Keeping the Learning in Independent Learning

Three simple guidelines help ensure that independent work benefits students and teaches them the skills they need to become independent learners.

Douglas Fisher and Nancy Frey

Learning shouldn't stop when independent work begins. That seems obvious, but in too many cases, the tasks and the thinking required to complete independent assignments are limited to regurgitating knowledge. The work itself doesn’t move students’ learning forward; it is simply assigned to determine how closely the factual knowledge they have learned aligns with what the teacher has taught.

To be certain, declarative knowledge (the what) is important, but it is not an end product. Students must master the procedural knowledge (the how) by applying factual knowledge in novel and authentic ways. It is unlikely that students will meet Common Core State Standards without opportunities to apply knowledge independently. Whether your state has adopted those standards or not, they are shaping the profession’s expectations for all students. Smith, Wilhelm, and Frederickson (2013), in their discussion of the writing standards, put it this way:

Common practice in schools emphasizes developing declarative knowledge. But the Common Core emphasizes procedural knowledge. Look at the verbs that introduce the anchor standards for writing. In sequential order, they are: write, write, write, produce, develop, use, conduct, gather, draw, write. If the Common Core emphasized declarative knowledge, the anchor standards would instead be introduced with verbs like recognize, identify, and define. (p. 47)

We use the phrase independent learning intentionally because such work is more than independent practice. The term practice suggests recitation and rehearsal. Practice is a necessary intermediate step in the knowledge-building process. But independent learning conveys an expectation that knowledge acquisition continues—it doesn’t cease so that the brain dump can begin. Certain specific methods ensure that independent tasks propel learning forward. We look for three quality indicators that deepen learning in the independent phase of instruction: the opportunity to think metacognitively, set goals, and develop self-regulatory skills.

Does It Promote Metacognition?
The first question to pose to evaluate an independent task is, does it promote metacognition? Self-awareness of one’s own learning evolves over a lifetime and is developed through opportunities to think about one’s own thinking. Metacognitive questions embedded in a task can do just that. It is common to ask reflective questions at the end of a complex task and to ensure that their regular use encourages the habit of post hoc analysis.

But metacognition should also occur during a task. Seventh-grade math teacher Rick Greenfield uses four questions designed by Anderson (2002). Before his students begin an independent task, he reminds them to think through the problems as they work:

- What am I trying to accomplish? The first question encourages students to identify the purpose of
the activity. In this case, it causes his learners to think about what the equation is asking of them.

- **What strategies am I using?** The second question requires students to determine what will be required of them, such as converting an improper fraction to solve for an unknown.

- **How well am I using the strategies?** Students need to monitor their work on complex tasks to see whether they are making progress, which means they must pause to see whether they are headed in the right direction. The ability to make a midcourse correction is an important factor in developing procedural knowledge. Greenfield promotes this by setting a two-minute timer to remind students to stop and evaluate their progress.

- **What else could I do?** Students will get stuck; if that doesn’t occur from time to time, then the work is too easy. But teachers must promote resilience and flexible thinking. This question reminds Greenfield’s students that thinking mathematically involves reasoning and exploring alternative solutions.

Greenfield explained, “The CCSS mathematical practices call for them to ‘make sense of problems and persevere in solving them.’ I tell them that the problem isn’t going to announce itself, ‘Hey, here’s how to solve me!’ They have to actively dig around for it, try different approaches, really wrestle with it. These [metacognitive] questions are posted in my room, they are modeled regularly by me, and they are at the top of every worksheet they handle,” he said. “I tell them from the first day that math is muscular, and we’re math warriors.”

### Does It Promote Goal Setting?
A second quality indicator concerns goal setting by the student. A student should understand how a task advances his or her work toward goals, which is the basis of intrinsic motivation. Student motivators vary, but they are likely to include some mix of performance (grades and recognition), mastery (acquiring knowledge), and work-avoidant (conserving effort).
goals (Alexander & Jetton, 2000). Although work avoidance may not sound like something positive, it is something that all of us consider in our own decisions. For example, we may weigh an opportunity by thinking about the possible reward and the chance to advance our learning, but those are always considered within the context of the amount of effort it will require.

Adolescents are no different. Written essays and research papers require effort, but there are performance and mastery elements at stake as well. High school English teacher Robin Alexander builds goal setting into such assignments. After discussing the writing project at hand, she asks each student to set a performance goal (the grade they want to achieve), a mastery goal (what they propose to learn during the process), and their planned effort (how many hours they will invest). They submit their goals to her in advance, and she uses them during writing conferences. When they submit the essay, they rate themselves on how well they attained their goals: their expected grades, evidence of achievement of the learning goal, and the amount of time actually spent on the assignment.

“I have found these to be among the most valuable conversations I’ve had this year,” she said. “Conferences about their progress toward their goals can jump-start a less-than-diligent student. And when it comes to grading, they can see how their efforts played an active role in the result.”

**Does It Promote Self-Regulation?**

A third indicator for independent learning is the opportunity to assume autonomy and develop a sense of efficacy. Self-regulation doesn’t stand apart from the first two quality indicators; in fact, metacognition and goal setting are necessary to self-regulate one’s learning. Choice is essential for developing a sense of autonomy. We don’t mean that independent learning tasks should be completely freewheeling assignments. Adolescents should, however, have the freedom to explore and customize their learning.

Independent reading is one example of how the principles of self-regulation can be developed. Middle and high school teachers often assign texts to be read independently. When learners are presented with a reading list with deadlines, rather than being fed requirements in a piecemeal fashion, they learn to formulate a reading plan. That is far superior to the “read this for tomorrow” assignments that are usually given.

In addition, students need opportunities to select independent reading. Teacher interest in reading has a positive effect on the self-selected independent reading habits of adolescents. Teachers at the high
An instructional leader interacts consistently with students and teachers and displays the same qualities we look for in independent learners. A spirit of inquiry, reflection, and self-regulation are vital for sustained learning, whether you are an assistant principal or a seventh-grade math student.

A final aspect of self-regulation is giving students opportunities to explore and expand their own learning. One way to accomplish that goal is through research and writing about a chosen topic. Biology teacher Lauren Oldfield introduces possible topics for the research papers her students will develop on the science of natural selection and adaptation. “I give them options to choose from, like sexual selection, camouflage, and mimicry,” she explained. “One student got very involved with the panda’s thumb after reading an essay by Stephen Jay Gould. Another looked at some recent research about the development of human male hands to fight. They converted their research into short videos that they posted for one another on our LMS [learning management system]. I think them having a forum to share their research was as important as the research itself. Everyone needs an audience.”

**Conclusion**

An instructional leader interacts consistently with students and teachers and displays the same qualities we look for in independent learners. A spirit of inquiry, reflection, and self-regulation are vital for sustained learning, whether you are an assistant principal or a seventh-grade math student. Don’t try to determine whether those conditions are present in a written lesson plan; it’s better to ask students and teachers about their work. Their responses will inform your own learning, and in turn, your engagement and interest will embody the principle of the lifelong learner. **PL**

**References**


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