Fall 2015 - Report on Academic Performance of Supplemental Instruction Students

## - Summary

This report presents course outcomes related to students enrolled in fall 2015 sections that provided supplemental instruction (SI). SI in fall 2015 was funded through the college's BSI Grant, Title V Velocidad Grant, and other sources.

- SI was offered in 19 sections (13 courses).
- Of the $\underline{809}$ graded students in SI sections, $\underline{463(\underline{57 \%}) \text { received SI services. }}$

Three methods for assessing the success of SI are discussed in this report. All of the metrics are based on final grades, with successful or non-successful completion as the outcome variable. A successful completion is defined as a final grade of $\mathbf{A}, \mathbf{B}, \mathbf{C}$ or $\mathbf{P}$.

- Success in SI Sections versus Success in Non-SI Sections (Pages 2 and 3)

This measure compares the overall success rate in all Sl sections of a course to the overall success rate in all non-SI sections of the course. A chart and a data table appear on pages 2 \& 3 .

## - Success Rates within SI Sections (Page 4)

Students in SI sections are afforded the opportunity to receive academic assistance from an SI Leader. This metric compares success rates of students who received SI assistance to success rates of students who did not receive SI assistance. Data tables are presented on pages 4 and 5 .

## - Success Rates in SI Sections - By Number of SI Contacts (Pages 5 and 6)

In this assessment, success rates in SI sections are computed as a function of the number of contacts that students have with an SI Leader (SI contacts). Of the three metrics presented in this report, this one provides the best evidence that SI is contributing to successful course completions.

Student Demographics: Success rates by student demographics are presented on page 5.

## Success Rates by Number of SI Contacts

The tables below show success rate data for fall 2015 and fall 2014. In both terms, students who had six or more contacts with SI Leaders had significantly higher success rates than students with five or less SI contacts. Unfortunately, only $\mathbf{2 1 \%}$ of the students in fall 2015 SI classes had six or more contacts with SI Leaders (in fall 2014, it was 11\%). Additional data appear on pages 5 and 6.

Fall 2015

| Number of |  |  |  |
| :---: | ---: | ---: | :---: |
| SI Contacts | Students |  | Success |
| Rotal | Success | Rate |  |
| 0 | 346 | 191 | $55.2 \%$ |
| 1 to 5 | 296 | 216 | $73.0 \%$ |
| 6 to 10 | 79 | 66 | $83.5 \%$ |
| 11 to 15 | 40 | 37 | $92.5 \%$ |
| 16 to 20 | 23 | 21 | $91.3 \%$ |
| 21 to 29 | 20 | 18 | $90.0 \%$ |
| 30 or more | 5 | 4 | $80.0 \%$ |
| Totals | $\mathbf{8 0 9}$ | 553 | $\mathbf{6 8 . 4 \%}$ |
| 0 to 5 |  | 642 | 407 |
| 6 or more | 167 | 146 | $\mathbf{6 3 . 4 \%}$ |
| Difference in percentage points |  | $\mathbf{2 4 . 0}$ |  |

Fall 2014

| Number of | Students |  | Success |
| :---: | ---: | ---: | :---: |
| SI Contacts | Total | Success | Rate |
| 0 | 1,212 | 700 | $57.8 \%$ |
| 1 to 5 | 499 | 339 | $67.9 \%$ |
| 6 to 10 | 98 | 76 | $77.6 \%$ |
| 11 to 15 | 40 | 34 | $85.0 \%$ |
| 16 to 20 | 43 | 37 | $86.0 \%$ |
| 21 to 29 | 28 | 25 | $89.3 \%$ |
| 30 or more | 10 | 7 | $70.0 \%$ |
| Totals | $\mathbf{1 , 9 3 0}$ | $\mathbf{1 , 2 1 8}$ | $\mathbf{6 3 . 1 \%}$ |
| 0 to 5 |  | 1,711 | 1,039 |
| 6 or more | 219 | 179 | $\mathbf{6 0 . 7 \%}$ |
| Difference in percentage points |  | $\mathbf{8 1 . 7 \%}$ |  |

## - Success in SI Sections versus Success in Non-SI Sections

The chart below and table (on page 3) present success rates and grades distributions for two sets of courses: SI Sections (sections in which SI was offered) and Non-SI Sections (sections in which SI was not offered). Differences between success rates are rendered in percentage points.


