

# Research Briefs

## Trends in Hybrid Courses

Hybrid courses – sometimes called blended courses – combine the convenience of a distance-learning option with the learning environment of a traditional in-person course. South Texas College launched its hybrid program in the Fall 2006 semester and, over ten years later, hybrid courses now represent around 5% of all sections offered.

Student success rates in the hybrid program have fluctuated significantly over this time period but, as the program has matured, they have become similar to that of the College as a whole. Research & Analytical Services (RAS) finds that the composition of the programs offered is strongly correlated with the overall hybrid success rate; in other words, offering hybrid sections in departments that traditionally report above- or below-average pass rates has an impact on the overall hybrid pass rate. This has been especially true with the College's Developmental programs.

### HOW TO JUDGE: SUCCESS RATES DEFINED

The success rate is defined as the percentage of students who receive a grade of A, B, C or P in a course. To compare success rates across programs, the benchmark is the institutional pass rate for a given semester, which is the A, B, C, or P grades as a percentage of all grades issued in all classes for that term. In the Fall 2016 semester, the institutional pass rate was 77%.

### PRIOR RESEARCH

In 2009, RAS studied the hybrid program for the Spring semester of that year (Research Brief, Vol. 19, No. 1). The institutional pass rate for that semester was 75%. We found that success rates in hybrid courses were equivalent to or higher (82%) than in either traditional in-person (72%) or distance-education (60%, online-only) sections. This finding was true across division and course level. We find that this represented

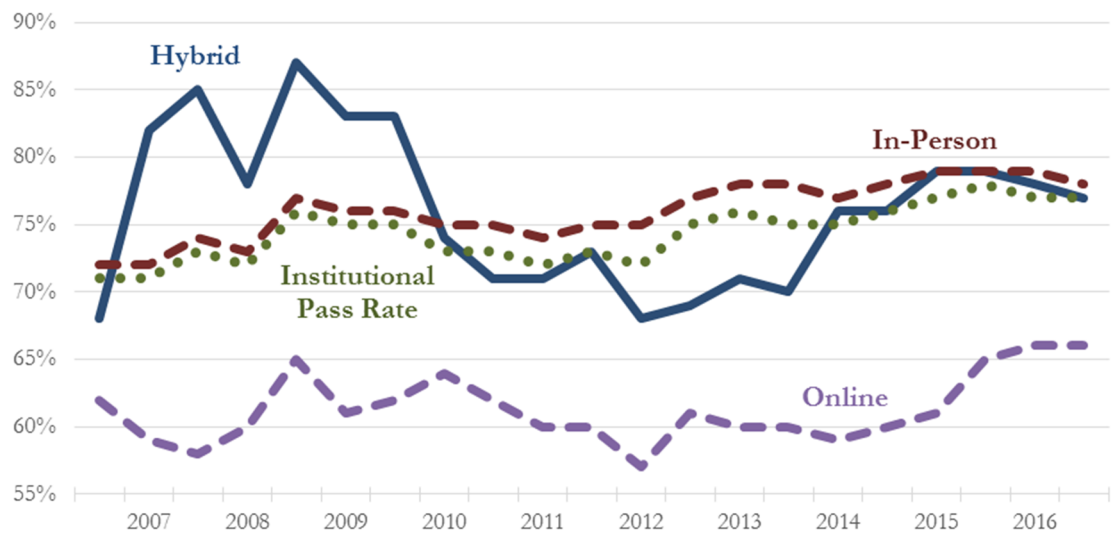
a high point for success rates in the program, and we attribute this to broader trends in the overall composition of the departments that offer hybrid courses, as discussed later in this brief.

### THE HYBRID PROGRAM FOR FALL 2016

In the Fall 2016 semester, South Texas College offered 211 hybrid sections, or 4.4% of the overall section count. That semester, the college offered 605 online-only sections (13%), with the balance in traditional in-person (n=3,996, 83%). The success rate in hybrid sections was 77%, which matched the institutional pass rate for that term. That is to say, students in hybrid sections are now as successful as students as a whole.

The Nursing & Allied Health division offered 52 sections in nine departments, and the Technology division offered 40 sections in six departments. The divisions

Pass Rates Across Course Type, 2006-2017



of Business (16 sections, 2 departments), Liberal Arts (25 sections, 6 departments), Math & Science (41, 3 departments) and Social Sciences (12 sections, 1 department) all participated in the program.

**TRENDS IN THE HYBRID PROGRAM**

The College first established its hybrid program in the Fall 2006 term, with four sections offered and a success rate of 68%. The success rate in the hybrid program peaked in the Fall 2008 semester at 87% (47 sections offered), and dipped to a low of 68% in the Spring 2012 term, before rising again to 76% in Spring 2014 (178 sections). As noted, the hybrid pass rate was 77% for the Fall 2016 term (211 sections). During the same period, the institutional pass rate stayed in a range of 72-78%.

**WHAT EXPLAINS THE TRENDS? COMPOSITION**

We find that the overall success rate in the hybrid program is highly correlated with the departments that offer hybrid courses. That is to say, adding courses that traditionally report above- or below-average success rates will have an impact on the overall hybrid pass rate.

When the hybrid success rate peaked in the Fall 2008 term, the program was dominated by the Nursing & Allied Health division (21 of 47 sections offered, or 45%), especially in programs with traditionally higher pass rates such as Vocational Nursing (VNP, 16 sections, hybrid success rate of 96%). But as the hybrid model expanded across the college, it took in departments that report traditionally lower pass rates, such as the Developmental Reading and Writing programs.

Developmental courses first used the hybrid model in Fall 2011. We find a strong negative correlation ( $r = -0.66$ ,  $p = .0038$ ,  $r^2 = .44$ ) between the number of development courses offered and the hybrid success rate. That is to say, the more hybrid developmental sections offered, the lower the overall hybrid success rate. This was the strongest statistical relationship among all divisions and course types.

The overall hybrid success rate began to rise again in the Fall 2013 term. What changed? The Integrated Reading & Writing (INRW) program was piloted in the Fall 2012 term and was implemented broadly for the Fall 2015 term. None of the INRW sections are hybrid. Therefore, as the program expanded, this led to fewer hybrid developmental sections.

**HIGHLIGHTING SUCCESS: THE TECHNOLOGY PROGRAM**

We noted the Technology Division has broadly adopted the hybrid model, offering 40 sections in six departments in the Fall 2016 term. At the department level, the Diesel Technology (DISL) program is a special success for the hybrid model. In Fall 2016, 24 of the 34 sections offered (71%) were hybrid, and the success rate in those sections was 93%.

**METHODOLOGY**

This report considers Fall and Spring semesters since the establishment of the hybrid program in Fall 2006. Hybrid courses are identified through section number as listed in the student information system. In this brief, we define Development courses as those with course catalog numbers below 1,000. All the differences between groups discussed here are statistically significant ( $p < 0.05$  or better).

Hybrid Success Rate Moves In Opposite Direction As Count of Developmental Sections

