

# Teaching Today



## Challenge by Choice

Two years ago, Upper School mathematics and economics teacher Dr. Adam Lavallee introduced a new assessment method to his AP Economics class. He calls this method “Challenge by Choice,” and it allows the students to break free from traditional, multiple-choice testing and apply what they are learning in class to current events, coursework in other classes, or other areas of individual interest. “If you think about how we all learn,” Dr. Lavallee said, “we learn best when we can connect a concept to a topic that we know or care about. I want my students to develop an economic lens with which to see the world and to build a foundation of economic understanding that they can apply to their lives.”

With Challenge by Choice, 40% of the student’s grade each semester is based on assignments they choose, design, and complete, based on their own interests. The other 60% of their grade is determined by test results and completed homework. Over the course of each semester, they must earn 200 points however they choose, and points are awarded relative to the time, effort, and insight that went into creating the assignment.

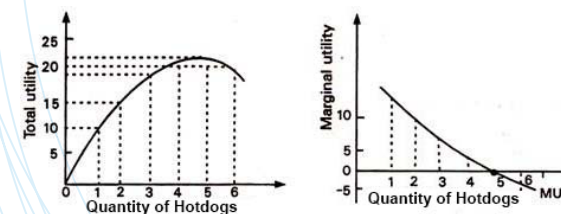
For example, a student could choose to do 20 small assignments worth 10 points each (such as reading an article and assessing the economic forces at play and applying economic theories), or four larger assignments worth 50 points each. “This work gives students the flexibility to choose a focus and application of course concepts,” Dr. Lavallee said. “They can choose the format of the work they do, whether that be reading a newspaper article, writing a paper, conducting a debate in front of the class, and more.”

It is those larger projects and ideas, Dr. Lavallee says, that demonstrates to him that the students are doing multiple times the work outside the classroom than what he sees in the final assignment. “Figuring out what they’re going to do is just as valuable as the work they end up turning in,” he explains. “They’re going through the day looking for ways these theories can be applied and making these connections outside of school.”

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One student at a baseball game, eating hot dogs, when he had an “aha” moment. He realized that he was willing to pay a premium for the first hot dog, but once he ate it, he was willing to pay less and less for each additional hot dog. “That’s the concept of Diminishing Marginal Utility,” Lavallee says. “He wasn’t in school or doing homework, but he was thinking about economics and seeing an example of it in the real world. The student submitted that analysis along with graphs to explain the theory at play.”



Each student can apply their knowledge differently, depending on their aptitudes and passions. For example, one student produced calculus proofs for the economics formulas that they were learning in class. Another student took a paper he had written about the Great Depression from U.S. history class and annotated each paragraph to explain the economic forces at play and the potential economic impact of policy decisions during that time. The student also noted whether the theory bore out in practice. Other students conducted a scripted debate in front of their classmates on whether Bitcoin and other cryptocurrencies should be considered fiat money (not backed by something of physical value, like gold) or commodity money.

Jack Rebillard '20 combined multiple concepts that he learned in class to analyze the macroeconomic impact of World War II on the U.S. economy. He shared, “I think it is important to have alternative grading methods. It forces students to understand a topic deeply in order to elaborate on it in a theoretical example.”

Alex Capitano '20 echoed Jack’s belief that the assessments helped him understand and retain the material better, adding, “I really enjoyed having this as an alternative because it gave me an opportunity to think outside the box and learn the content in a way that I could personally understand. It was a lot different from just learning the content out of the book or through a lecture, and this was because it forced me to apply it to the real world.”

Dr. Lavallee came up with the concept of Challenge by Choice after he participated in a Global Online Academy (GOA) cohort for professional development, where he explored alternative assessment methods. He then was able to use funds from a Class of 1944 50th Reunion Faculty Enrichment Fund to develop the course. “I valued my students’ voices and their ability to make choices. I don’t care if they know what the gross domestic product (GDP) of Canada is—you can ask Siri that. I want them to make connections and think more deeply about the relative GDPs of Canada and Mexico relative to their populations and what that means for the people who live there.”

Of course, there can be occasional challenges with implementing a less traditional way of assessing student learning. For example, while it’s hard for students to complete these projects early in the semester before they learn key concepts, it is also important not to procrastinate and leave dozens or hundreds of points to the end of the semester. To overcome those challenges, Dr. Lavallee works closely with students to give them ideas for their assignments, helps them understand why they were awarded a certain number of points, and discusses ways to take a submitted assignment to the next level. “I don’t have a rubric. This process is based on mutual trust; trust from the students that I will honor their efforts, but also my trust in them that they won’t just plug their way through to get it done.”

This semester, Dr. Lavallee is requiring that every student visit a “production site”—any business that produces a good—as part of their Challenge by Choice. They have complete freedom as to what business they visit, how they interact with that business, how to apply economic principles, and how to present their knowledge, but he is looking forward to the creative projects that result. “The results in the last two years have been astonishing,” he shared. “Seeing how the students have deepened their understanding has been one of my proudest accomplishments as a teacher.”