SI Sections versus Non-SI Sections - Success Rates and Grades Distributions

|  | $\begin{gathered} \mathrm{SI} \\ \text { Status } \end{gathered}$ | Total Cnt | Successful |  | Grades Distributions |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Course ID |  |  | Num. | Rate | A | B | C | P | D | F | NP | W |
| ANTH V01 | Yes | 70 | 45 | 64.3\% | 7 | 20 | 18 |  | 6 | 4 |  | 15 |
| ANTH V01 | No | 212 | 156 | 73.6\% | 55 | 50 | 51 |  | 17 | 9 | 1 | 29 |
| Difference: SI minus Non-SI |  |  |  | -9.3 |  |  |  |  |  |  |  |  |
| CHEM V01A | Yes | 84 | 51 | 60.7\% | 18 | 15 | 18 |  | 9 | 11 |  | 13 |
| CHEM V01A | No | 199 | 92 | 46.2\% | 31 | 44 | 17 |  | 21 | 26 |  | 60 |
| Difference: SI minus Non-SI |  |  |  | 14.5 |  |  |  |  |  |  |  |  |
| ECON V01B | Yes | 45 | 39 | 86.7\% | 11 | 11 | 17 |  | 4 |  |  | 2 |
| ECON V01B | No | 187 | 111 | 59.4\% | 31 | 40 | 40 |  | 34 | 4 |  | 38 |
| Difference: SI minus Non-SI |  |  |  | 27.3 |  |  |  |  |  |  |  |  |
| ENGL V01A | Yes | 50 | 30 | 60.0\% | 13 | 8 | 9 |  | 1 | 3 |  | 16 |
| ENGL V01A | No | 1,133 | 837 | 73.9\% | 310 | 337 | 190 |  | 49 | 80 |  | 167 |
| Difference: SI minus Non-SI |  |  |  | -13.9 |  |  |  |  |  |  |  |  |
| GEOG V01 | Yes | 69 | 48 | 69.6\% | 8 | 21 | 19 |  | 4 | 13 |  | 4 |
| GEOG V01 | No | 315 | 199 | 63.2\% | 62 | 69 | 68 |  | 35 | 38 |  | 43 |
| Difference: SI minus Non-SI |  |  |  | 6.4 |  |  |  |  |  |  |  |  |
| HIST V07A | Yes | 79 | 62 | 78.5\% | 7 | 31 | 24 |  | 4 | 4 |  | 9 |
| HIST V07A | No | 449 | 267 | 59.5\% | 104 | 90 | 73 |  | 23 | 53 |  | 106 |
| Difference: SI minus Non-SI |  |  |  | 19.0 |  |  |  |  |  |  |  |  |
| MATH V01 | Yes | 40 | 33 | 82.5\% | 22 | 6 | 4 | 1 | 2 | 4 |  | 1 |
| MATH V01 | No | 742 | 349 | 47.0\% | 92 | 121 | 135 | 1 | 104 | 135 | 1 | 153 |
| Difference: SI minus Non-SI |  |  |  | 35.5 |  |  |  |  |  |  |  |  |
| MATH V03 | Yes | 37 | 29 | 78.4\% | 15 | 9 | 5 |  | 2 | 4 | 1 | 1 |
| MATH V03 | No | 790 | 415 | 52.5\% | 143 | 147 | 124 | 1 | 98 | 107 | 2 | 168 |
| Difference: SI minus Non-SI |  |  |  | 25.9 |  |  |  |  |  |  |  |  |
| MATH V04 | Yes | 62 | 32 | 51.6\% | 13 | 9 | 10 |  | 7 | 8 |  | 15 |
| MATH V04 | No | 339 | 185 | 54.6\% | 65 | 66 | 54 |  | 48 | 46 |  | 60 |
| Difference: SI minus Non-SI |  |  |  | -3.0 |  |  |  |  |  |  |  |  |
| MATH V12 | Yes | 41 | 14 | 34.1\% | 4 | 3 | 7 |  | 3 | 7 |  | 17 |
| MATH V12 | No | 91 | 59 | 64.8\% | 8 | 21 | 30 |  | 13 | 10 |  | 9 |
| Difference: SI minus Non-SI |  |  |  | -30.7 |  |  |  |  |  |  |  |  |
| MATH V21A | Yes | 83 | 52 | 62.7\% | 16 | 14 | 22 |  | 5 | 7 |  | 19 |
| MATH V21A | No | 131 | 95 | 72.5\% | 36 | 28 | 31 |  | 14 | 5 |  | 17 |
| Difference: SI minus Non-SI |  |  |  | -9.8 |  |  |  |  |  |  |  |  |
| MATH V13A | Yes | 49 | 34 | 69.4\% | 11 | 10 | 13 |  | 1 | 8 |  | 6 |
|  | -- |  |  |  |  |  |  |  |  |  |  |  |
| Difference: SI minus Non-SI |  |  |  | -- |  |  |  |  |  |  |  |  |
| POLS V03 | Yes | 100 | 84 | 84.0\% | 43 | 26 | 15 |  | 6 | 5 |  | 5 |
| POLS V03 | No | 252 | 190 | 75.4\% | 81 | 79 | 30 |  | 15 | 14 |  | 33 |
| Difference: SI minus Non-SI |  |  |  | 8.6 |  |  |  |  |  |  |  |  |
| Total SI * | Yes | 760 | 519 | 68.3\% | 177 | 173 | 168 | 1 | 53 | 70 | 1 | 117 |
| Total Non-SI | No | 4,840 | 2,955 | 61.1\% | 1,018 | 1,092 | 843 | 2 | 471 | 527 | 4 | 883 |
| Difference: SI minus Non-SI |  |  |  | 7.2 |  |  |  |  |  |  |  |  |

