**Research Question:** Do students in learning community (LC) classes have higher successful course completion rates than their peer students in comparable non-linked classes? And are successful course completion rates higher for developmental MATH courses taught in LCs, compared to rates of non-linked developmental MATH classes taught face-to-face on-site? How do these MATH success rates compare to the comparable MATH Bridge course taught during that Spring 2011 semester?

**Analysis:**
- Students in 82 paired LC classes during Spring 2011 completed those courses at a 56% rate compared to a 58.6% success rate for students in 281 non-linked comparison classes. There is no significant difference between these rates. In general, with the exception of MATH0306, course pairings that included developmental or introductory courses were more successful than other courses. Except for MATH0306, LCs were somewhat more effective for students who had first enrolled within one year of taking the courses, who made up over 80% of all enrollments. Low success rates in some LC classes may have been due to differences in LC implementation.
- Students in 17 LC developmental MATH 0306 classes during Spring 2011 completed those classes at a 40.5% rate, which is significantly lower than the 50.8% success rate for students in 50 non-linked MATH0306 classes held on campus. Fewer students (13%) withdrew or got an incomplete in the LC classes than students (16%) in the comparison group classes. The late registrants and multiple repeaters taking second start dev MATH0306 classes may have lowered those classes average success rate to 33.3%, compared to the full-semester courses' average rate of 41.6%.
- Students in the MATH0106 bridge classes were significantly more successful than either LC or the comparison group students, but their attrition rate matched the comparison group's rate.

**Definitions:**

**HCC Learning Community:** Learning communities consist of two classes of different disciplines linked at registration and providing shared content by a team of instructors and a counselor during adjoined class periods.

**Comparison Course Group:** Spring 2011 students in non-linked similar classes, taken at similar locations and times and comparable in SLOs to Learning Community classes.

**Successful course completion rate:** A primary outcome indicator of student success is the rate at which students complete their courses with a "C" or better grade. Such successful completion of coursework is required to accumulate credits desired for transfer or to earn an award or degree.

**Learning Community and Control Courses:** Included the following: BIOL1322, BIOL1406, BIOL2401, BIOL2402, BIOL2420; CHEM1405, ENGL0300, ENGL0310; ENGL1301, FSHD1302, FSHD1311, FSHD1313, GUST0339, GUST0341, GUST0342, GUST1270, HIST1302, MATH0306, POFI1104, POFI1301, PSYC2301, PSYC2314, and SPCH1315. All students selected for this analysis belonged to one of HCC’s AtD Cohorts, Fall or Spring back to the Fall 2002 base year.

**Dev. MATH Bridge Course:** MATH0106 which is comparable to MATH0306, but modularized into a 4-week course.
Research Question: Is there improvement in successful course completion rates of African-American and Hispanic students and Pell recipient students in learning community (LC) classes compared to their peer students in the comparison stand-alone classes?

Analysis: Of the three groups – African-Americans, Hispanics, and Pell Recipients – only Hispanics made significant gains in successful course completion rates in LC classes compared to peers in similar stand-alone classes.

- African-Americans participated in all 22 courses making up the 82 classes paired into 41 Learning Communities. They obtained an average course success rate of 47%, which was significantly less than their 51% success rate in stand-alone classes. Their individual course success rates were lower than the overall rates in all but four LC courses — GUST0341, GUST1270, LBRA1191, and POFI1104. Also, unlike the overall results, their ENGL1301 course success rate in LC classes was less than thier rate for stand-alone classes. For dev.Math, these students attained a course success rate of only 31% in the LC MATH0306, 45% in the regular MATH0306, and 50% in the MATH0106 bridge course.

- Hispanics also participated in all LC courses. They obtained an average course success rate of 65%, which was significantly higher than their 62% success rate in stand-alone classes. Their success rate pattern for the courses was similar to the overall pattern, except for higher rates in the LC classes GUST0342 and BIOL1322. LC rates in four courses — BIOL2402, GUST0339, POFI1104, and PSYC2314 — but their enrollment in these courses was very minimal. For dev.Math, these students attained a course success rate of 38% in the LC MATH0306, 58% in the regular MATH0306, and 73% in the MATH0106 bridge course. With the exception of MATH0306, Hispanic students still seem to gain the most from the LC structure.

- Pell recipients participated in all but one LC courses — POFI1104. They obtained an average course success rate of 51%, which was significantly lower than their 54% success rate in stand-alone classes, which matched their 54% rate in the MATH0106 bridge course. Since Pell recipients made up 67% of all students in LCs, their success rate pattern essentially matched the overall pattern, except for there was no significant differences in GUST0341 or PSYC2314.

### Definitions:

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**Successful course completion rate:** A primary outcome indicator of student success is the rate at which students complete their courses with a “C” or better grade. Such successful completion of coursework is required to accumulate credits desired for transfer or to earn an award or degree.

**Learning Community and Control Courses:** Included the following: BIOL1322, BIOL1406, BIOL2401, BIOL2402, BIOL2420; CHEM1405, ENGL0300, ENGL0310; ENGL1301, FSHD1302, FSHD1311, FSHD1313, GUST0339, GUST0341, GUST0342, GUST1270, HIST1302, MATH0306, POFI1104, POFI1301, PSYC2301, PSYC2314, and SPCH1315. All students selected for this analysis belonged to one of HCC’s AtD Cohorts, Fall or Spring back to the Fall.

**Source:** HCCS DataMarts end-of-term for Spring 2011.