BRONX COMMUNITY COLLEGE

Research Brief

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Impact of the First Year Seminar (FYS) on Student Success at BCC

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Bronx Community College created the BCC First Year Seminar (FYS) as part of a college-wide effort to positively impact the success of first year students at the College. FYS is a holistic introduction to college life which: (1) builds upon traditional student success courses by integrating academic content and skill-building with traditional college orientation activities; (2) creates opportunities for students to practice new skills via student-centered and constructivist pedagogies; (3) embeds advising and student support into the course; and (4) provides opportunities for instructor learning. With CUNY Student Success Research Grant funding, the BCC Office of Institutional Research and the Community College Research Center (CCRC) of Teachers College, Columbia University collaborated on a mixed methods approach to assessing the outcomes of students in FYS courses and to understand why the early success courses have a positive influence on early student outcomes. This Brief details the propensity score analyses, which found positive 1-semester and 1-year performance and persistence impacts for FYS.

Overview:

This paper provides the quantitative results of a mixed methods approach to studying the impact of the BCC First Year Seminar (FYS) on student performance and persistence at Bronx Community College. A full report ,"Learning for Application", detailing both the qualitative and quantitative results is forthcoming.

Bronx Community College created the BCC First Year Seminar (FYS) as part of a college-wide effort to positively impact the success of first year students at the College. The program design was informed by an institutional self-study and improvement plan conducted under the auspices of the John Gardner Foundations of Excellence in the First Year in 2010-11. The first FYS courses were piloted with 5 sections in Spring 2012 and has grown to serving more than 900 students in 35 sections in Fall 2014.

This paper examines the impact of the First Year Seminar (FYS) at Bronx Community College. Outcomes evaluation utilized propensity score matching analysis to assess the overall program efficacy and impact on a series of first-year outcomes .

Findings from the analyses indicate that FYS students have more positive early outcomes (1 semester) than do other students at BCC and those outcomes last longer (1 year).

Methodology:

We used a propensity score matching methodology in an effort to correct for bias associated with observable differences between treated and untreated groups. Propensity score matching, a statistical matching method originated by Rosenbaum and Rubin (1983), allows for the construction of a comparison group in lieu of a random assignment study. The propensity score is the likelihood of a student, conditioned on observable variables, of receiving treatment. Based upon this score, treated students (those taking FYS and those taking the more traditional Freshman Seminar at BCC (OCD) were matched to untreated students, creating samples which were balanced across observable variables.

Sample: We used a data file containing demographic and academic information on all first-time freshmen who entered the college in the fall 2012, spring 2013, and fall 2013 semesters. The file contained 1,403 students who participated in the new First Year Seminar (FYS), 1,980 students who participated in the traditional seminar (OCD), and 1,076 students who did not participate in either.

Data analyses. Analyses included comparative retention, GPA and credits earned statistics based on data from fall 2012, spring 2013 and fall 2013. Separate comparisons were made between first-time freshmen who did not participate in any freshman program to FYS enrollees and to OCD enrollees.

