Students’ Participation in Supplemental Instruction and Final Grades, Based on Level of Interest and Availability
2012-2013

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Students’ Participation in Supplemental Instruction and Their Final Grades, Based on Level of Interest and Availability 2012-2013

Abstract
The online Supplemental Instruction (SI) scheduling surveys are used to determine the best possible days, times, and locations for SI sessions. In this report, the results of this survey are used to compare SI participants and non-participants, based on availability to attend SI sessions and level of interest in SI.

Executive Summary
Purpose
The purpose of this report is to compare final grades and SI participation of students based on students’ availability to attend SI sessions and their interest in SI. These data also contribute to additional assessments of the SI program.

Methods
During the first week of classes for the semester, SI Leaders promote the SI program to students using a verbal presentation. During the presentation, Leaders announced the online scheduling survey and encouraged students to complete the survey.

The online scheduling survey has been in use since spring 2009. Scheduling survey data are now collected only through this web-based survey. An associated online program allowed the SI Leaders to determine the best days, times, and locations for SI sessions.

Based on scheduling survey responses, students were classified as available to attend SI if at least one of the scheduled SI sessions fit their availability. Students with an interest level of 4 or 5 were classified as having high interest, while those with an interest level of 1, 2, or 3 were classified as low interest.

Findings
First, note that 80.5% overall of the survey respondents had a high level of interest in SI. (This rate increases to 97% if level 3 was also included as high interest.”) The high rate of interest shows that students who are less interested in SI are not likely to complete the SI scheduling survey. Also:

◆ Tables 1 and 2 reports frequencies of SI attendance and grades categories, based on interest level.
◆ Tables 3 and 4 reports frequencies of SI attendance and grades categories, based on availability.

Interesting overall frequencies based on interest level include:
◆ From Table 1:
  o More (51.3%) of the students with high interest in SI were participants.
  o Students with a higher interest in SI attended a significantly higher number of SI sessions than students with low interest.
◆ From Table 2, students with a higher interest in SI did not earn a significantly higher final grade than students with lower interest in SI. This may suggest that students with a lower interest in SI:
  o Can perform well in a course without the support of SI, or
  o Seek support from other campus resources.

Interesting overall frequencies based on availability include:
◆ From Table 3:
  o While 81.4% of the surveyed students are available to attend SI, only 48.3% actually attended.
  o However, 41.1% of those unavailable to attend—based on the scheduling survey—did in fact attend SI. This demonstrates that the students’ availability provided in the scheduling survey does not reflect their actual availability. We also see higher attendance closer to exams, and often

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schedule exam reviews for times different than the regularly scheduled sessions to accommodate the anticipated increase in number of students.

- There was a significant difference in the number of SI sessions attended for actual SI participants, between students available and those unavailable to attend SI according to their scheduling survey. This was not a significant difference in 2011-2012, which suggested that students who want to attend SI will find a way to do so; however, the difference between 2011-2012 and 2012-2013 is that students available to attend SI attended more SI (5.8 to 6.3 total sessions).

- From Table 4:
  - The difference in students’ ability to earn a C or higher, based on their availability to attend SI, is significant, but only a difference of .10 in their final grade. This too suggests that students motivated to earn a C or higher may seek help from another campus resource if SI is not available.

Discussion and Recommendations
It appears productive to continue scheduling SI sessions based on students who have a higher interest in SI. Nevertheless, our scheduling accuracy may improve if:

- More students, regardless of level of interest in SI, complete the scheduling survey, and
- We improve promotion of SI in manners that increase students’ early interest in the program.

Regarding students’ availability to attend SI, it similarly looks most useful to choose SI sessions based on making the SI sessions available to the greatest number of students possible; however, results here may (and from our end of the semester program evaluation) show that some students indicate their availability based on preference, not actual availability. Therefore, scheduling SI sessions that are variable may be the strategy that reaches the greatest number of students. See the “Maximizing Availability of SI Sessions” for suggested scheduling strategies.
Table 1. Participation in SI Sessions, Based on Level of Interest in SI.

<table>
<thead>
<tr>
<th></th>
<th>High Interest</th>
<th>Low Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI Participant</td>
<td>3938</td>
<td>540</td>
<td>4478</td>
</tr>
<tr>
<td>Non-Participant</td>
<td>3739</td>
<td>1315</td>
<td>5054</td>
</tr>
<tr>
<td>Mean # of Sessions Attended, all students</td>
<td>3.3***</td>
<td>1.1***</td>
<td></td>
</tr>
<tr>
<td>Mean # of Sessions Attended, SI Participants only</td>
<td>6.5***</td>
<td>3.8***</td>
<td></td>
</tr>
</tbody>
</table>

*** Significant difference of means at p<0.001.

Table 2. Final Grade Categories, Based on Level of Interest in SI.

<table>
<thead>
<tr>
<th></th>
<th>High Interest</th>
<th>Low Interest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined A, B, C</td>
<td>5819</td>
<td>1514</td>
<td>7333</td>
</tr>
<tr>
<td>Combined C-, D, F, Drop</td>
<td>1815</td>
<td>341</td>
<td>2199</td>
</tr>
<tr>
<td>Mean Final Course Grade</td>
<td>2.68***</td>
<td>2.87***</td>
<td></td>
</tr>
</tbody>
</table>

*** Significant difference of means at p<0.001.

Table 3. Participation in SI Sessions, Based on Availability to Attend SI sessions.

<table>
<thead>
<tr>
<th></th>
<th>Available</th>
<th>Unavailable</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>SI Participant</td>
<td>3749</td>
<td>729</td>
<td>4478</td>
</tr>
<tr>
<td>Non-Participant</td>
<td>4008</td>
<td>1046</td>
<td>5054</td>
</tr>
<tr>
<td>Mean # of Sessions Attended, all students</td>
<td>3.04***</td>
<td>2.22***</td>
<td></td>
</tr>
<tr>
<td>Mean # of Sessions Attended, SI Participants only</td>
<td>6.3**</td>
<td>5.4**</td>
<td></td>
</tr>
</tbody>
</table>

* Significant difference of means at p<0.01.
*** Significant difference of means at p<0.001.

Table 4. Final Grade Categories, Based on Availability to Attend SI sessions.

<table>
<thead>
<tr>
<th></th>
<th>Available</th>
<th>Unavailable</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined A, B, C</td>
<td>6018</td>
<td>1315</td>
<td>7333</td>
</tr>
<tr>
<td>Combined C-, D, F, Drop</td>
<td>1739</td>
<td>460</td>
<td>2199</td>
</tr>
<tr>
<td>Mean Final Course Grade</td>
<td>2.74*</td>
<td>2.64**</td>
<td></td>
</tr>
</tbody>
</table>

* Significant difference of means at p<0.01.

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