Tech Snacks: Managing Self-Paced Learning

Covid-19 has forced us to embrace more flexibility in the classroom, often in terms of pacing. In some cases, students face circumstances that are slowing their progress in class. In others, they're asking to work ahead in anticipation of future obstacles. But how do you manage a class where students are working on different topics at different times?

When should I use self-paced learning in my class?

In contrast to a traditional model where students move in lockstep with one another on the same schedule, self-paced learning means that students choose what to study, how to study, when to study, and how long to study.

Self-paced learning can be helpful in situations ...

- where students have a very wide range of prior knowledge or ability in the subject area
- where students tend to have a lot of outside commitments and need flexible due dates so that they can structure learning around their available study windows (e.g., weekends if they work full-time during the week). ***This is especially important to consider at MSU-Northern, where the average student age is 23.6 years old. Many students have families and/or work full time.***
- where limited equipment requires students to work on a variety of different projects or labs, and these projects take different lengths of time.

Why should I use it?

Racing students through content before they've mastered it results in ever-accumulating skill and knowledge gaps that can ultimately set them up for failure. Likewise, holding quick learners back can dampen their interest and limit their learning potential.

Self-paced models can also allow more opportunity for individualized feedback from the instructor and direct interaction between the instructor and individual students.

What are the drawbacks?

In order for self-paced learning to be successful, students must have sufficient self- regulation skills, the ability to choose effective study strategies for the material at hand, and enough awareness to recognize the areas in which they need more work.¹

If students lack the necessary metacognitive skills, it can be critical to find ways to foster these skills with mechanisms such as self-assessments, check-in assignments, and/or periodic "hard" deadlines. Likewise, students (especially online students) can easily lose focus and motivation without at least some boundaries to keep them on track.

Finally, peer-to-peer interaction is more difficult to integrate into a course when it is set to a self-paced model. Discussion boards, for instance, would be difficult to implement and manage in a self-paced environment.

¹ See for instance: J. G. Tullis and A. S. Benjamin, "On the Effectiveness of Self-Paced Learning," *The Journal of Memory and Language*, 2011 (64.2): 109–18.

What does it look like?

There are many examples of successful models of self-paced out there, but here are a few critical elements that can improve a class's chance of success.

Clear learning outcomes that are transparent to the student

In order for students to know if they are proficient enough to successfully complete a major assignment or test and progress in the course, they need to know what the expectations for that particular unit of study are and if they're meeting them.

Examples:

• A list of learning outcomes indicated at the beginning of each module

• A checklist of learned outcomes at the end of each module that students review before going into the final module assessment (e.g., "I can do X. I can do Y.")

Brightspace tools that can help

- Module description area
- Checklist feature

□ Lots of opportunity for instructor feedback and student self-assessment

In order for students to know if they need to study more, they need opportunities to practice their knowledge and skills and receive feedback on their performance. It is difficult to improve if you don't know where you're going wrong.

Examples:

- Quizzes with multiple attempts and a "mastery learning" model (80% achievement)
- Self-calibrating quizzes that require students to repeat practice in weak areas until they have reached mastery (some publisher quizzes have this feature)

• Assignments that require students to correct their own work or use a rubric to assess their own work and reflect on their progress

• Practice "stations" with self-contained learning outcomes, learning activities, and opportunities for self-assessment that students must complete before moving on

Brightspace tools that can help

- Opportunities for multiple "Quiz Attempts" with questions drawing from a question library
- · Question feedback as well as "sections and levels" features in Quizzes
- Intelligent agents that automate feedback and suggest "extra practice" in targeted areas

Structure and direct feedback from the instructor

Especially for lower-level courses and in courses with underclassmen, it's important for instructors to recognize that students are still developing study skills and self-awareness about their own time management and academic abilities. They typically need benchmarks to achieve these skills.

Examples:

- Periodic hard deadlines, especially in online courses (at least every 2-3 weeks)
- Mandatory check-ins with the instructor about achievement of outcomes and benchmarks
- "Grade Check" assignments

How can Brightspace help?

- Due dates
- Lots of visual structure that conveys a "target" timeline (i.e., in the Content area)

Related discussion topics

How do I know if self-paced learning is appropriate for my class? How far should I let students work ahead in a class? How do I keep students from falling behind?