

Pearson Inclusive Access study documents increased student engagement at Connors State College

School name Connors State College, Warner and Muskogee, OK	Educator Lynett Rock, Math and Science Division Chair
Timeframe Fall 2017–Spring 2018	Results reported by Dina Yankelewitz, Pearson Program Outcomes Analytics Manager

Key Findings

- After Pearson Inclusive Access was implemented, the percentage of students enrolled in MyLab Math across four courses who began to submit homework assignments by the second week of the semester increased twelve percentage points, from 75% to 87%.
- With Inclusive Access, students in a trigonometry course submitted each of the first five homework assignments within two weeks, whereas, prior to Inclusive Access, student submissions of these assignments occurred over a five- to six-week period.
- Student trigonometry grades between Fall 2016 and Fall 2017 improved dramatically, with 39% of students earning an A or B before Inclusive Access, and 74% of students earning those grades with Inclusive Access.

Setting

Connors State College was founded in 1908 as one of six state agricultural schools to serve students in rural Eastern Oklahoma. It is currently a two-year college serving over 3,000 students. Nearly half of the student population is comprised of ethnic minorities, with over 35% identifying as American Indian, approximately 9% as Black, and 54% as White. Only 10% of its students live on campus, and 68% attend part-time. About 70% of students pursue general education, pre-nursing, nursing, or business administration associates degrees. The Department of Math and Science boasts nine full-time faculty members, including five full-time math instructors, and the department offers courses in mathematics, biology, and chemistry. Approximately 2,000 students enroll in math courses each semester. All math courses use MyLab™ Math or Statistics for graded assignments, including homework and exams, and one science instructor incorporates Mastering Environmental Science in her course.

Challenges and Goals

Lynett Rock, Math and Science Division Chair, described that the primary motivation for implementing Inclusive Access was to enable students to have first-day access to course materials via Blackboard, their learning management system (LMS). This would preclude students on financial aid from struggling to catch up in the course after waiting to procure an access code to Pearson MyLabs. In addition, in the past, students could not begin course assignments because it often took days to weeks for their course materials to arrive.

Implementation

Until the 2017–2018 academic year, students purchased access codes to MyLabs and Mastering either online or at the Follett-owned bookstore located on the college grounds. Connors State College piloted Inclusive Access in Fall 2017 and Spring 2018 in four mathematics courses and one science course. One access code was provided for each course section, and students were provided with the access code to use when they logged into their LMS for the first time and linked to the MyLabs purchase page. The department collaborated with administrators as well as the bookstore. Inclusive Access allowed the bookstore to maintain its required revenue, with all purchases handled by the bookstore.

Results

Access

Overall results

Across the four math courses implementing Inclusive Access during the Fall 2017 and Spring 2018 semesters, the percentage of students subscribed to MyLabs who accessed the course materials by the second week of class increased from 75% to 87% with Inclusive Access in place (figure 1). In addition, a consistently higher percentage of students accessed the materials nearly each week from the first week until the tenth week of the semester after Inclusive Access was implemented.

Cumulative percentage of students using MyLab Math by week

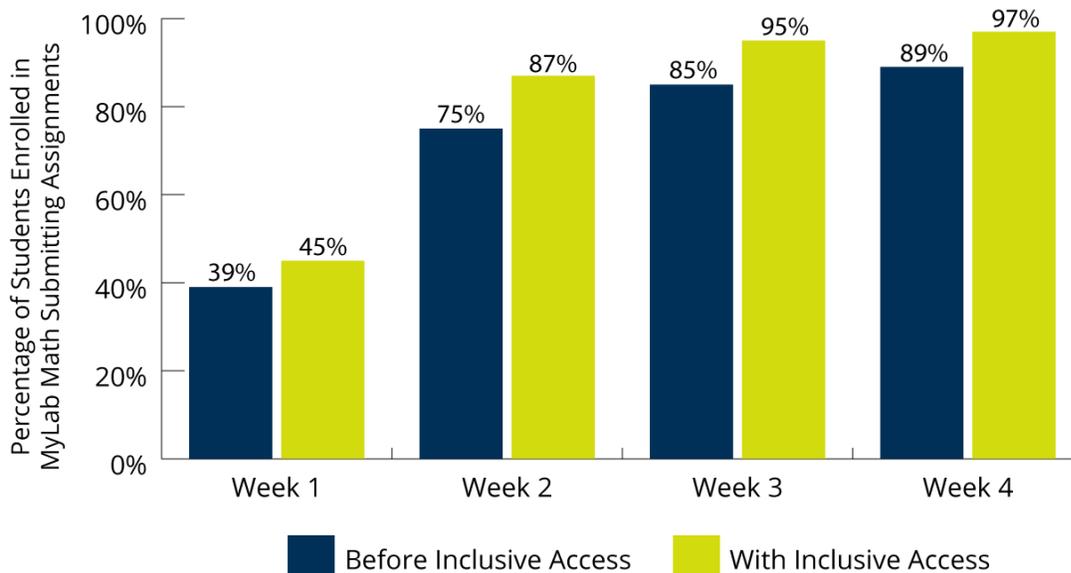


Figure 1. Percentage of Students Enrolled in MyLab Math Across Four Courses That Submitted Course Assignments by the First Through Fourth Weeks of the Course ($n=2,206$)

