments. None could describe tundra or wetlands, however, and the group was mixed when it came to forests and grasslands. Thus, her lessons needed to focus on areas of student need, and she needed to let students know what they would be learning.

Learning targets, objectives, or intentions are not a secret, and students should not have to infer what they are learning. Assessment-capable learners want to know what they are learning. And their teachers have to build lessons that facilitate students' confidence in learning that content.

3. Assessment-capable learners select tools to guide their learning. Teachers who want students to engage and understand their learning need to provide them with informed choices, rather than telling them they have to do the same things at the same time. That means teachers should introduce a wide range of

learning tools, and allow students to select from those tools.

In Ledezma's classroom, students have been introduced to a wide range of graphic organizers. So when she invites her students to organize information about the habitat they are studying, they select the tools that work for them. Similarly, when they watch video clips in small groups about different environments and the animals that populate them, students have a range of note-taking options. They also know that there are a number of books they can read to build their knowledge. During library center, students select from these texts.

It's worth noting that choice is an important, but often overlooked, variable in engagement. When students have more choices, their commitment is often higher, and their willingness to struggle through a task improves. We also recognize that life is not a series of options, and there are times when tasks must be completed. Ledezma knows this, and she keeps a list of "must-dos" and "may-dos" on her board. For example, a must-do might be an assembly that all students are scheduled to attend, whereas a may-do could describe the format of the report they will create for their learning about environments.

## 4. Assessment-capable learners seek feedback and see errors as opportunities.

Engaged students don't wait around for feedback from their peers and teachers; they actively seek it out and know when it's necessary. Therefore, when students realize that it's time for feedback, they are much more receptive. When feedback is unsolicited, it is easier to ignore.

"I used to give students feedback on their writing on a regular schedule," Ledezma says. "And they were compliant, changing everything that I edited. But I don't think they learned any more. Now, students ask me for feedback when they're ready for it, and they are much more likely to learn from it."

Ledezma provides all of her students with table tents. On one side, the cards read "working," and on the other, the cards read "feedback." She refrains from interrupting students when their cards say they are working, and she makes a point to visit students when their cards are turned to feedback.

"Ms. Ledezma wants us to work in the learning pit and try to get out of it on our own," says Aaron, a student in the class, "but if we need help, we have to know how to ask for it."

Another student, Jacqueline, adds, "Yeah, but we don't tell each other the answers, because that's not good helping. We help, but we don't do [the project] for the person."

Assessment-capable learners know that errors are opportunities to learn. If an hour goes by in the classroom and no one makes an error, the students have already mastered the content. Teachers should get excited when students make errors, because that means they're ready to learn.

"I talk about the best error of the day, and the error that most people had, and the error that stumped me, and the error that helped the most people learn," Ledezma says. "My kids know that errors are part of learning, that we all make them, and that we can all learn from the errors that others make."

## 5. Assessment-capable learners monitor their progress and adjust their learning.

When students understand their current level of performance and know where they are going with their learning, they are much more likely to be able to monitor their own progress. And monitoring one's own progress is an important aspect of learning. Of course, teachers also monitor students' progress, but they sometimes forget to share the information with students or encourage students to use tools to monitor their own progress.

Ledezma uses checklists to help her students monitor their progress. For example, during the unit on environments, she created a tool that asked questions students could use to track their understanding of each environment: Do I know the environment's physical characteristics? Can I find this environment on a map? Can I find it in several places on a map?

Ledezma and her students also co-created a rubric they could use to monitor their success and determine areas that were still missing from the work they had completed. Yvonne, a student in the class, says, "I look at our rubric every day. I highlight things that I've done and how good they are. It helps me know what to work on." There are a number of other ways teachers can help students monitor their progress; the point is that they should.

6. Assessment-capable learners recognize their learning and teach others. Engaged students recognize when they have learned something. They know it and can describe what they have learned to others. This means that they need opportunities in class to talk with their peers about what they've learned,

get assistance from the teacher, and show their peers each learning expectation accomplished.

Ledezma employs success criteria that students can use to recognize when they have learned something. For example, students in the unit on environments were on the lookout for learning in a number of areas, including:

- I can describe the physical characteristics of this environment.
- I can identify locations on the map for this environment.
- I can identify life forms that could live in this environment.

When students have mastered learning and recognize that they have done so, provide them with opportunities to teach others. Teaching others allows students to transfer their learning, and the ability to transfer learning means that students can apply what they have learned in new situations without the assistance of others.

Ledezma understands the power of peer learning and has established classroom routines in which students peer-teach. This occurs during collaborative learning times, and she often meets with group leaders in advance so she can prepare them for the experience. Importantly, Ledezma makes sure students rotate through the peer teaching position so that everyone has an opportunity to transfer their learning.

## **Engagement Encapsulated**

Engagement is a complex concept, but a critical one. It's not enough for principals to tell teachers that several students were not behaviorally engaged. Teachers have to change their classrooms and invite students into the learning process if they are going to truly and authentically engage them in learning tasks. Our experience and a review of research suggest that the six factors that define assessment-capable learners can result in significant improvements in engagement, not to mention increases in satisfaction for teachers and students alike.

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