* Total SI excludes MATH V13A (49 students), since this course was offered only as SI.

Fall 2015 grades were extracted from Banner on February 9, 2016.

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## - Success Rates within SI Sections

Students in SI sections have the opportunity to receive academic assistance from the SI Leader assigned to their class. In the table below, the success rates of students receiving SI services are compared to the students who did not participate in SI (Non-SI students).

In SI sections, the overall success rate for SI students was $\underline{\mathbf{4 2} \%}$ higher than that of Non-SI students.
Group Success Rate Percent Difference Computation

Students participating in $\mathbf{S I}$ Students not participating in SI Difference

78\%
55\%
23 points

| 1 |
| :--- |
|  |
|  |
|  |


| Total <br> Students |  | Non-SI Students |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Total N | Successful |  |
| N | S/R* |  | N | Rate |


| 34 | $74 \%$ |
| :--- | :--- |
| 36 | $56 \%$ |
| 70 | $64 \%$ |

Totals \& Overall Success Rates

| CHEM V01A |  | 3.0 |
| :--- | :--- | :--- | :--- |

84 61\%
68
I

45 8 87\%
26
2

| 23 | $52 \%$ |
| :--- | :--- |
| 27 | $67 \%$ |
| $\mathbf{5 0}$ | $\mathbf{6 0 \%}$ |

69 69
45 73\%
34
79

Totals \& Overall Success Rates

| MATH V01 | 5.0 |  | 40 | $83 \%$ | 24 | 18 | $75 \%$ | 16 | 15 | $94 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| MATH V03 | 5.0 |  | 37 | 78\% | 11 | 9 | 82\% | 26 | 20 | 77\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATH V04 | 4.0 |  | 30 | 73\% | 24 | 17 | 71\% | 6 | 5 | 83\% |
| MATH V04 | 4.0 |  | 32 | 31\% | 8 | 0 | 0\% | 24 | 10 | 42\% |
| Totals \& Overall Success Rates |  |  | 62 | 52\% | 32 | 17 | 53\% | 30 | 15 | 50\% |


| MATH V12 |  | 3.0 |  | 41 | $34 \%$ | 11 | 0 | $0 \%$ | 30 | 14 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| MATH V21A |  | 5.0 |  | 47 | $64 \%$ | 30 | 15 | $50 \%$ | 17 | 15 |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| MATH V21A | 5.0 |  | 36 | $61 \%$ | 14 | $\mathbf{8}$ | $57 \%$ | 22 | 14 | $64 \%$ |
| Totals \& Overall Success Rates |  |  | $\mathbf{8 3}$ | $\mathbf{6 3 \%}$ | $\mathbf{4 4}$ | $\mathbf{2 3}$ | $\mathbf{5 2 \%}$ | $\mathbf{3 9}$ | $\mathbf{2 9}$ | $\mathbf{7 4 \%}$ |


| POLS V03 | 3.0 |  | 58 | 86\% | 18 | 14 | 78\% | 40 | 36 | 90\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| POLS V03 | 3.0 |  | 42 | 81\% | 2 | 0 | 0\% | 40 | 34 | 85\% |
| Totals \& Overall Success Rates |  |  | 100 | 84\% | 20 | 14 | 70\% | 80 | 70 | 88\% |
| Totals \& Overall Success Rates |  |  | 809 | 68\% | 346 | 191 | 55\% | 463 | 362 | 78\% |

* S/R = Success Rate for a specific course section (CRN) or group of courses.

