



Research Brief

Spring 2013 HSI STEM Supplemental Instruction Program Evaluations

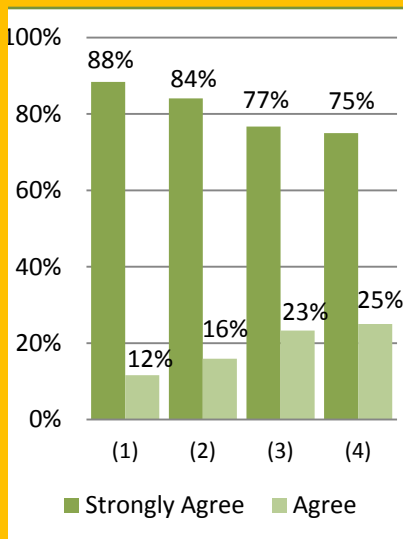
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Purpose of Brief

This brief analyzes the results of the Spring 2013 HSI STEM supplemental instruction program evaluations.

Summary of Findings

- The overall response rate of the HSI STEM SI evaluation survey was 63%.
- Respondents stated time conflicts (n=7) or a lack of need for assistance (n=3) as reasons for not attending SI sessions.
- One-hundred percent (100%) of respondents either agreed or strongly agreed with the following statements: the SI leader (1) was knowledgeable about the course material, (2) was well-organized, (3) provided helpful learning strategies, and (4) created a supportive environment.



Overview

In an effort to improve students' math, technical and conceptual science skills as a part of the HSI STEM Grant, Crafton Hills College (CHC) developed a supplemental instruction (SI) program as an alternative learning strategy. In the Spring 2013 term, CHC offered supplemental instruction for students enrolled in the following course sections: CHEM-150-25, CHEM-150-26, MATH-103-15, MATH-103-35, MICRO-102-35, MICRO-102-36, and MICRO-102-37. Surveys were provided to students enrolled in these sections to evaluate the SI program.

Methodology

In conjunction with the HSI STEM Alternative Learning Strategies Coordinator, the Office of Institutional Effectiveness, Research, and Planning developed a one-page paper survey to measure students' perceptions of the SI program. The evaluations were matched to Ellucian (Datatel) student data and SI attendance records to analyze evaluations for HSI STEM SI sessions. Respondents were asked whether they attended any SI sessions along with a follow-up open-ended question if they did not attend any sessions. Respondents were then presented with a series of Likert-scale questions to measure their level of agreement with statements regarding various program components. Responses were ranked where Strongly Agree = 5, Agree = 4, Disagree = 3, Strongly Disagree = 2, and Not Applicable = 1. Lastly, respondents were presented with a final open-ended question for any additional comments.

Findings

Table 1 illustrates the response rate for each section where '#' is the number of responses, 'N' is the number of students earning a grade on record (GOR¹) in the section, and '%' is the number of responses divided by the total number of students earning a GOR in the section. The overall response rate of the HSI STEM SI evaluation survey was 63%.

Table 1: Response rate for HSI STEM SI evaluations

| Course Section | # | N | % |
|----------------|-----------|-----------|--------------|
| CHEM-150-25 | 15 | 19 | 78.9% |
| CHEM-150-26 | 11 | 16 | 68.8% |
| MATH-103-15 | 2 | 5 | 40.0% |
| MATH-103-35 | 2 | 8 | 25.0% |
| MICRO-102-35 | 11 | 16 | 68.8% |
| MICRO-102-36 | 9 | 13 | 69.2% |
| MICRO-102-37 | 1 | 4 | 25.0% |
| TOTAL | 51 | 81 | 63.0% |

¹ GOR is a grade earned in the course of A, B, C, D, F, P, NP, CR, NC or I

Table 2 illustrates the number of students in each section who stated whether or not they attended. Seventy-four percent (74%) of respondents reported attending an SI Session.

