Fall 2016 Outcomes in MATH 006A for Summer ALEKS Users

This brief provides an update on the 137 students who enrolled in MATH006A in the fall of 2016 through a program that gave them the chance to change their math placement by working with ALEKS (an online, adaptive learning tool) in the summer of 2016. These 137 students represent a subset of the 562 who worked with ALEKS, not all of whom were able to change their placement.

These 137 students are compared to those who placed directly into MATH 006A. These groups were very unevenly distributed across the five sections of MATH 006A offered, and average grades differed from section to section. Table 1 presents data on all sections, with the two sections (highlighted in light blue) with relatively even numbers of ALEKS students and students who placed directly into MATH 006A being a major focus.

In one of the two of the sections (030) mentioned in the previous paragraph, the ALEKS group's average course grade was higher compared to the direct group, while in the other section (040), they scored lower. In the section (040) with more ALEKS students than direct placements, ALEKS students' average grade was lower but similar to the average grade earned by direct students. The percent of student passing (earning a C- or better) MATH 006A is higher for the ALEKS group in every section with more than a few ALEKS student, and in one section (040) higher by more than ten percentage points. While lower average grades are driven by ALEKS students not earning the highest course grades, a clear majority of these students demonstrated sufficient command of the material to earn a passing grade.

	Total Avg.	ALEKS Avg.	Direct Avg.	Total Pass	ALEKS Pass	Direct Pass
Section	2.93	2.32	3.00	91.61%	80.00%	92.97%
001	(143)	(15)	(128)	(143)	(15)	(128)
Section	2.58	1.85	2.59	85.25%	50.00%	85.83%
010	(122)	(2)	(120)	(122)	(2)	(120)
Section	2.55	2.38	2.64	87.07%	87.50%	86.84%
020	(116)	(40)	(76)	(116)	(40)	(76)
Section	2.89	3.08	2.78	93.64%	97.56%	91.30%
030	(110)	(41)	(69)	(110)	(41)	(69)
Section	2.56	2.55	2.60	90.91%	92.31%	80.00%
040	(44)	(39)	(5)	(44)	(39)	(5)
Total	2.73	2.62	2.76	89.53%	90.51%	89.20%
	(535)	(137)	(398)	(535)	(137)	(398)

Table 1: Outcomes in MATH 006A for in fall 2016 by Section, with number of students in parenthesis (Note in each set of columns the overall section average is broken out for ALEKS students and direct placement student)

Interestingly, when this group of 137 students who was able to move into MATH 006A is compared to 143 who used ALEKS but were not able to change their placement through retesting, those who moved into MATH 006A actually spent less time using ALEKS on average (1896 minutes over the course of the summer) than those who were not able to change their placement (2464 minutes).

Taken together this evidence suggests that there is a group of students who used ALEKS as a refresher in the summer of 2016, moved into MATH 006A in the fall of 2016, and then earned grades comparable to students who placed directly in MATH 006A.