Similarly, the percentage of students submitting each of the first several homework assignments of the semester during the first month of the course was consistently higher once Inclusive Access was implemented (figure 2).

Percentage of students submitting initial assignments during first month

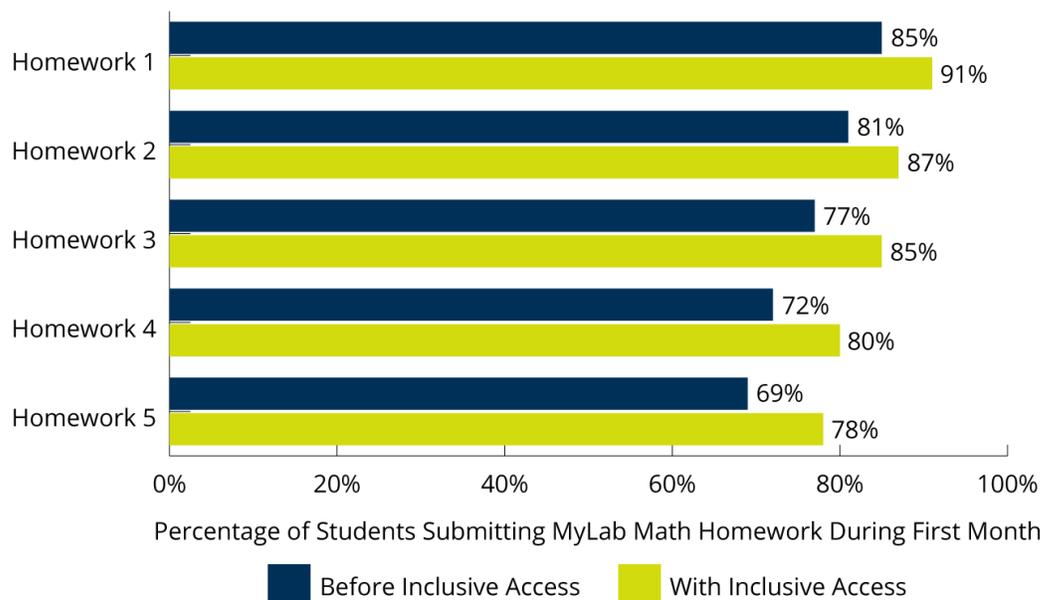


Figure 2. Percentage of Students Enrolled in MyLab Math Across Four Courses That Submitted Each Initial Homework Assignment During the First Month of the Course ($n=2,206$)

Course-level results

In the department's trigonometry class, taught each semester by Lynett Rock, student enrollment in MyLabs increased from 77% to 100% after Inclusive Access was implemented. Between 90% and 100% of students in the course submitted each of the first five homework assignments with Inclusive Access, compared to rates between 46% and 73% before Inclusive Access began (figure 3).