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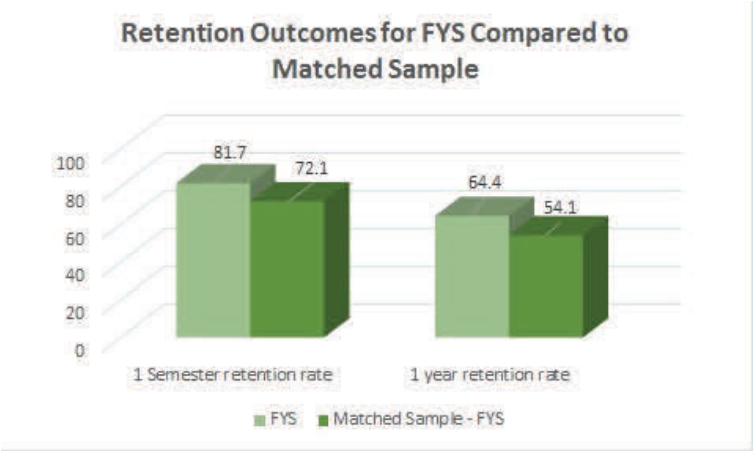
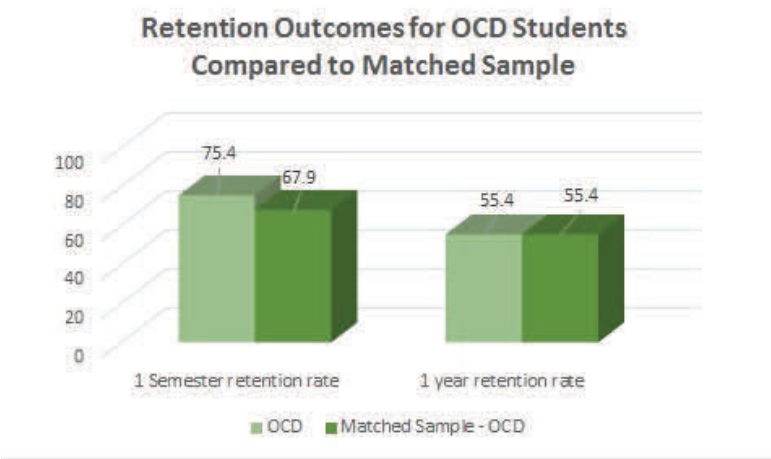
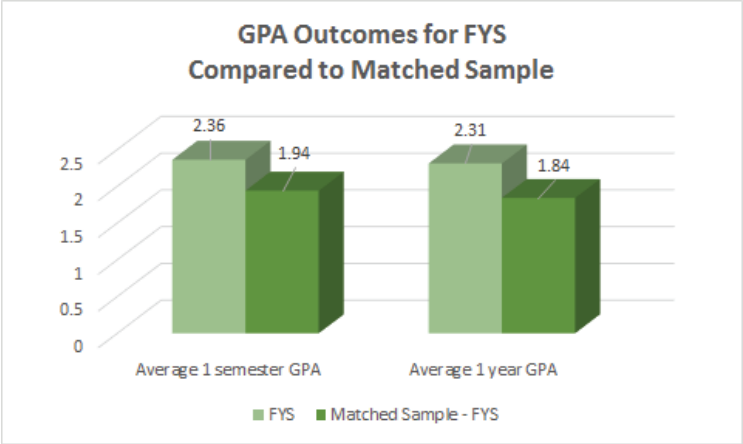
Findings:

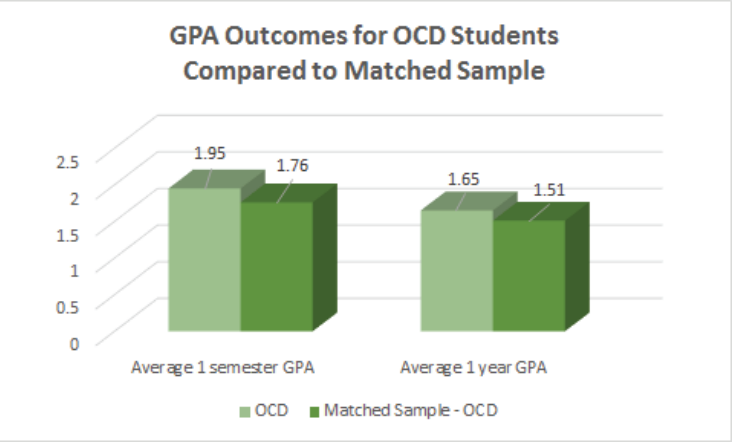
After matching FYS and OCD (treatment groups) to non-participants (untreated group), the balance between comparison groups on background variables was considerably improved. Student persistence (retention rates) and academic performance (grade point average and credit accumulation) measures were calculated for the FYS and OCD students groups compared to their matched samples . Like other studies of student success courses, propensity score analyses found positive short-term impacts for FYS and OCD participation. The propensity score analyses also provide early evidence that FYS may have sustained impact, while OCD does not. FYS students, as compared to non-participants, had greater rates of one-year retention while OCD students did not.





With respect to persistence, the FYS group demonstrated approximately a 10% point higher retention rate (compared to their matched sample) after one semester (82% compared to 72%) and maintained that lead (10% points) after one year (64% vs 54%). While the OCD group also demonstrated a higher (7% point) one-semester retention rate relative to their matched group (75% compared to 68%), the lead diminished completely after one year, with both the OCD and their matched group demonstrating the same one-year retention rates of 55%.





FYS students demonstrate almost a half-grade advantage over their matched sample in average GPA after both one-semester (2.36 compared to 1.94) and after one-year (2.31 compared to 1.84). The OCD students also demonstrated both a higher one-semester (1.95 vs. 1.76) and one-year grade point average (1.65 vs. 1.51) compared to their matched sample—however their average grade in both semesters remained under a 2.0.