



Research Briefs from the Office of Research and Planning Supplemental Instruction Fall 2011

Overview: The purpose of this brief is to summarize the impact of supplemental instruction on success for Fall 2011.

Summary of Findings:

- 65 students attended one or more SI sessions and earned a Grade on Record (GOR) in Fall 2011
- 52% of students who attended an SI session attended two or more SI sessions
- 26% of the students who were enrolled in a section where SI was offered attended an SI session at least once
- Students who attended one or more SI sessions had a substantially higher success rate (82%) than students in the same section who did not attend at least one SI session (72%)

Methodology: The success rate of students who utilized SI was compared to students in the same section who did not utilize SI. Success rate is defined as earning a grade of A, B, C, or P divided by the number of grades earned on record (GOR; A, B, C, D, F, P, NP, I, and W). Students who attended an SI session one or more times were compared to students who did not attend an SI session and who were enrolled in the same section. Future research will also compare students who attended only one SI session with those who attended two or more. The reason for adding this comparison is that the actual benefits of SI are more likely to occur for students who utilized SI two or more times rather than just once. This comparison was not done this time because SI was piloted in Fall 2011 and the number of students attending two or more SI sessions was not large enough to make the comparison.

The effect size statistic was used to indicate the size of the difference on success between those who did and did not attend an SI session. One method of interpreting effect size was developed by Jacob Cohen. Jacob Cohen defined "small," "medium," and "large" effect sizes. He explained that an effect size of .20 can be considered small, an effect size of .50 can be considered medium, and an effect size of .80 can be considered large. An effect size is considered to be meaningful if it is .20 or higher. It is important to mention that the number of students in each group does not influence Effect Size; whereas, when statistical significance is calculated, the number of students in each group does influence the significance level (i.e. "p" value being lower than .05).

Participation: In Fall 2011 71 students attended at least one SI session. Of those, 65 (92%) students earned a GOR in one of the sections in which SI was offered. Moreover, 35 of the 65 students (52%) attended two or more SI sessions.

Table 1 illustrates the number of students who attended at least one SI session and earned a GOR in one of the sections where SI was offered. Students were excluded if they attended an SI session for a section where SI was not offered. Accordingly, 26% of the students who were enrolled in a section where SI was offered attended an SI session at least once.

Table 1: Percent of Students Attending One or More SI Sessions by Section in Fall 2011.

Course	Percent of Students who Used SI		
	#	N	%
ANAT-101-01	8	33	24.2
ANAT-101-02	5	31	16.1
HIST-100-10	16	73	21.9
HIST-101-15	24	67	35.8
Total	53	204	26.0

*Only includes sections where SI was offered. Some students attended SI even though they were not in a section that offered SI.
 Note. "#" represents the number of students who attended at least one SI session and earned a grade on record (GOR), "N" represents the total number of GOR earned in the SI Section, and "%" represents the percent of students who attended at least one SI session.

Findings: Students who attended one or more SI sessions had a substantially higher (ES = .21) success rate (82%) than students in the same section who did not attend at least one SI session (72%, see Figure 1 and Table 2).

Figure 1: Success Rate by Attending a Supplemental Instruction Session for Fall 2011.

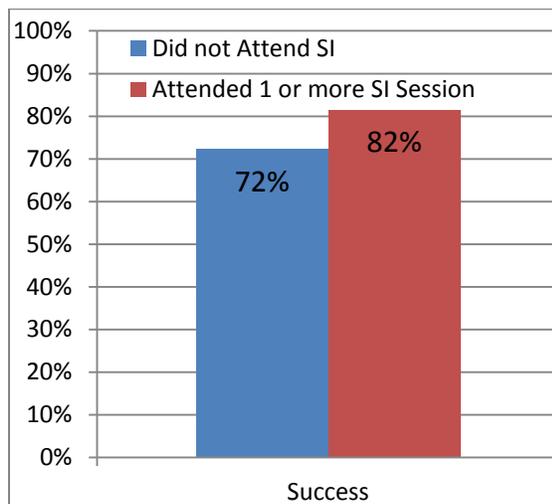


Table 2: Success Rate by Supplemental Instruction Attendance for Fall 2011.

SI Course	Success Rate						ES	P Value
	Did Not Attend SI Session			Attended One or More SI Session				
	#	N	%	#	N	%		
ANAT-101	31	51	60.8	9	13	69.2	.17	.582
HIST-100	152	198	76.8	24	28	85.7	.22	.288
HIST-101	28	43	65.1	20	24	83.3	.41	.116
Total	211	292	72.3	53	65	81.5	.21	.124

Note: Student's were included even if they were not enrolled in a section where SI was offered.