Kent State University saw a need to increase the accuracy of their placement program. A high percentage of students were failing remedial math courses, which delayed graduation, caused a change in degree focus, or caused withdrawals from the institution. Professor Andrew Tonge, Math Department Chair, decided ALEKS Placement, Preparation and Learning (ALEKS PPL) was the key to success. In the fall of 2011, 61% of students completed developmental math courses, a 24% improvement over the previous year, and there was a 10% decrease in the D/F/W rate. Additionally, professors expressed that students were coming to class prepared to learn and succeeding for the first time.

Institution Profile
Kent State University has an annual enrollment of over 43,000 students across eight campuses. Kent State is the 14th largest public institution in the country.

Implementation
Placement at Kent State is designed so students can take the ALEKS Assessment remotely at a time and date convenient to them. If the desired score is not reached, students have the option to take a six-week, self-paced remediation sequence within the ALEKS learning module. Kent State requires students to spend a minimum of 10 hours in the learning module before reassessment is allowed. All incoming freshman have the opportunity to take a reassessment on campus when they attend the required summer program called Destination Kent State. The reassessment is proctored by graduate students who monitor the ALEKS Math Emporium, an ALEKS-specific computer lab.

Results Achieved
Placement Results:
Of the students who attended the Destination Kent State program, 331 took the ALEKS PPL reassessment. 61% (202) of these students improved their placement score. Of those that improved their score, 74% (150) jumped up at least one course. Two students jumped as many as four courses.

<table>
<thead>
<tr>
<th>Number of Courses Jumped</th>
<th>Number of Students</th>
<th>Percent of Students Who Improved Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>86</td>
<td>57%</td>
</tr>
<tr>
<td>2</td>
<td>47</td>
<td>31%</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
<td>10%</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>1%</td>
</tr>
</tbody>
</table>
Course Results:
Within the first year of implementation, the D/F/W rate in remedial courses dropped 10%. Students placed with ALEKS outperformed students not placed with ALEKS in developmental math courses. Prior to ALEKS PPL, the pass rate was 63%. In 2011, ALEKS PPL improved the pass rate to at least 77%. In college-level courses, instructors reported that students are better prepared and grades on common finals were better than in the previous years.

Conclusion:
The math department was very pleased with the impact of ALEKS PPL on retention rates, pass rates, performance in subsequent courses, and the boost in students’ confidence in math. ALEKS PPL allows the students, parents, and institution to be flexible and better prepared to place students in the correct course. Having success in the first math course sets the path towards graduation. This is good news not just for math, but for all disciplines.

Student Comments
“\textit{When you take the placement assessment for the 2nd and 3rd time, it definitely shows you that your effort is worth it, because I was so shocked, honestly, to have improved that much in such a short amount of time.}”

“\textit{I feel like I was placed very well. If I don’t remember how to do this, I obviously need to relearn it.}”

“\textit{The most helpful thing to me about ALEKS is that it’s flexible and works around you. At any given point in time you can jump on the ALEKS system and decide to do math, and work towards the goal of... refreshing all your skills.}”

"Having students better prepared for the classes they are entering gives a lot more flexibility to instructors. They are able to challenge the students more, and this will benefit not only the students, but the university as a whole as we move forward.”

–Prof. Andrew Tonge