

The Effect of Tutoring on Student Success

This research examined the effect of tutoring on student success at Oakton, net of the independent variables of gender, age, race/ethnicity, highest level of education, and reading, writing and mathematics competency. Student success was defined three ways: term grade point average, success in courses (grades of A, B, C or P in developmental courses), and persistence from the fall to spring semesters. For course success we looked at each course as an independent observation; that is, if a student took three courses, each course was looked at separately to determine the effect of the independent variables and tutoring on course success. Our study included the 2724 students who were new to Oakton in Fall 2005. Of these students, 306 (11.2%) obtained tutoring at least once.

To conduct our analysis we created models for each success variable. Each model contained the independent variables and then tutoring (yes or no). We eliminated an independent variable if it did not enter the model as statistically significant at the .05 alpha level, and we also eliminated control variables that were correlated with others.

Term GPA

We used analysis of variance to study whether tutoring matters, net of the independent variables. Results indicate that tutoring does matter; a student who obtained tutoring has a term GPA 0.38 points higher than a student who did not receive tutoring after controlling for the effects of race/ethnicity, gender, and course placements.

Successful Course Completions

We used logistic regression analysis, an event / trials form, to study whether tutoring matters, net of the independent variables. For this model, an event was defined as the number of successful course completions and the trial was defined as the number of courses completed in the term. Note we did not connect tutoring with a specific course or success in that course. Results indicate that tutoring does matter; a student who obtained tutoring was 1.8 times as likely to successfully complete a course after controlling for the effects of race/ethnicity, gender, and course placements.

Persistence to Spring

We used logistic regression again. Results indicate that tutoring does matter; a student who obtained tutoring was 2.3 times as likely to persist to the spring semester after

controlling for the effects of race/ethnicity and course placements.

Results of this study suggest that tutoring helps to foster student success as defined by grade point average, successful completion of courses and persistence to the next semester. This finding provides empirical evidence to support widespread admonitions about the importance of tutoring among the arsenal of student support services offered by community colleges. It may also strengthen the case for continuing financial support for tutoring, a service that rarely generates revenue. However, the world of community colleges and community college students is far more complex than this simple study might suggest. Consider:

- Many community college students balance competing roles of student, employee and family member. Fulfilling their multiple responsibilities may prevent them from taking full advantage of support services offered by a college, even when they recognize their academic performance is lacking.
- Students may overestimate their knowledge and skills, assuming they will be able to succeed without assistance.
- Students may lack the time, recognition of need, or self discipline to obtain tutoring.
- Tutoring may also serve a different function for students: connecting them with the institution. This feeling of connection can be a crucial factor affecting students' experiences at a college, making them feel at home, and encouraging persistence.
- It may also be the case that the effect of tutoring is more granular than suggested by a success variable such as course success or grade point average. Moving a student from a B to an A in the course will not change course success data, when success is defined as a grade of A, B, C or Pass, for example, but to the student whose objective is to earn an A, that tutoring can be as critical as for a student who simply wants to earn a passing grade in a course he would otherwise fail.

For more information, including tables with the statistical analyses, contact the Office of Research.