

Iowa State University  
Dean of Students Office  
Supplemental Instruction-Academic Success Center

**Supplemental Instruction: Outcomes Assessment, 2006-2007**

Report Compiled by: Craig Zywicki, Supplemental Instruction Coordinator

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Contact: Craig Zywicki, [czywicki@iastate.edu](mailto:czywicki@iastate.edu)

## **Supplemental Instruction: Outcomes Assessment, 2006-2007**

### **Abstract**

The primary program evaluation of the Supplemental Instruction (SI) program completed semi-annually assesses whether students who attend SI sessions earn higher final course grades than students who do not attend SI sessions. This report provides an overview to the participant data collected, which continues to demonstrate a positive influence on student academic success.

### **Program**

SI is an academic support program utilizing peer-assisted study sessions to enhance student performance and retention. SI was first developed by Deanna Martin, Ph.D., at the University of Missouri at Kansas City in 1973. In 1992, Iowa State University established a SI program targeting traditionally difficult entry-level courses that result in a high percentage of D or F grades and withdrawal rates. Since its implementation, students who have attended SI sessions earned statistically significant higher final course grades and withdraw from courses less frequently than non-participants.

### **Executive Summary**

#### **Purpose**

This assessment is completed to fulfill the following tasks:

- ◆ Establish reporting mechanism for information collected in the SI database
- ◆ Disseminate findings to faculty, students, SI Leaders, Academic and Student Affairs Administrators
- ◆ Report statistics comparing participants in SI to non-participants

#### **Methodology**

Course rosters are obtained from the Registrar's office each semester without the students' prior consent under the following provision in the Family Education Rights to Privacy Act: 34 CFR Part 99. The rosters contain the student's first and last name, student ID number, course name and section number, college, year in school, birth date, academic major, entry term, admission type, gender, ethnicity code, citizenship code, ACT score, high school rank, e-mail address, learning community team and number, and social security number. This information is entered into a database created using the statistical software SPSS. SI Leaders distribute attendance sheets at each SI session to track the names and number of SI participants at each section. This information is regularly entered into the database and used to evaluate the progress of the SI sessions.

At the end of each semester, final course grades are entered into the database to compare participants and non-participant course outcomes. Students' names are not reported in outcome data and all information is kept confidential. Finally, additional coding is created to enable and simplify reporting. Comprehensive reports including descriptive statistics of SI participants and non-SI participants, summary reports for each class including final course grades, number of SI sessions attended, mean number of sessions attended, mean size of SI sessions, final course grade according to number of SI sessions attended, learning community participation reports, and Student Support Services Program Reports, and Department of Residence Reports are completed each semester.

Beyond this regularly completed methodology, further use of the data will address additional research questions.

#### **Findings**

The findings reported are based on data collected over the entire 2006-2007 school year. Individual data for each class or semester is also available, but not included within this report.

TABLE 1: SI Participant and Non-Participant Group Comparison

	SI Participants (N=4654)		SI Non-Participants (N=14151)		All Students (N=18805)	
	Number	Percent	Number	Percent	Number	Percent
	Combined A, B, C	3663	78.7%	9369	66.2%	13032
Combined C-, D, F, Drop	991	21.3%	4782	33.8%	5773	30.7%
Mean Final Course Grade	2.65*		2.38*		2.45	

\* Significant difference of means at  $p < 0.05$

\*\* Audits, Transfer credits, incompletes, and pass/not pass grades are not included in the analyses.

TABLE 2: Student Success Based on Participation in SI

	Mean Final Grade	N	% of Participants
Students attending 1 SI Session	2.52	1590	34.16%
Students attending 2-5 SI Sessions	2.67	1770	38.03%
Students attending 6-9 SI Sessions	2.66	525	11.28%
Students attending 10 or more SI Sessions	2.92	616	13.24%

TABLE 3: Summary of Additional Participation Data

Total Course Enrollment (students who appear on final class roster after drop/add)	18805
Number of SI Sessions Offered During the Academic Year	2446
Total Number of Students Attending SI (Unduplicated Headcount)	4654
Total Contact Hours of SI Participants	20881
Mean Number of Sessions Attended by SI Participants	4
Mean Size of SI Sessions	9
Highest Number of SI Sessions Attended by One Student	41

### Discussion and Recommendations

Longitudinal data shows the successful, positive impact of SI sessions. It can easily be deduced that the program works as is, thus focusing recommendations on minor changes:

- ◆ Use additionally gathered data (from scheduling surveys) to understand how motivation affects participation in SI.
- ◆ Work with faculty to understand the affect of a major exam grade or midterm grade on participation in SI.
- ◆ Continue to revise promotion of the program to reach a greater number of students.
- ◆ Reevaluate the level of support for SI in courses where participation is low or declining.
- ◆ Continue to develop partnerships with the Provost's Office, Learning Communities, Department of Residence, and other interested stakeholders in Iowa State University.