

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

**A Decade of SI at Iowa State University:  
1999-2000 to 2008-2009**

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# A Decade of SI at Iowa State University: 1999-2000 to 2008-2009

## Abstract

The Supplemental Instruction (SI) program at Iowa State University has seen considerable growth since its inception in 1992<sup>1</sup>. Collaborative learning opportunities for students have consistently been our primary focus; however, other changes in the program have collectively contributed to the SI program reaching its highest number of contact hours with students in 2008-2009. This report briefly summarizes a few trends based on students' final grades and contacts with students in the past decade of SI at Iowa State University.

## 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 and History

This assessment is being compiled to describe the recent growth of the SI program. A longitudinal electronic database is available to track the past nine years of SI. During this time, key changes to the SI program include:

- ◆ 1999: The SI Program Coordinator becomes a fulltime professional position. Keri Hensen serves as the SI Coordinator.
- ◆ 2002: The “centralized budget” for SI sessions reaches \$95,000 per academic year<sup>2</sup>. This remained consistent for four years, then decreased slightly in 2006. Additional SI funding corresponds to departmental contributions for specific departmental courses.
- ◆ 2004: Beginning with the fall 2004 semester, SI sessions are offered three times per week for 50 minutes each. In prior semesters, two SI sessions were offered each week for 90 minutes each. Fall 2004 is also the first semester with Marissa Cope as the SI Coordinator.
- ◆ 2006: The foundation for the online SI schedule is created. Additional features to the online schedule over the next three years contribute to significant growth in the web as a communication tool for SI Leaders with students. Craig Zywicki is the SI Coordinator beginning fall 2006.

### Methodology

Data are tracked, evaluated, and reported on a semesterly and annual basis. (Countless additional reports are available for interested readers.) Trend data summarized in this report are based on previous reports and a longitudinal database<sup>3</sup> made up of all semester databases.

### Findings

*Grade Difference:* We frequently promote that that SI participants earn a higher final grade than non-participants. We also promote that the more sessions a student attends, the higher their final course

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<sup>1</sup> SI was implemented at Iowa State University in 1992. Data collection and assessment have been maintained and managed electronically since the 1999-2000 academic year.

<sup>2</sup> The “Centralized Budget” excludes salaries/benefits for the SI Coordinator and SI Graduate Assistants. The centralized budget funds are spent entirely on programming.

<sup>3</sup> Some electronic data have been lost over time. The longitudinal database contains the most comprehensive collection of SI data available.

grade. Based on our longitudinal database, there is a statistically significant difference in the average grade of SI Participants ( $M=2.64$ ) and their non-participant classmates ( $M=2.37$ ;  $p<.001$ ). Chart 1 shows the differences in final grade by year, and Chart 2 shows the variation in final grades based on the number of sessions a student attends.

*Contacts with Students:* Contacts with students have been tracked based on time spent with students in SI sessions. From 1999-2000 to 2003-04, SI sessions were 90 minutes each, and each session was equal to 1.5 contact hours. Since 2004-2005, SI sessions are 50 minutes each and each session is equal to 1 contact hour. Chart 3 summarizes the trends in contact hours. Chart 4 adjusts the numbers to summarize the number of contacts with each student on the same scale<sup>4</sup>.

Contact hours accumulated in one academic year for the 90 minute sessions peaked in 2002-03 and the 50 minute sessions peaked in 2008-09. Comparing these two peak years, the decision to offer more, shorter sessions per week has contributed to:

- ◆ A 20% increase in the number of contact hours with students, *and*
- ◆ A 79% increase in the number of contacts (regardless of length) with students.

Over the five year period (2004-05 to 2008-09) of 50 minute SI sessions, the number of contact hours and count of contacts with students has increased by 78%. Much of this growth can be attributed to:

- ◆ the strong reputation of the SI program,
- ◆ more sessions offered per week,
- ◆ development of the online resources, and
- ◆ creative solutions, to reach more students in more courses. (See Chart 5.)

Table 6 summarizes additional statistics for the SI Program over the past decade.

### **Discussion and Recommendations**

The fundamental purpose for SI and delivery during SI sessions has remained quite consistent. Besides the major change in session length and number of sessions offered per week, additional smaller changes have occurred within promotions, staff training & development, assessment practices, etc. The collection of all changes have improved the SI Leaders' ability to serve a greater number of students.

Looking towards a future with uncertain financial circumstances for Iowa State University, SI may take an even larger role. We can prove that SI is cost effective, and good decisions over the past decade have allowed us to achieve more without additional funding.

Many other reports of SI assessment suggest specific recommendations. General recommendations include:

- ◆ Increase funding if available to: Increase the number of sessions offered per week (4 or 5) per Leader, offer SI for additional courses, increase the SI Leader stipend, or hire additional supervisory support for SI Leaders.
- ◆ If funding remains the same, look for creative solutions to supporting SI Leaders and promoting the program.
- ◆ Look to assess the program on a higher level. Many of the changes with the website are envied by staff and faculty at other institutions, based on the contacts I have received for "how do you..." information.
- ◆ Continue to develop online resources for SI.

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<sup>4</sup> Readers should keep in mind that the adjustment to compare the "number of contacts" when 90-minute sessions were offered to when 50-minute sessions disregards the length of the session. Obviously, more sessions are also offered, creating more opportunity for contacts.

