

## **Community Colleges: Opening or Closing Doors for Students?**

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### **Abstract**

The purpose of this study was to predict what would happen in terms of educational achievement if a student began his or her college pursuits at a two-year institution versus if that same student began college pursuits at a four-year institution. In order to make this prediction, pairs of students (one who began at a two-year school and one who began at a four-year school) were matched on six variables shown in previous literature to influence educational achievement: (1) gender, (2) ethnicity, (3) mother's highest level of education, (4) father's highest level of education, (5) total family income during the student's eighth grade year, and (6) the student's own predictions of how far he or she will go in post secondary education, made while a senior in high school. Data used in this study came from the Department of Education's National Education Longitudinal Study of 1988 (NELS:88). This database contains information about a nationally representative sample of students tracked from eighth grade in 1988 through eight years post high school in 2000.

### **Introduction**

Two-year colleges have assumed an important role in the higher education system, and now serve almost half of all undergraduates in the United States (American Association of Community Colleges, 2010). Researchers have long speculated that two-year colleges serve a "cooling out" function in American society (Clark, 1960, 1980). The phrase "cooling out" refers to critics' claims that two-year colleges reduce students' original goals and promote a culture of privilege though reserving selective admissions at four-year colleges for the children of the upper class, while not allowing the children of the working class to advance in social class. Clark (1960, 1980) was a pioneer of the idea that two-year colleges are actually counterproductive in the overall educational achievement of students.

Following Clark's initial line of questioning, Dougherty (1994) asks about the community college, "Is it an avenue of opportunity for its many working-class, minority and female students, or is it a blind alley blocking off equality?" (p.15). After more than ten years of exhaustive research, Brint and Karabel (1989) concluded that the dream of education as a route to upward mobility, as well as the ideal of equal educational opportunity for all, are both seriously threatened by the community college.

The problem now is that the bulk research in this area is dated and applies to the community colleges of the 1970s and 1980s. Long and Kurlaender (2009) suggest that a more timely analysis is needed to reexamine and extend understanding of the current functions and changing roles of community colleges in the 21<sup>st</sup> century. They examined data from two-year and four-year college students in the Ohio public higher education system to determine differences in degree completion, total credit hours completed, and stop out behavior. They found that students who began at two-year colleges suffered a considerable "community college penalty," and by their most conservative estimates were 14.5% less likely to complete a baccalaureate degree within 9 years, were more likely to dropout and also to complete fewer total credits.

The aim of this study is to determine if those findings persist even when a different set of students is tracked and different methods to control for selection issues that cause students to non-randomly sort into two-year and four-year schools are used. Many years after initial questions about the community college's function began appearing in education literature, very little is still known about the outcomes for students who choose to attend two-year colleges. It has been hard to support or refute the claim that community colleges hinder student achievement because the majority of previous studies fail to take into account background reasons that cause some students to first select two-year colleges, including financial constraints, parental influence, and personal aspirations.

Because there are now over 1200 community colleges serving 11.8 million students in the United States (American Association of Community Colleges, 2010), more information is needed about the two-year college and its overall function in the higher education system. This information is important and relevant to students, parents, administrators, researchers, and policymakers alike.

### **Research Question**

The central research question in this study was this: Do students who begin at two-year colleges achieve less academic success than otherwise similar students who begin at four-year colleges? The three outcomes of interest were: (1) whether a student remains continuously enrolled throughout college; (2) the total number of semesters a student successfully completes; and (3) the highest degree, if any, a student obtains.

In order to make a comparison, students were matched on the following variables previously shown in the literature to affect educational outcomes: (1) gender, (2) ethnicity, (3) mother's highest level of education, (4) father's highest level of education, (5) total family income during the student's eighth grade year, and (6) the student's own predictions of how far he or she will go in post secondary education, made while a senior in high school.

This research question is important because there is limited information available to indicate if the same student had started college at a four-year school, instead of a two-year school, would that student have been more likely to have stayed continuously enrolled? Would that student have been more likely to have completed more total college credits? Finally, would that student have been more likely to achieve an associate's degree, bachelor's degree, or even a graduate degree?

### **Results**

Differences were found between matched students who began their post secondary education at two-year schools and students who began at four-year schools across all levels of the three outcome variables of interest: highest degree attained, total number of years completed, and continuity of enrollment.