Table 2: Respondents' self-reported SI session attendance

| Course Section | Did you attend a Supplemental Instruction (SI) session? | | | |
|----------------|---|--------------|-----------|--------------|
| | Yes | | No | |
| | # | % | # | % |
| CHEM-150-25 | 11 | 73.3% | 4 | 26.7% |
| CHEM-150-26 | 7 | 63.6% | 4 | 36.4% |
| MATH-103-15 | 2 | 100.0% | 0 | 0.0% |
| MATH-103-35 | 2 | 100.0% | 0 | 0.0% |
| MICRO-102-35 | 10 | 90.9% | 1 | 9.1% |
| MICRO-102-36 | 8 | 88.9% | 1 | 11.1% |
| MICRO-102-37 | 0 | 0.0% | 1 | 100.0% |
| TOTAL | 40 | 73.8% | 11 | 26.2% |

When asked why they chose not to attend an SI session, respondents provided various reasons related to time conflicts (n=7) or a lack of need for assistance (n=3). Additionally, when compared with the SI attendance records, each respondent who provided a reason for not attending an SI session attended at least one SI session. The number of times the respondent attended is included in parenthesis after the response.

Q4: Please explain why you did not attend an SI session, and if anything could be done to persuade you to do so:

Time conflicts

- Did not work well with my work schedule, no times were good for me. (1)
- I could not attend due to my work schedule. (1)
- It interfered with my work schedule, no times were good for me. (1)
- couldn't fit in to my schedule (2)
- No time (2)
- Wanted to, but had extreme time constraints (Mon-Fri) (2)
- Felt like I did not need much help, the times did not work with my schedule at all (3)

Lack of need for assistance

- I did not attend an SI session because I understood the subject well enough. (2)
- I never felt I needed to attend a SI session (2)
- Felt like I did not need much help, the times did not work with my schedule at all (3)

Table 3 illustrates respondents' levels of agreement with statements regarding various components of the SI program. Over 95% of respondents either strongly agreed or agreed with all but one statement; 89% of respondents either strongly agreed or agreed that the SI sessions helped them do well on tests.

Table 3: Respondents' levels of agreement with statements regarding various SI program components

| Statement | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | | Average Score |
|---|----------------|-------|-------|-------|----------|------|-------------------|------|---------------|
| | N | % | N | % | N | % | N | % | |
| The SI leader explained SI in class and I understood what he/she meant | 32 | 74.4% | 10 | 23.3% | 1 | 2.3% | 0 | 0.0% | 4.72 |
| The SI leader attends class regularly | 37 | 88.1% | 4 | 9.5% | 1 | 2.4% | 0 | 0.0% | 4.86 |
| The SI leader answered questions effectively by re-directing them to the students | 30 | 71.4% | 11 | 26.2% | 1 | 2.4% | 0 | 0.0% | 4.69 |
| The SI leader was knowledgeable about the course material | 38 | 88.4% | 5 | 11.6% | 0 | 0.0% | 0 | 0.0% | 4.88 |
| The SI leader was well-organized | 37 | 84.1% | 7 | 15.9% | 0 | 0.0% | 0 | 0.0% | 4.84 |
| The SI leader provided helpful learning/studying strategies | 33 | 76.7% | 10 | 23.3% | 0 | 0.0% | 0 | 0.0% | 4.77 |
| The SI leader created a supportive environment | 33 | 75.0% | 11 | 25.0% | 0 | 0.0% | 0 | 0.0% | 4.75 |
| The SI sessions helped me do well on the tests. | 28 | 71.8% | 7 | 17.9% | 3 | 7.7% | 1 | 2.6% | 4.59 |
| I would attend SI sessions for other courses | 34 | 77.3% | 8 | 18.2% | 2 | 4.5% | 0 | 0.0% | 4.73 |
| The SI sessions were very helpful for learning the course content | 27 | 67.5% | 12 | 30.0% | 1 | 2.5% | 0 | 0.0% | 4.65 |

Respondents provided 15 additional comments and suggestions. Thirteen responses praised the SI program or the SI leader, and 2 provided suggestions for improvement.

Q6: If you have any other comments or suggestions regarding SI, state them here:

Praise

- Extremely helpful and useful
- I am glad I attended SI, it helped me do well in my test.
- It was very helpful. Thank you!
- It's was coool!
- [Name] is a great SI Instructor!
- Keep it up!
- Keep SI going. Very useful
- [Name] is awesome!!
- SI leader was great! You should hire him to teach micro.
- Thank you!
- Thanks for the help!
- The playing of jeopardy and the depth to which information was relayed was very helpful for me.
- The SI really helped me understand and pass test. [Name] made it easier. I wish SI was longer in time.

Suggestions

- The SI really helped me understand and pass test. [Name] made it easier. I wish SI was longer in time.
- More sessions for other courses.

Other

- SI leader did stop coming so all of these responses were based on when he was actually here.