# First Degree Earns: The Impact of College Quality on College Completion Rates

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# **RESEARCH HIGHLIGHTS:**

- Students entering college now have completion rates lower than those in the 1970s, and although college enrollment has expanded to include a larger population, student characteristics do not fully explain disparities in graduation rates.
- This study shows that among Massachusetts Adams
   Scholarship recipients, students often chose more affordable
   colleges over higher quality colleges, and this choice
   significantly lowered their on-time completion rates, especially
   for highly skilled students. While students who just missed
   qualifying for the scholarship have a completion rate of about
   57%, students just over the threshold for eligibility have lower
   completion rates of about 53% since they are induced to
   attend lower-quality colleges with lower on-time graduation
   rates.
- For students who the scholarship induced to attend instate
  public colleges, chances of graduating on time were lowered
  by over 40%. The results of this study suggest that improving
  college quality, and therefore graduation rates, requires more
  than changing the composition of the student population.
  On-time graduation rates and time to completion should be a
  large factor for students making decisions about colleges, and
  better tools are needed to publicize information on graduation
  rates.

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# **ABSTRACT:**

"We use a Massachusetts merit aid program to provide the first clear causal evidence on the impact of college quality on students' postsecondary enrollment decisions and rates of degree completion, where college quality is defined by a variety of measures including on-time graduation rates. High school students with test scores above multiple thresholds were granted tuition waivers at in-state public colleges of lower quality than the average alternative available to such students. A binding score regression discontinuity design comparing students just above and below these thresholds yields two main findings. First, students are remarkably willing to forgo college quality for relatively small amounts of money. Second, choosing a lower quality college significantly lowers on-time completion rates, a result driven by high skilled students who would otherwise have attended higher quality colleges. For the marginal student, enrolling at an in-state public college lowered the probability of graduating on time by more than 40%. The low completion rates of scholarship users imply the program had little impact on the in-state production of college degrees. More broadly, these results suggest that the critically important task of improving college quality requires steps beyond merely changing the composition of the student body."



# **Implications**

# **FOR PRACTICE**

Previous studies have shown that within states, larger cohorts of students have lower completion rates, indicating that decreased resources, stretched across a greater number of students, play a part in reduced student success. This is especially relevant for poorly funded state institutions. In this study, many students eligible for the Adams Scholarship were willing to trade higher quality, more competitive colleges for reduced costs of attendance, which resulted in lowered on-time college completion rates, specifically for highly skilled students. Scholarship eligibility decreased the enrollment of highly skilled students in most or highly competitive colleges by more than 3 percentage points, and consequently decreased their chances of graduating on time. Attending a higher quality college in terms of higher average SAT scores, lower admissions rates and fewer students per faculty member was shown to raise the probability of graduating on time by 37 percentage points for the marginal student. For students induced by the scholarship to change their college attendance, choosing in-state public colleges resulted in a reduced probability of graduating on time by 26 percentage points. Students swayed by Adams Scholarships to attend instate public colleges, and therefore lower their chances of graduating, may end up with estimated lifetime earnings penalties of \$250,000, which is far more than the value of the tuition waiver. Because students seem to have a poor understanding of the importance of college quality and completion rates, college admissions counselors should work to communicate this to traditional incoming students. For adult and non-traditional students selecting colleges, more information should be readily available online and via admissions counselors about in-state public college completion rates, compared with more competitive colleges and universities.

### **FOR POLICY**

While the policy implementing the Adams Scholarship successfully increased enrollment in Massachusetts' four-year public colleges, overall these increased enrollments did not significantly increase the in-state production of college degrees. Overall, the results of this policy seem to show increases in state expenditures for very little benefit and possible harm for in-state students who would have otherwise chosen to attend more competitive institutions. While the in-state public college graduation rates increased by about two percentage points, about ¾ of increased enrollment did not result in degree attainment because many students enrolled in Massachusetts public colleges did not finish college at all. Policy interventions should focus on increasing widespread student and parental understanding of the importance of college quality and the availability of information concerning graduation rates. The U.S. Department of Education may need to work with high schools to create more salient and easy to navigate informational tools comparing colleges in terms of student success variables, such as graduation rates and completion times.

#### FOR FUTURE RESEARCH

While this is not an article using veterans as a sample, the implications for veterans enrolling in college are clear and compelling. Future studies should include student veterans in the sample. Furthermore, additional studies may look at GI Bill funding and investigate whether that has an influence on school choice and completion rates. In addition to using veterans in the sample, future studies should account for multiple measures of college quality beyond graduation rates and student-faculty ratios. Researchers should explore whether colleges with varying levels of access to coursework, campus resources, veteran resources and peer networks share similar results, and whether colleges with fewer overall resources, especially veteran resources, per student have poorer completion rates regardless of academic ability. Future studies should focus more in depth on which factors directly influence on-time completion of degrees, as well as which factors result in late completions, at five or six years, versus students who are still unable to complete their degree over these extended periods of time including completition rates for

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veterans. Students may also have other consequences, beyond low completion rates, from exposure to colleges and universities with little funding and resources for their education and/or veteran resources. Researchers may also wish to explore further long-term outcomes for these students, such as earnings, in order to provide more evidence showing the critical importance of improving these institutions both for students and to benefit states and communities.