QEP Evaluation: Learning Prescription/Supplemental Instruction Strategy
Comparison of Course Grades, Spring Term 2007-2
Classes using ALEKS vs. sections taught by same instructor without ALEKS

**Method:** ALEKS (Assessment and Learning in Knowledge Spaces) program was selected by faculty for use in providing learning prescriptions and supplemental instruction to students in target classes. Eight faculty agreed to use ALEKS in one section of either MAT0020 or MAT 0024 and teach another section of the same class without ALEKS. Course grades were compared at the end of the term to determine if the inclusion of ALEKS improved student success. An additional analysis was conducted to compare grades earned by students who logged time on ALEKS with the control group sections. Fifty percent of the students in the MAT0024 ALEKS sections and 23% in the MAT0020 ALEKS sections actually used ALEKS.

**Results:**
No significant differences were found in course grades, pass rates, or retention rates between ALEKS and control group classes using Chi Square at \( p < .05 \) level.

Students who actually used ALEKS were significantly more likely to pass the course, but a relatively low percentage of students used ALEKS. However, we do not know how those students differed from students who did not use ALEKS or students in the control group in terms of motivation and willingness to devote extra time to study and prepare for class.

**Grade Comparison for ALEKS and Control Group Sections**

<table>
<thead>
<tr>
<th>Course</th>
<th>S</th>
<th>PR</th>
<th>U</th>
<th>W*</th>
<th>I/Z</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAT0020</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control (N=160)</td>
<td>28%</td>
<td>26%</td>
<td>16%</td>
<td>28%</td>
<td>4%</td>
</tr>
<tr>
<td>ALEKS (N=162)</td>
<td>27%</td>
<td>28%</td>
<td>19%</td>
<td>25%</td>
<td>2%</td>
</tr>
<tr>
<td><strong>MAT0024</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control (N=84)</td>
<td>57%</td>
<td>25%</td>
<td>8%</td>
<td>10%</td>
<td>0%</td>
</tr>
<tr>
<td>ALEKS (N=99)</td>
<td>55%</td>
<td>21%</td>
<td>11%</td>
<td>13%</td>
<td>0%</td>
</tr>
</tbody>
</table>

* Includes instructor withdrawals
Grade Comparison for Students Who Used ALEKS and Control Group Sections

<table>
<thead>
<tr>
<th>Course</th>
<th>Control (N=160)</th>
<th>ALEKS (N=37)</th>
<th>Control (N=84)</th>
<th>ALEKS (N=27)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT0020</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>S 28%</td>
<td>PR 26%</td>
<td>U 16%</td>
<td>W 28%</td>
</tr>
<tr>
<td>who used</td>
<td>I/Z 4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALEKS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=37)</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Grades</td>
<td>S 54%</td>
<td>PR 43%</td>
<td>U 3%</td>
<td>W 0%</td>
</tr>
<tr>
<td>I/Z 0%</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>MAT0024</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students</td>
<td>S 42%</td>
<td>PR 28%</td>
<td>U 14%</td>
<td>W 16%</td>
</tr>
<tr>
<td>who used</td>
<td>I/Z 0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALEKS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(N=27)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grades</td>
<td>S 52%</td>
<td>PR 26%</td>
<td>U 22%</td>
<td>W 0%</td>
</tr>
<tr>
<td>I/Z 0%</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

* Includes instructor withdrawals

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Jobnames: ALEKSDEM and ALEKS.sas