ACADEMIX Upshot

CAN FULLY ONLINE DEGREE PROGRAMS BOOST COLLEGE COMPLETION?

THE UPSHOT

Advocates have long searched for the best way to provide accessible, lower-cost higher education to students. Many point to online degrees as a solution. With flexible, virtual classes and meeting times, exclusively online degree programs can accommodate students' time and location constraints.[1] In theory, online programs seem like a viable strategy to get more students to complete college, especially for those who cannot attend in-person courses.

Previous research on online education has shown mixed results on the effects of online enrollment and students' academic outcomes.[2] Many of those studies focused on the short-term outcomes of online education and students who enrolled in some online courses, not exclusively online programs.[3] However, for students and institutions, the long-term outcomes associated with exclusively online programs are essential to understanding whether those offerings are actually boosting completion outcomes.

This study examined the long-term outcomes of exclusively online students at community colleges and four-year institutions. It also reported how outcomes varied by students' demographic characteristics and the type of institution in which they enrolled. Across race and ethnicity subgroups, students who enrolled in online programs were less likely to complete a bachelor's degree. And students who attended four-year, for-profit institutions fared the worst.

THIRD WAY

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NARRATIVE

Colleges and universities have long been criticized for not having a higher number of students who complete their degrees. Research shows that completion rates for Black, Hispanic, and low-income students also lag significantly behind their peers.[4] To boost completion rates, many institutions look to online degree programs as a way to get more students across the finish line and narrow attainment gaps.[5] For students with time and geographic constraints, online degree programs offer an accommodating learning option while potentially also increasing revenue for colleges.[6]

Online degree programs offer students what in-person instruction can't—flexible course times and the freedom to learn from anywhere.[7] And that flexibility appears to be increasingly popular. In 2008, 3.9% of college students were enrolled in exclusively online degree programs, compared to 23.4% in 2020.[8] Some research also shows that institutions with high percentages of exclusively online students can charge lower tuition prices, making exclusively online degrees more financially accessible for students and a lucrative endeavor for institutions seeking to grow enrollment.[9]

Figure 1. *Enrollment Growth in Exclusively Online Programs*
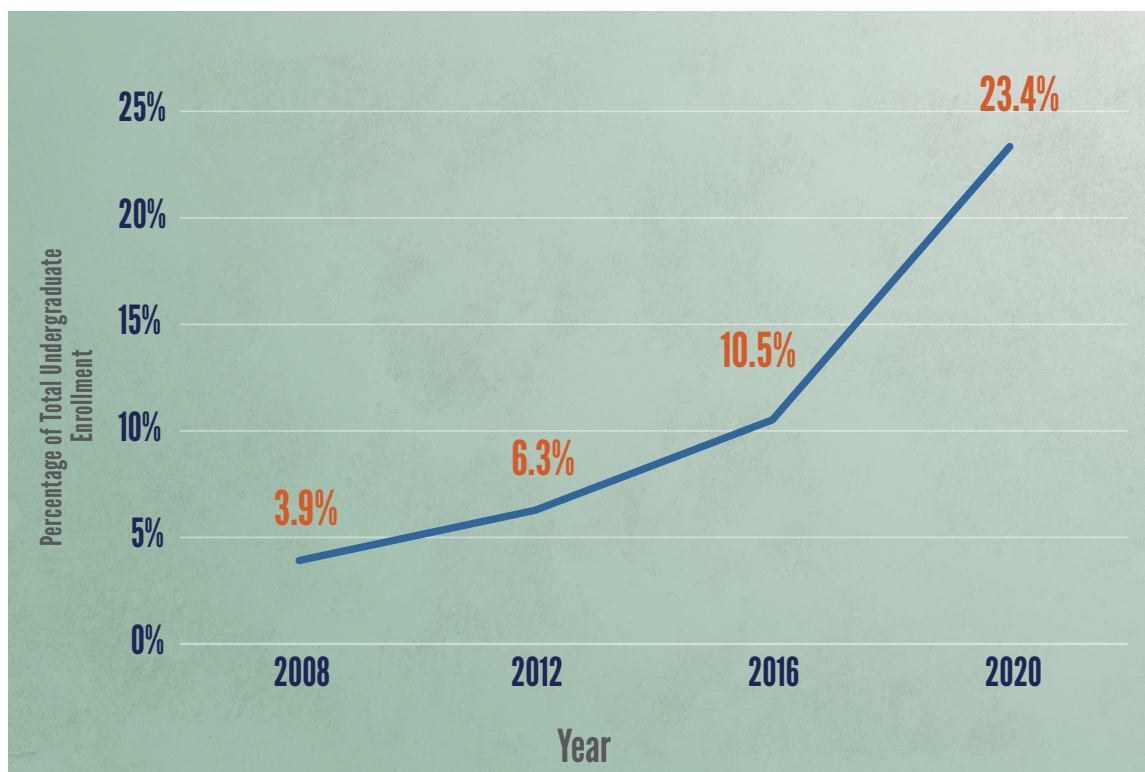
Source: Authors' calculations using National Postsecondary Student Aid Study (NPSAS) data.

Institutions' central question is whether online degrees open new doors to college completion or do more harm than good by derailing students from their pathway to success. Existing literature reveals mixed or negative relationships between online learning and short-term, course-level outcomes.[10] Most prior research examined the effects of a single online course and compared students' outcomes to their peers in face-to-face learning environments but did not explore the impacts of participating in an exclusively online program.