A total of 9,875 students were available for study from the NELS:88 data set. After removing students who had missing data on any of the matching variables, there were 6,022 students who remained eligible to be matched. After matching students on the six selected variables, there were 1,553 matches for a total of 3,106 students. Each of the three outcome variables of interest for this group of matched students is shown here.

#### ***Highest Degree Attained***

**Table 1**

**Highest Degree Attained as of 2000, Shown by Percentage of Students**

	Some PSE, No Degree	Certificate/ License	AA/AS Degree	BA/BS Degree	MA/MS Degree	PhD/Prof
2-year Group	44.33%	9.97%	16.59%	25.68%	2.80%	0.26%
4-year Group	28.89%	3.40%	6.69%	55.62%	4.12%	1.05

*Total Years of Full-Time Enrollment Completed*

**Table 2**

**Total Years of Full-Time Enrollment, Shown by Percentage of Students**

	Less than 1 year	1 year to 2 years	More than 2 years
2-year Group	24.84%	42.95%	32.21%
4-year Group	11.97%	27.82%	60.21%

*Continuity of Enrollment*

**Table 3**

**Continuity of Enrollment, Shown by Percentage of Students**

	Continuously Enrolled	Breaks in Enrollment
2-year Group	92.13%	7.87%
4-year Group	96.71%	3.29

**Interpretation of Results**

These findings suggest that if two students were matched on the basis of the following six variables - gender, race/ethnicity, mother's highest level of education, father's highest level of education, total family income during the student's eighth grade year, and the student's own predictions of how far they will go in post secondary education, made while seniors in high school - and then one of those students enrolled first at a two-year college and one of those students enrolled first at a four-year college, the four-year attendee would be more likely to stay continuously enrolled, would complete a larger number of years of full-time enrollment, and would ultimately earn a higher degree.

What is clear is that extensive research points to the fact that two-year students do not achieve at the same level as their four-year peers. What is not clear is why? These results indicate there could be more going on in this achievement gap than a student's demographic background and that the achievement gap could be due, at least in part, to cultural influences at these different institutions.

## **Suggestions for Future Research**

Two major areas for future research branching out from this study are (1) how geographical constraints impacted these students' achievements, and (2) what influence mentors such as faculty members at these different institutions had on the achievement of students in this study. Neither of these questions can easily be answered from the data provided in the NELS:88 database.

With the way data was collected and recorded in the NELS:88 database there is no convenient way to look at students' ability or willingness to move to attend college. As a result, questions left unanswered include knowing about the comparable success rates for these matched students who have both a two-year college and a four-college easily accessible in their home town, or just one of these kinds of institutions close to home, or neither. With the ability to look at where students live relative to their higher education options and where they selected to attend school, important questions could be answered. Are some students failing to achieve by being needed at home? Does living far away at a residential campus influence achievement negatively or positively? In short, how much influence, if any, does where students live have on their achievement levels?

The second major area that would be interesting to look at for students in these matched pairs is the quality and type of interactions students have with mentors at their first college, and whether this influences student achievement to any significant level. For example, are the faculty members who are attracted to four-year colleges influential on those students' more ambitious achievements? If so, in what specific ways? Could this be replicated at two-year colleges?

## **Conclusions**

Is the ideal of equal educational opportunity for all seriously threatened by the community college, as Brint and Karabel (1989) asked? If the community college is a counterproductive educational institution, as first suggested by Clark (1960), then 50 years later researchers should know why, yet this is still not clear.

This finding supports the recent conclusions of Long and Kurlaender (2009) across all three outcome variables. They used a different data set and different methods for controlling selection variables, but also concluded that students who began at four-year colleges were more likely to complete a bachelor's degree, stay enrolled, and complete more credits than those who began at two-year schools. Any shift in enrollment trends toward two-year colleges has important policy implications, and is worth exploring in detail, given growing recent evidence that first attending a community college is detrimental to bachelor's degree attainment.

This information is relevant to many different groups involved in higher education, including families, students, administrators and policy makers alike. Having more information about why students are achieving, or not achieving, will help interested parties decide how resources should be used, how time should be spent, where support efforts should be focused, and how to make better informed policy decisions.

The numerical data presented in this quantitative exploration should serve as a jumping off point for future qualitative exploration. Exploring and learning about an institution's culture is not easily done with databases and numbers. Education researchers now need to go into these institutions and talk to students, faculty, and administrators about their cultural values, perceptions and expectations and find out what exactly is limiting two-year students' academic achievement.

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