



Learning Communities  
for Students in  
Developmental Reading:  
An Impact Study at  
Hillsborough Community College

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Community college stakeholders continue to search for approaches to bolster low success rates among students, particularly those students who need developmental education. One popular strategy is to create “learning communities,” an idea that has come to describe an array of programs and services offered at community colleges. The most basic learning community model simply co-enrolls a cohort of students into two classes together. Proponents believe that when students spend time together in multiple classes, they are more likely to form social and academic support networks that in turn help them persist and succeed in school. More comprehensive learning communities include additional components: they co-enroll a group of students in multiple classes; the courses have thematically linked curricula; instructors collaborate closely to align their curricula and to support students; teaching includes project-based and experiential learning experiences; assignments and readings are integrated; and student services, such as enhanced advising and tutoring, can be embedded.

Hillsborough and the Learning  
Communities Demonstration

This Brief, based on a report of the same title, presents results from a rigorous study of a basic learning communities program operated at Hillsborough Community College. Hillsborough, one of six community colleges participating in the National Center for Postsecondary Research’s (NCPR) Learning Communities Demonstration, is a large, urban community college located in Tampa, Florida, a Gulf Coast city on the west coast of Florida. Hillsborough serves around 24,000 students each year, and three of the college’s five campuses—Dale Mabry, Ybor City, and Brandon—participated in the Learning Communities Demonstration. Across the entire college, just over half of students are White, with Black and Hispanic students each making up around 20% of the total student population. Thirty-six percent of all students are age 25 or over, and two thirds attend college part time. This study targeted a particular subset of the student body, first-semester students whose placement test scores required them to take developmental reading courses.

The demonstration focuses on determining whether learning communities are an effective strategy for helping students who need developmental education. Hillsborough’s basic learning community model linked a developmental reading course and a “college success” course with the intention of improving the outcomes of academically underprepared students. Hillsborough developed this program as part of its involvement in Achieving the Dream: Community Colleges Count, an initiative designed to help community colleges make better use of their own data to help students succeed. Hillsborough came up with the model after seeing low success rates for students in developmental courses and higher success rates for students who took a college success course. Learning communities offered the possibility of leveraging the skills acquired in the college success course to assist students in passing developmental courses.

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## Data and Methods

### Sample

To be eligible to participate in the learning communities study, students had to be:

- first-time students,
- age 18 or older, and
- placed into developmental reading (College Preparatory Reading I or College Preparatory Reading II).

A total of 1,071 students participated in the learning communities study at Hillsborough: 709 students were given the opportunity to participate in learning communities, and 362 students were assigned to a control group that received the college's standard services. After the course registration process and the add/drop deadline, 581 program group students were enrolled in courses at Hillsborough, 491 of whom enrolled in a learning community; 302 control group students were enrolled in courses at Hillsborough.

Study participants tended to be female (57.0%); 18 to 20 years old (70.2%); Black (36.8%), Hispanic (32.4%), or White (24.7%); unmarried (77.4%); and with no children (81.0%). A quarter of the sample received financial aid during the semester of random assignment. Most of the students (87.7%) had completed 12th grade; 84.4% had earned a high school diploma, and 14.1% had earned a GED, generally within the past year (58.5%) or between one and five years ago (21.1%). Only 8.8% had taken any college courses before, and 29.8% were the first in their families to attend college.

### Experimental Conditions

From fall 2007 to fall 2008, three cohorts of students in need of developmental reading were randomly assigned to either a program group or a control group. In the program group, students had the opportunity to co-enroll in a developmental reading course and a college success course. Students in the control group were not enrolled in linked courses.

The pedagogical hallmarks of learning communities—integration, collaboration between faculty, and student cohorts—are not expected to be found in regular classes, or at least not to the same degree as in learning communities. On the other hand, teachers in stand-alone classes may be just as likely as teachers in learning communities classes to use instructional strategies that

encourage active, collaborative learning; students in these classes are also free to access support services such as tutoring and advising. Interviews with faculty suggested that the college success courses that were taught in learning communities were similar in content and approach to those that were stand-alone and unlinked—the version of the college success course available to control group students. Faculty who taught both linked and stand-alone college success classes were required to make at least three contacts with each student in the class. This requirement ensured high levels of faculty-student engagement within the course.

In focus groups, students reported overall satisfaction with the college success course and their instructors, with no clear difference between learning community students and control group students. Clear contrasts in satisfaction were also not evident across developmental reading classes. However, the approach to teaching in both classes began to differ somewhat as the learning communities model evolved over time. For example, integrated assignments within the learning community and group projects began to take the place of typical developmental reading assignments.

### Measures

The impact of the learning communities program is estimated by comparing the outcomes of program and control group members using student transcript data collected during the year after random assignment. The key indicators of student academic progress that were examined reflect measures that are commonly viewed as important in the community college setting. In order to reduce the likelihood of observing chance relationships, the number of primary outcomes examined is limited (Schochet, 2008). The three primary indicators of student academic progress are:

- *Credits earned*—In order to earn an associate in arts (AA), associate in science (AS), or associate in applied science (AAS) degree, a Hillsborough student must complete at least 60 credits. Thus, a key indicator of student progress toward a degree is the number of credits a student has earned.
- *Persistence (as measured by continued enrollment)*—One of the goals of learning communities is to provide a more engaging educational experience for students. This increased engagement is hypothesized to increase students' likelihood to persist in school (Tinto, 1975, 1997).

