College can still be rigorous without a lot of homework
28 June 2021, by Kc Culver

Credit: Pixabay/CC0 Public Domain

How hard should it be to earn a college degree?

When the book "Academically Adrift" appeared in 2011, it generated widespread concern that college was not effectively educating students and preparing them for today's world. Among other things, authors Richard Arum and Josipa Roksa claimed that most colleges were not rigorous or demanding, in part because college students were not reading and writing enough in order to build their critical thinking skills. But is it really how much work students are assigned that makes college rigorous and helps them learn?

As a scholar of higher education, I have taken a close look at college students' academic experiences and outcomes for several years. Some people define rigor as how many pages a student reads or how many pages a student writes. But in a 2021 peer-reviewed study that I published with colleagues John Braxton and Ernie Pascarella, I found that if they do that, they might miss key elements of what it takes to help students develop critical thinking skills and become lifelong learners. They also might create an unnecessary burden for students who have other demands on their time.

What is rigor?

In education, academic rigor tends to be defined in two different ways: as a workload that is demanding and difficult or as learning experiences that challenge and support students to think more deeply.

Given the importance of critical thinking, the way rigor is defined makes a big difference in terms of the ways that the general public—as well as administrators, policymakers, journalists and researchers—assess if a college is rigorous. It also makes a difference in terms of faculties' expectations for students, the types of classroom activities they use and the assignments they give.

In other words, if rigor means workload, then students who spend a lot of time studying should become better critical thinkers. In contrast, if rigor means academic challenge, then students who practice higher-order thinking skills, such as analysis and evaluation, during class, on assignments and during exams should become better critical thinkers.

That's why my study examines each definition of rigor—workload and academic challenge—in terms of helping students develop critical thinking skills. The study also looks at those definitions of rigor in relation to two related dimensions of lifelong learning. One is reading and writing for pleasure, and the other is the habit of thinking deeply and critically about things.

The college difference

The study included about 2,800 students who attended one of 46 four-year colleges in the U.S. between 2006 and 2012. These students took part
in the Wabash National Study of Liberal Arts Education, which was a large, longitudinal study of how college experiences affected outcomes associated with a liberal arts education. They completed surveys and tests at three different points during college: at the beginning of their first year, at the end of their first year and at the end of their fourth year.

In these surveys, students reported their course workload, including how many books they read, pages they wrote and hours they spent studying for class. They also reported how much their courses challenged them to engage in higher-order thinking. Faculty ask students to practice higher-order thinking when they ask challenging questions in class and give assignments that ask students to analyze information or form an argument.

Since the Wabash National Study measured students' critical thinking and lifelong learning skills at multiple timepoints, my study looked at how much students developed these skills in relation to their workload and the academic challenge of their classes. Of course, students who are motivated to get good grades may be more likely to develop these skills. And lots of other college experiences, like interacting with faculty outside of class or being in an honors program, might also make a difference. My study accounts for these factors in order to better understand the unique influence of each definition of rigor.

What matters

Here's what we found.

In the first year of college, higher-order thinking was related to an increase in both dimensions of lifelong learning: reading and writing for pleasure. This relationship was driven primarily by the amount of reading students did, rather than the amount of writing they did or the amount of time they spent studying.

Perhaps most importantly, my study suggests that students learn important critical thinking and lifelong learning skills because of challenging class experiences regardless of the workload. In other words, college can help students be better critical thinkers and lifelong learners without requiring them to spend a lot of time studying.

Implications for colleges

This study has implications for how courses and colleges are assessed as being rigorous. It also has implications for how faculty teach, as it suggests that they should create courses that engage students in higher-order thinking, rather than asking them to complete long reading and writing assignments.

These implications matter particularly for students from low-income backgrounds, who are more likely to work full-time during college. Low-income students are also more likely to commute to campus and have family responsibilities.

Because of these responsibilities, students from low-income backgrounds often have less time to dedicate to homework compared to students from wealthier backgrounds who live on campus and who don't work as many hours. This creates an opportunity gap in students' ability to be successful. A 2018 report from the Pell Institute shows that low-income students graduate at much lower rates than students from higher-income backgrounds.

If campuses want students from low-income backgrounds to graduate at the same rate as their peers, then it is important that these students have a reasonable workload in their courses so that they don't have to choose between college and their other responsibilities.

This article is republished from The Conversation under a Creative Commons license. Read the