Percentage of students submitting initial course assignments in trigonometry

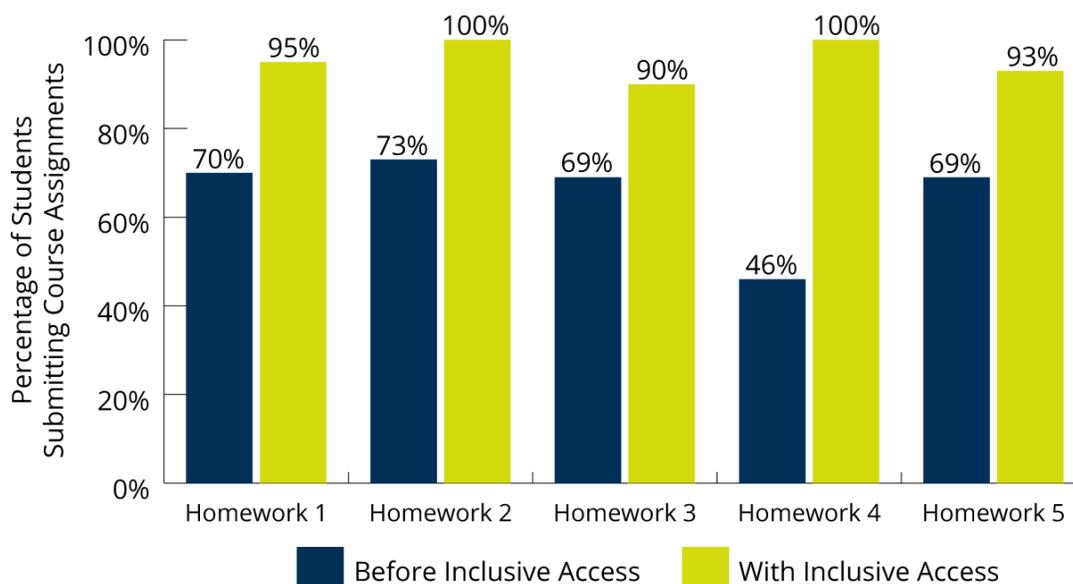


Figure 3. Percentage of Students Enrolled in Trigonometry that Completed Initial Course Assignments Before Inclusive Access ($n=105$) and With Inclusive Access ($n=15$). Percentages are Reported Relative to Actual Course Enrollments.

After Inclusive Access was implemented, between 88% and 98% of students completed each assignment in the trigonometry course within only one week, with the remainder completing the assignment either the prior week or the week after. Before Inclusive Access was implemented, students completed assignments over a five- to six-week period (figure 4).

Student homework submission timeframes in trigonometry before and with Inclusive Access