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- *Completion of developmental reading course*—Each of the learning communities linked a developmental reading class with a college success course. The learning communities program may increase a student's likelihood of completing a developmental reading course, which would allow the student to enroll in a higher-level developmental reading course or a college-level course for which developmental reading is a prerequisite.

In addition to observing student outcomes, NCPD research staff visited Hillsborough to collect qualitative data on the learning communities program. The following were used as sources of information about program implementation:

- “site diaries” kept by visiting NCPD staff that documented information on the random assignment process and study intake, the process of setting up and staffing the learning communities, professional developmental activities, changes in the program, and problems encountered and solutions applied by the college;
- a two-day field research visit in fall 2008, during which the research team interviewed college administrators, faculty, and staff, as well as a small subset of program and control group students;
- a survey designed to assess the faculty's characteristics and pedagogical beliefs and practices; and
- faculty syllabi from the learning communities linked courses.

## Results

The most salient feature of learning communities implemented at Hillsborough was co-enrollment of students into linked courses, creating student cohorts. Faculty and students suggested that this course structure increased social linkages among students. In addition, the learning communities program became more comprehensive over the course of the study. Curricular integration and collaboration between faculty members teaching in paired courses are considered a key element of comprehensive, effective learning communities. At Hillsborough, curricular integration and faculty collaboration were generally minimal at the start of the study but increased over time.

Academic outcomes for the study participants were measured using student transcript data collected after students had been randomly assigned either to the program group or the control group. The

following are the key impact findings for the study.

**For students overall, the learning communities program did not have meaningful impacts on educational outcomes during the program semester. For example, there was very little difference** between program group students and control group students in enrollment rates, average total credits attempted, average total credits earned, or likelihood of completing developmental reading during the program semester.

**For students overall, the learning communities program did not have meaningful impacts on students' rates of persistence (that is, continued enrollment).** In the first postprogram semester 60.0% of program group students and 54.7% of control group students registered for at least one course. This 5.3 percentage point difference is not statistically significant. By the second postprogram semester, the difference in registration rates between program and control group students dropped to -0.5 percentage points, also not a statistically significant difference.

**For the third cohort of students, who received a more comprehensive version of learning communities, evidence suggests that the learning communities program had a positive impact on some educational outcomes.** In the program semester, the third cohort's program group students earned 1.2 credits more than their control group counterparts. In the first postprogram semester, the third cohort's program group students were 10.3 percentage points more likely than their control group counterparts to register for at least one course. However, this impact on registration did not persist through the second postprogram semester. Results for the third cohort should be viewed with caution. When the impacts of the third cohort of students are compared with the impacts of the first and second cohorts, the differences generally are not statistically significant. Since program maturation was observed at several learning community demonstration sites, analyses will be conducted in future reports to see if there is common improvement in later cohorts.

## Conclusions

The overall result (for the full sample) of this study is that the learning communities program at Hillsborough did not appear to add value above and beyond the college's usual services. When considering this finding, it is important to understand Hillsborough's program in the context of learning communities more broadly. By design, Hillsborough's learning communities represent a

basic model: the college co-enrolled students in two courses, forming student cohorts and laying the groundwork for implementing other features associated with comprehensive learning communities. In time, there were, in fact, signs of the faculty collaboration and curricular integration found in more comprehensive learning communities. However, with respect to the depth and spread of collaboration and curricular integration, there was a high degree of variability across learning community faculty pairs. Thus, this study was not a test of comprehensive, robustly implemented learning communities; rather, it was a test of the effectiveness of the learning communities at Hillsborough, some of which were very basic and others that were more comprehensive and strongly implemented. This type of basic model did not yield results that were significantly different from the college's usual services.

It is possible that evaluating the learning communities program at Hillsborough, which was still under development, may not accurately reflect how well the program would work once it had been in place for a while and had become more institutionalized. In this study, the conditions for the third cohort come closest to resembling a mature program, and the cohort subgroup analyses mentioned above provide some evidence that as the program improved, it yielded positive impacts that were not evident at the beginning of the study.

Notably, this Brief presents findings from only one of the colleges in the demonstration, which operated one learning communities model. The six colleges taking part in the national Learning Communities Demonstration were selected, in part, because they represent various learning community models. Hillsborough's model was more basic, at least at the outset, than the models of some of the other colleges in the demonstration. In order to better understand the effectiveness of learning communities more broadly, it will be essential to determine whether more comprehensive, robustly implemented learning communities yield positive impacts. In addition, the growth and improvement of Hillsborough's program as it scaled up was a pattern exhibited at the other Learning Communities Demonstration colleges. It will also be interesting to see whether more mature versions of the programs tested at the other colleges will similarly yield more positive impacts. During the next two years, NCPR will report impact findings from the other five colleges as they become available. The result will be a significant body of experimental research

on the effectiveness of learning communities in the community college setting.

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