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## - Success Rates in SI Sections - By Demographics

| Student Demographics | Total Student Enrollments |  | Non-SI Participants |  |  | SI Participants |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total Num. | Successful |  | Total <br> Num. | Successful |  |
|  | Num. | Perent |  | Number | Rate |  | Number | Rate |
| Ethnicity |  |  |  |  |  |  |  |  |
| Asian | 61 | 7\% | 37 | 22 | 59\% | 24 | 22 | 92\% |
| Black | 19 | 2\% | 7 | 2 | 29\% | 12 | 9 | 75\% |
| Hispanic | 466 | 58\% | 199 | 108 | 54\% | 267 | 202 | 76\% |
| Native American | 2 | 0\% | 0 | 0 |  | 2 | 2 | 100\% |
| Pacific Islander | 0 | -- | -- | -- | -- | -- | -- | -- |
| Multi- Ethnic | 29 | 4\% | 12 | 6 | 50\% | 17 | 12 | 71\% |
| White | 226 | 28\% | 89 | 51 | 57\% | 137 | 112 | 82\% |
| Unreported | 6 | 1\% | 2 | 2 | 100\% | 4 | 3 | 75\% |
| Totals and Rates | 809 | 100\% | 346 | 191 | 55\% | 463 | 362 | 78\% |
| Gender |  |  |  |  |  |  |  |  |
| Female | 405 | 50\% | 173 | 97 | 56\% | 232 | 180 | 78\% |
| Male | 397 | 49\% | 172 | 94 | 55\% | 225 | 178 | 79\% |
| Unreported | 7 | 1\% | 1 | 0 | 0\% | 6 | 4 | 67\% |
| Totals and Rates | 809 | 100\% | 346 | 191 | 55\% | 463 | 362 | 78\% |
| Age (in years) |  |  |  |  |  |  |  |  |
| 17 or younger | 22 | 3\% | 7 | 3 | 43\% | 15 | 14 | 93\% |
| 18-22 | 585 | 72\% | 267 | 146 | 55\% | 318 | 255 | 80\% |
| 23-29 | 146 | 18\% | 54 | 30 | 56\% | 92 | 66 | 72\% |
| 30-39 | 38 | 5\% | 16 | 10 | 63\% | 22 | 17 | 77\% |
| 40 or older | 18 | 2\% | 2 | 2 | 100\% | 16 | 10 | 63\% |
| Totals and Rates | 809 | 100\% | 346 | 191 | 55\% | 463 | 362 | 78\% |

## Success Rates in SI Sections - By Number of SI Contacts

The tables in this section present data related to success rates based on the number of SI contacts. Tables A - B display summary data for all sections in which SI was offered. Table C (page 6) provides success rates by course and number of SI contacts (i.e., $\mathbf{0}$ to $\mathbf{5}$ contacts versus $\mathbf{6}$ or more contacts).

Table A. All Students in SI sections

| Number of SI Contacts | Students |  | Success Rate |
| :---: | :---: | :---: | :---: |
|  | Total | Success |  |
| 0 | 346 | 191 | 55.2\% |
| 1 to 5 | 296 | 216 | 73.0\% |
| 6 to 10 | 79 | 66 | 83.5\% |
| 11 to 15 | 40 | 37 | 92.5\% |
| 16 to 20 | 23 | 21 | 91.3\% |
| 21 to 29 | 20 | 18 | 90.0\% |
| 30 or more | 5 | 4 | 80.0\% |
| Totals | 809 | 553 | 68.4\% |
| 0 to 5 | 642 | 407 | 63.4\% |
| 6 or more | 167 | 146 | 87.4\% |
| Difference in percentage points |  |  | 24.0 |