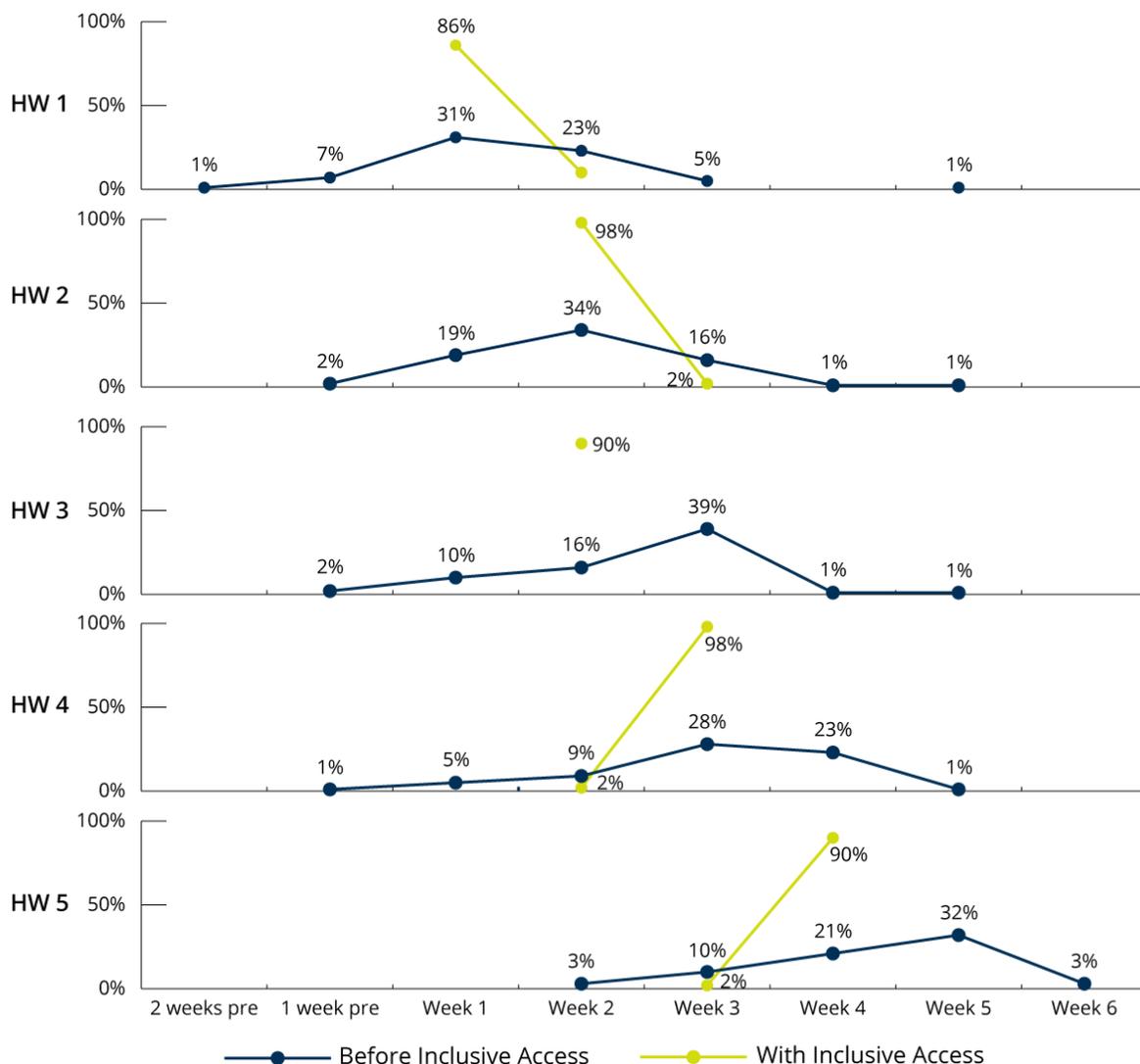


Figure 4. Student Homework Submission by Week. Percentages are Reported Relative Actual Course Enrollment

Student outcomes

In Rock’s trigonometry course, students demonstrated improved outcomes following Inclusive Access implementation. The course is taught face to face during the Fall semester, and outcomes are reported for that mode of instruction. As can be seen in figure 5, aside from several student withdrawals from the course, all students earned As and Bs after Inclusive Access was implemented, with 67% of students enrolled in the course earning an A.

It should be noted that this analysis involves a relatively small sample size for the Inclusive Access implementation. Further analysis following future Fall semesters is needed to verify these results.

Trigonometry grade distribution before and with Inclusive Access

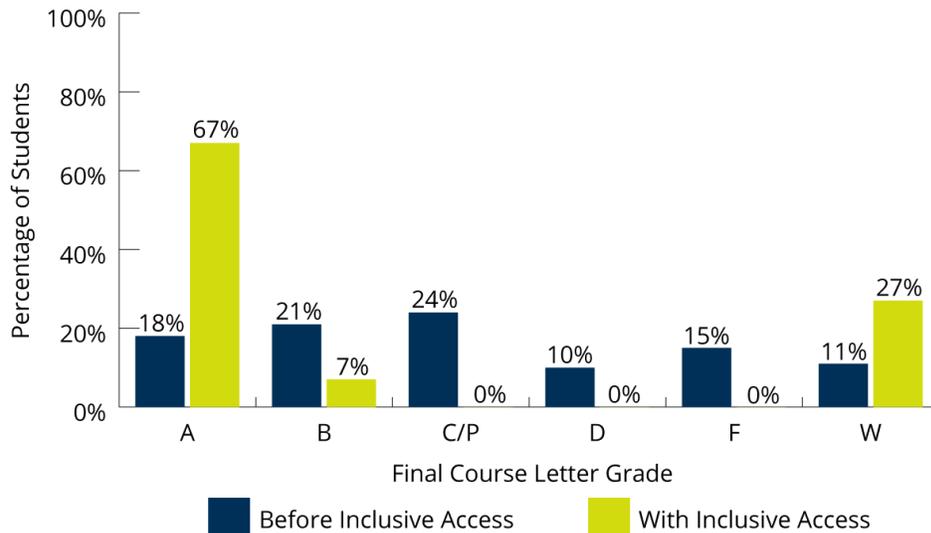


Figure 5. Trigonometry Grade Distribution, Before Inclusive Access, Fall 2012–Fall 2016 and With Inclusive Access, Fall 2017

The Instructor Experience

According to Rock, it is critical to provide all instructors with information about Inclusive Access and access to the courseware quickly so that they understand the new initiative and can communicate it effectively with students. During the Spring 2018 semester, Rock made certain that instructors were aware of the process to ensure a seamless and efficient implementation.

In addition, Rock noted, because of its relatively small size, everyone in the college administration is aware of the new initiative and very supportive. The administration recognizes that it benefits students and has worked with the division to get the initiative off the ground. The bookstore also recognizes the value of Inclusive Access and has been a great partner throughout the process.

College administrators have noted that participating faculty have consistently provided positive feedback thus far. They recognize the benefits to students and are requesting expansion of the pilot to include other courses as well.

Conclusion

“The data demonstrate that Inclusive Access is facilitating student success, and we are doing something that is making a difference.”

—Lynett Rock, Math and Science Division Chair, Connors State College

Inclusive Access has been welcomed at Connors State College, addressing the need for all students to easily access course materials on the first day of class. It has resulted in increased homework assignment and assessment completion, giving every student the opportunity to succeed in foundational mathematics and science courses. As Lynett Rock summarized, “The data demonstrate that Inclusive Access is facilitating student success, and we are doing something that is making a difference.”