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# What Fitness Bands Can Teach Us about Classroom Assessment

By: Karen S. Buchanan, EdD

A colleague of mine recently engaged with a new technology tool that has changed her life. She purchased and became a vigilant user of the fitness band. This wristband tracks her movement and sleep. Although fitness bands are cool tech tools, their “magic” is rooted in the continuous feedback they provide on one’s progress toward fitness goals determined by age, height/weight, and activity level. This amazing device has helped my colleague lose 40 pounds and increase her activity level fourfold in the last seven months. Watching her response and seeing her success have caused me to revisit what we know about the power of formative assessment as a learning tool.

Formative assessment can be any assessment that first and foremost promotes students’ learning. Many refer to this type of assessment as assessment “for” learning. In contrast, summative assessment, or assessment “of” learning, looks at grades or scores that give a final judgment or evaluation of proficiency. Assessment “for” learning is usually more informal and includes aspects of teaching. It is formative because it gathers evidence that helps teachers better meet the learning needs of students as well as empowering students to be change agents in their achievement. A host of studies have shown that when formative assessment is implemented effectively, it can greatly enhance, or even double, the speed of student learning. It is a tool that, much like the fitness band, has the potential to facilitate amazing results.  
The fitness band helps users see where their current data sits in relation to their goals.

I’d like to look more closely at how the fitness band has made a difference for my colleague and apply those aspects of its formative assessment to our classrooms. First, the fitness band provides clear, timely data on the user’s progress. At any moment a fitness band user can view real-time data about her or his movement (steps taken, miles traveled, active and idle time, calories burned, and so forth). For college teachers, providing students with clear and timely data on progress is challenging. Gathering and reporting data takes time. However, our students depend on feedback to help them see if their work needs to improve and in what areas. We must work to discover small ways to efficiently gather and report on data. Here are some possibilities:

* Short in-class quizzes that are graded in class
* Online quizzes that provide feedback right away
* One-minute quick write-ups done at the end of class that check on students’ understanding, with feedback from the teacher offered in the next class

Next, the fitness band helps users see where their current data sits in relation to their goals. By learning that she has taken 7,122 steps by 11:30 a.m., my colleague sees that she has met 75 percent of her daily goal of 10,000 steps. She will need to add another 3,000 steps before bedtime. Faculty need to help students see where their work stands in relation to a clear learning goal or quality standard. Scoring their work on a rubric or scoring guide that clearly defines levels of quality can help students gauge the quality of their work and see what else is needed to meet the standard. You can also provide students with model examples or anchor papers that demonstrate target quality. You might want to include activities that have them compare their work (or that of their classmates) with these models.

Another critical component of the fitness band’s work is to provide the user with feedback or tips aimed at improving their performance. For example, my colleague’s sleep data indicated that it was taking her a long time to fall asleep. She received a message about creating a routine at bedtime that included examples of what she might do. It is the specific feedback that we as professors give students, describing how they can take a “next step” to improve the quality of their work, that makes a difference. In the book How Learning Works, Ambrose and her co-authors write, “Feedback is most effective when it explicitly communicates to students about some specific aspects of their performance relative to specific target criteria, and when it provides information that helps students progress toward meeting that criterion.” (p. 227) My work with faculty has shown me that this is an often-neglected practice. We are so busy, pushed and pulled in many different directions, that providing this kind of feedback to students is often not the priority it should be. We may need to redistribute our teaching tasks and reclaim those, like this one, that are so essential to learning.

Finally, the fitness band celebrates milestones using a variety of electronic methods. My colleague received a message that her step totals over the last month were in the top 10 percent of all fitness band users. She felt accomplished! Students need to have the chance to pause and reflect on how their efforts have improved their work, helped them learn, and enabled them to meet high-quality standards. As professors, we should share this feedback one-on-one with students (electronically or personally) or report on class success. Creating moments to pause and mark success generates motivation for future learning.

Discovering how to teach so that students learn is a journey. What is the next step for you as a professor striving to increase the quality of your teaching? Perhaps embracing the power of formative assessment is a step that leads in a direction you’d like to take.

Karen S. Buchanan is an associate professor of education at George Fox University.

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