## Table B. Hispanic Students in SI Sections

| Number of <br> SI Contacts | Students |  | Success |
| :---: | ---: | ---: | ---: |
| 0 | 199 | Success | Rate |
| 0 | 177 | 124 | $54.3 \%$ |
| 1 to 5 | 47 | 38 | $80.1 \%$ |
| 6 to 10 | 21 | 20 | $95.9 \%$ |
| 11 to 15 | 11 | 9 | $81.8 \%$ |
| 16 to 20 | 8 | 8 | $100.0 \%$ |
| 21 to 29 | 3 | 3 | $100.0 \%$ |
| 30 or more | $\mathbf{4 6 6}$ | $\mathbf{3 1 0}$ | $\mathbf{6 6 . 5 \%}$ |
| Totals | 376 | 232 | $\mathbf{6 1 . 7 \%}$ |
| 0 to 5 | 90 | 78 | $\mathbf{8 6 . 7 \%}$ |
| 6 or more | 90 | $\mathbf{2 5 . 0}$ |  |
| Difference in percentage points |  | $\mathbf{2}$ |  |

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Table C. Students in SI Sections: Summary of Success by Course and Number of SI Contacts

| Courses | All Students |  |  | 0 to 5 SI Contacts |  | 6/more SI Contacts |  | Difference |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Studnts | Successful |  | Total Studnts | A <br> Success <br> Rate | Total Studnts | B <br> Success <br> Rate | $\begin{gathered} \underline{\mathrm{B}} \\ \text { minus } \\ \underline{\mathrm{A}} \end{gathered}$ | Percent Differ* |
|  |  | Count | Rate |  |  |  |  |  |  |
| ANTH V01 | 70 | 45 | 64.3\% | 60 | 58.3\% | 10 | 100.0\% | 41.7 | 71.4\% |
| CHEM V01A | 84 | 51 | 60.7\% | 80 | 60.0\% | 4 | 75.0\% | 15.0 | 25.0\% |
| ECON V01B | 45 | 39 | 86.7\% | 34 | 82.4\% | 11 | 100.0\% | 17.6 | 21.4\% |
| ENGL V01A | 50 | 30 | 60.0\% | 33 | 39.4\% | 17 | 100.0\% | 60.6 | 153.8\% |
| GEOG V01 | 69 | 48 | 69.6\% | 65 | 67.7\% | 4 | 100.0\% | 32.3 | 47.7\% |
| HIST V07A | 79 | 62 | 78.5\% | 40 | 70.0\% | 39 | 87.2\% | 17.2 | 24.5\% |
| MATH V01 | 40 | 33 | 82.5\% | 38 | 81.6\% | 2 | 100.0\% | 18.4 | 22.6\% |
| MATH V03 | 37 | 29 | 78.4\% | 24 | 79.2\% | 13 | 76.9\% | -2.2 | -2.8\% |
| MATH V04 | 62 | 32 | 51.6\% | 49 | 49.0\% | 13 | 61.5\% | 12.6 | 25.6\% |
| MATH V12 | 41 | 14 | 34.1\% | 33 | 24.2\% | 8 | 75.0\% | 50.8 | 209.4\% |
| MATH V13A | 49 | 34 | 69.4\% | 43 | 69.8\% | 6 | 66.7\% | -3.1 | -4.4\% |
| MATH V21A | 83 | 52 | 62.7\% | 66 | 57.6\% | 17 | 82.4\% | 24.8 | 43.0\% |
| POLS V03 | 100 | 84 | 84.0\% | 77 | 79.2\% | 23 | 100.0\% | 20.8 | 26.2\% |
| Totals | 809 | 553 | 68.4\% | 642 | 63.4\% | 167 | 87.4\% | 24.0 | 37.9\% |

* Percent Differ: ((B minus A) divided by A) times 100


## Notes Related to Success by Course and Number of SI Contacts (Table C)

1. Except for MATH V03 and MATH V13A, success rates for students with " $6 /$ more SI Contacts" were higher than the success rates for students with "0 to 5 SI Contacts."
2. Three courses (in light yellow) had four or less students in the " $6 /$ more SI Contacts" category.
3. Of the $\mathbf{8 0 9}$ students in SI classes, only 167 received six or more SI contacts ( $\mathbf{2 1 \%}$ of students).
4. The overall difference in success rates between students with "0 to 5 SI Contacts" and students with " $6 /$ more SI Contacts" is $\mathbf{2 4 . 0}$ percentage points or $\mathbf{3 7 . 9} \%$.
