

# William Rainey Harper College

## ALEKS PPL Significantly Improves Students' Placement and Performance in College-Level Math Courses

### Institution Profile

William Rainey Harper College provides a community college education to more than 26,000 students annually in Chicago's northwest suburbs. Harper College offers associate degrees, certification programs, workforce training, and continuing education classes.

### A Study to Evaluate Math Placement

Harper College used ACT's Compass math placement exam for over 20 years. To improve their course placement and success rates for students in college-level math courses, Harper College, in partnership with researchers from Vanderbilt University, conducted a controlled pilot of more than 1,000 students during the summer of 2014 and subsequently monitored student performance in math classes during the fall of 2014.

The pilot design and analysis were done by researchers at Vanderbilt University to allow for an independent, unbiased and data-driven assessment of ALEKS PPL relative to the student body. The ALEKS PPL product was used by students in the experimental study group and compared against a control group of students who utilized the ACT Compass assessment.

### Implementation

Harper College requires degree-seeking students who do not have an ACT math score of 22 or higher from within the past five years to demonstrate their mathematical abilities by taking a math placement exam. The placement exam serves to place students from developmental math through Calculus I. The first assessment students take is proctored, and additional assessments are not.

Harper College requires that students use the ALEKS PPL Prep and Learning Module prior to reassessing. Students must spend three hours in the Prep and Learning Module in order to take the second assessment, and an additional three hours is required for a third attempt. A fourth attempt is available for students who spend an additional five hours in the Prep and Learning Module and, finally, eight additional hours are required for a fifth and final attempt.

### Results

Students who used ALEKS PPL were 7–9% more likely to place in a college-level math course compared to the control group who used Compass. Additionally, students who used ALEKS PPL were 19% more likely to receive a “C” or better in their college-level course. Those students were also 22.5% more likely to stay enrolled at Harper College for a second semester (Figure 1). Although those who placed into developmental coursework earned similar grades as compared to the Compass control group, this still points to a positive outcome due to ALEKS students placing higher in the developmental course sequence as compared to Compass testers.

**PLACEMENT COURSES:** Developmental math, which includes Basic Mathematics, Beginning and Intermediate Algebra, and Data Modeling with Algebra, and into Collegiate Math

**STUDENTS TAKING PLACEMENT:** 3,500 students per academic year

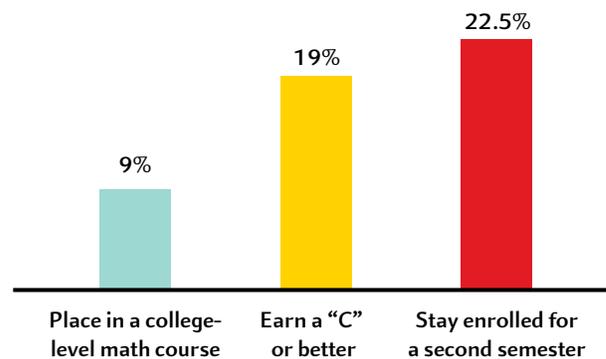
**CASE STUDY TERMS:** Summer 2014 and Fall 2014



Results show that having to use the ALEKS PPL Prep and Learning Module prior to taking the exam does not deter students from re-taking the placement exam. In fact, students who used the Prep and Learning Module prior to re-taking the placement exam had a higher retest rate of 36% compared to students who used Compass (and were not required to participate in a learning module) who had a 32% retest rate.

Additionally, when students used the Prep and Learning Module prior to re-taking the placement exam, students improved their course placement scores and were more successful in the math course in which they enrolled (success is defined as earning a “C” or better). 82% of students who used the Prep and Learning Module increased their course placement on their reassessment as compared to only 36% of students who reassessed using Compass (Figure 2). Further, the use of the ALEKS PPL Prep and Learning Module increased the probability of a student passing the math course in which they enrolled by 10%.

### Results for Students Placing into College Level Courses (ACT Compass vs. ALEKS PPL)



Percentages listed represent a percent-increase in likelihood (when using ALEKS PPL vs. ACT Compass) of placing into a college-level course, earning a “C” or better, and staying enrolled for a second semester.

Figure 1

### Percentage of Students that Improved Course Placement After Reassessing

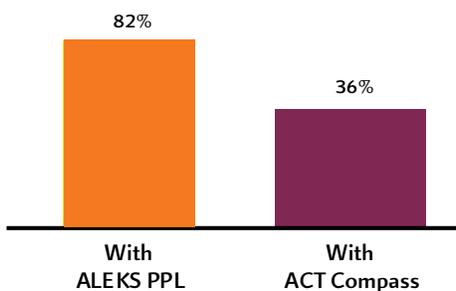


Figure 2

### Conclusion

Harper College has adopted ALEKS PPL as the official college math placement program because students who used ALEKS PPL had higher level placements, higher success rates in college-level math courses, and were more likely to stay enrolled at Harper College for a second semester.

**“Upon completion, students are provided a full and complete profile of their mathematical abilities broken out by 314 math concepts. ALEKS PPL not only provides a stable testing platform, but it is a placement exam and diagnostic tool all wrapped into a single student experience.”**

–Matthew McLaughlin, Director, Title III & Testing Center