Previous studies revealed negative effects of enrolling in an online college course. Students enrolled in online courses earned lower grades, were more likely to withdraw from the course, and performed worse on exams than their peers in face-to-face instruction.[11] However, select studies revealed some positive effects of enrolling in at least one online course—being more likely to earn an associate degree, having higher bachelor's degree completion rates, and graduating in a slightly shorter time than their peers.[12] The logic of these positive long-term outcomes suggests that online courses can introduce flexibility and allow students to progress toward degree completion, especially when facing time or location constraints.

Prior research has also shown that students' success in online courses is related to their demographic and background characteristics. Racially minoritized students, especially Black students, are less likely to persist in online courses.[13] Another study revealed that male, racially minoritized, and part-time students saw the most significant declines in passing grades in online courses compared to their peers in face-to-face instruction.[14] However, more research is needed to understand the role of background characteristics in online academic performance.

Despite these studies, little is known about the impacts of exclusively online degree programs on degree completion. To fill that gap, we examined the extent to which enrolling in an exclusively online degree program influences students' likelihood of degree completion, accounting for student demographics and the type of institution the student attended.

Our study suggests that online programs may not be the ticket to bolstering college completion, and for-profit programs are leaving students in a worse position than they were before attending college. We found that students enrolled in exclusively online degree programs were 8.3 percentage points less likely to complete a bachelor's degree than their non-exclusively online peers. The negative relationship between online degree enrollment and college completion was consistent across race and ethnicity subgroups. And the negative outcomes associated with online programs were especially concentrated among low-income and veteran students, with students in these groups less likely to complete an exclusively online program by 8.9 and 11.4 percentage points, respectively.

As referenced earlier, this study also revealed that enrolling in an exclusively online degree program at a for-profit institution exacerbated the negative influence of exclusively online enrollment on students' likelihood of completing a bachelor's degree. When focusing solely on exclusively online students, those who enrolled at selective four-year institutions were more likely to finish their degree than fully online students at other four-year institutions.

Enrolling in an exclusively online program can introduce flexibility but also bring its share of challenges. By not taking any courses on campus, students enrolled entirely online may not have the opportunity to benefit from personalized and consistent interactions with professors, which can be critical to their sense of belonging and likelihood of success.[15] Consequently, exclusively online students may be forced to rely more on self-directed learning than face-to-face instruction, resulting in worse outcomes.[16] Not surprisingly, this issue would become heightened at a for-profit institution that—in alignment with its mission—prioritizes advertising and marketing to a further extent than support and services for its students.

Enrolling in an exclusively online degree program at a for-profit institution exacerbated the negative influence of exclusively online enrollment on students' likelihood of completing a bachelor's degree.

POLICY RECOMMENDATIONS

Although fully online programs have a negative relationship with degree completion, that doesn't mean such programs are always ineffective. Online programs aren't going anywhere, and investing taxpayer dollars in programs that prioritize student success is essential. Our results should be used to implement the following guardrails to ensure institutions are offering high-quality online programs that center degree completion and a strong return on taxpayer financial aid dollars:

- **Require transparent reporting of costs and revenues among exclusively online programs.** Our research shows that students at for-profit four-year schools are less likely to earn their degrees than exclusively online students at other institutions. At the same time, institutions can use online programs to bring in substantial revenue for their institutions. Prior research also indicates that for-profit programs invest more funds toward marketing than academic support services or class instruction.[17] Requiring institutions to report the costs and revenues of their programs could increase transparency for students and taxpayers alike.

- **Regulate non-profit institutions' use of online program managers (OPMs).** Some non-profit institutions contract with OPMs, which are third-party for-profit companies, to outsource components or all of their online degree programs.[18] Using a for-profit offering seems misaligned with goals to increase degree attainment and narrow completion gaps for historically marginalized students. Regulating how and if these companies are involved in the online program experience could benefit students' likelihood of academic success and degree completion.

- **Increase institutional wraparound services for students in exclusively online programs.** Students enrolled in exclusively online programs may not have the same faculty and staff interactions as their peers and may have to opt for self-instruction.[19] Research shows that regardless of instruction method, wraparound services, high-quality advising, and targeted engagement positively impact students, so colleges and universities should invest in these approaches for exclusively online students.[20]

- **Consider clear and elevated accreditation standards for exclusively online degree programs.** For some students, the only path to pursue higher education is through an online program. If students can receive taxpayer-funded financial aid dollars to enroll in an online degree program, it should be a quality program that leaves students in a better position than before they pursued higher education. Accreditation efforts should focus on establishing clear, shared, elevated standards for exclusively online degree programs. These agreed-upon standards could help institutions deliver a high-quality online education experience and increase degree completion outcomes among exclusively online students.

METHODOLOGY

This study draws on national data from the Beginning Postsecondary Students Longitudinal Study for 2012–2017 (BPS: 12/17), the most recent longitudinal tracking of a nationally representative sample of college students. Students included in BPS: 12/17 enrolled initially at a college or university in 2011–2012 and participated in three rounds of data collection during their first, third, and sixth years after beginning college. The national sample includes 22,500 students. We can use these data to examine student characteristics, course-taking patterns (such as exclusively online enrollment), and academic outcomes over six years.

Using BPS data and a quasi-experimental design, we offer rigorous evidence to examine the relationship between degree completion (the outcome variable) and enrolling in an exclusively online program (the treatment variable). After accounting for differences in students' background characteristics and likelihood to enroll in an online program, we estimate the influence of enrolling in exclusively online degree programs on students' likelihood of degree completion using various statistical models to explore variations in results by student subgroup and institutional sector.

More detailed methodological information can be found here.

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