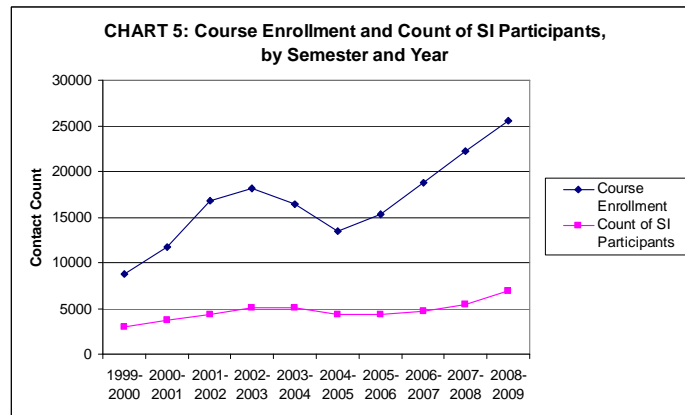
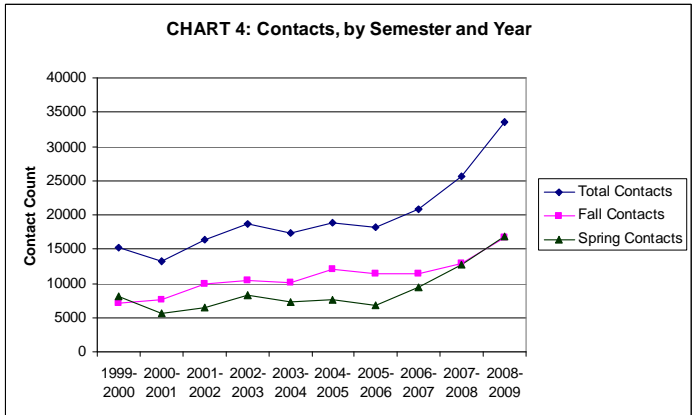
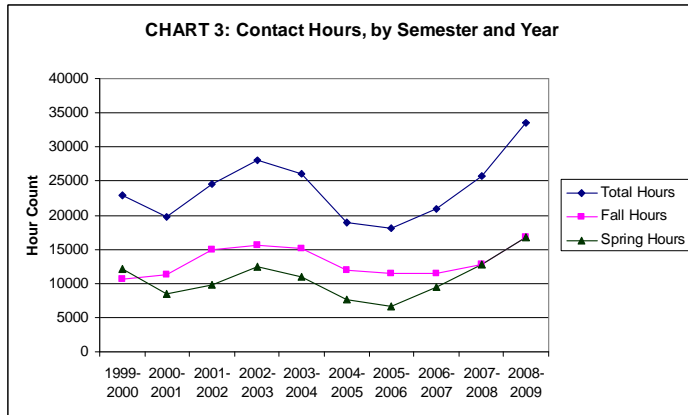
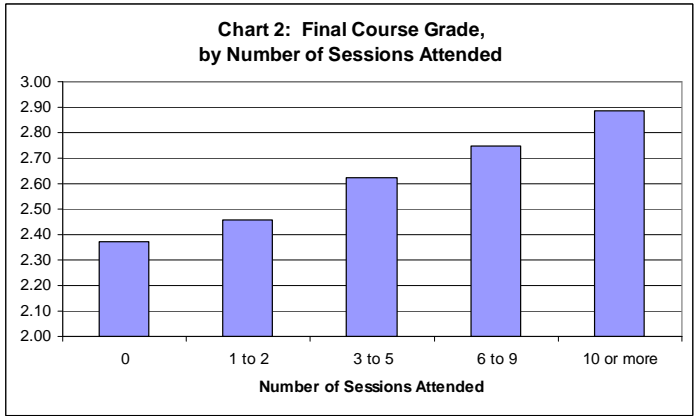
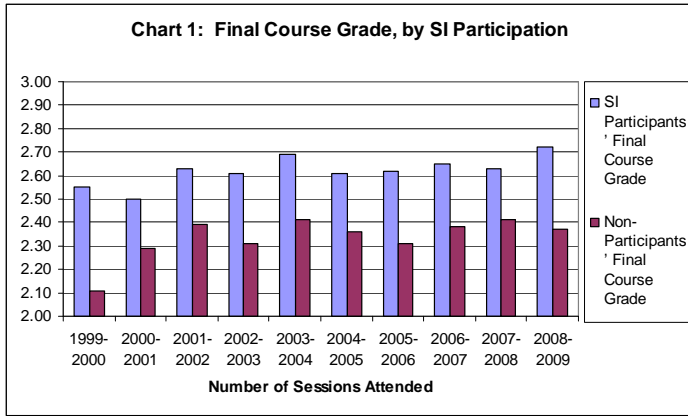


TABLE 5: A Decade of Data, by Academic Year

Year	Count of SI Participants	Course Enrollment	Number of SI Leaders	Count of Contact Hours	SI Participants' Final Course Grade	Non-Participants' Final Course Grade	Number of SI Sessions Offered	Number of Contacts
2008-2009	6892	25602	62	33507.0	2.72	2.37	2634	33507
2007-2008	5374	22228	57	25653.0	2.63	2.41	2381	25653
2006-2007	4654	18805	62	20881.0	2.65	2.38	2446	20881
2005-2006	4312	15257	63	18100.0	2.62	2.31	2493	18100
2004-2005	4327	13440	62	18841.0	2.61	2.36	2566	18841
2003-2004	5020	16388	65	26131.5	2.69	2.41	1778	17421
2002-2003	5046	18147	66	28036.5	2.61	2.31	1808	18691
2001-2002	4318	16832	62	24621.0	2.63	2.39	2503	16414
2000-2001	3718	11786	60	19765.5	2.50	2.29	1603	13177
1999-2000	2909	8768	54	10668.0	2.55	2.11	?	7112