## - SUMMARY

## - Introduction

The VC Math Center, located in room SCI-223A in the Sciences and Mathematics building, is funded through the college's Title V Velocidad Grant. The Math Center assists Ventura College students in acquiring the skills they need to succeed in their current mathematics class/es.

This report examines tutoring sessions provided during fall 2014. Data for the study were extracted from SARS-GRID (Math Center tutoring sessions) and the VCCCD Banner System (final grades).

## - Overview

Summary data for fall 2014 and spring 2014 are presented in the table below.

|  | Fall | Spring | Difference |  |
| :--- | ---: | ---: | ---: | ---: |
| Tutoring Category | 2014 | 2014 | Points | Percent |
| A. Number of Courses in which Tutoring was Provided | 17 | 11 | 6 | $55 \%$ |
| B. Unduplicated Number of Tutored Students | 244 | 79 | 165 | $209 \%$ |
| C. Unduplicated Number of Basic-Skills Students | 48 | 22 | 26 | $118 \%$ |
| D. Number of Student Visits to the Math Center | 764 | 288 | 476 | $165 \%$ |
| E. Number of Student Course Enrollments | 299 | 88 | 211 | $240 \%$ |

Explanations of Tutoring Categories:
SARS-GRID creates multiple records for each tutoring session. For example, a student who received tutoring in MATH V03 would have a "History Code" record for that date plus a "Reason Code" record of MATH V03 and possibly another record with a "Reason Code" of AABSKSKL (Basic Skills student).
(A) "Number of Courses in which Tutoring was Provided": Count of the courses in which tutoring was provided.
(B) "Unduplicated Number of Tutored Students": Count of individual students who received tutoring services (many students received tutoring in more than one discipline).
(C) "Unduplicated Number of Individual Basic-Skills Students": Unduplicated number of students enrolled in MATH V01, MATH V10, MATH V11A, or MATH V11B.
(D) "Number of Student Visits to the Math Center": Count of individual "History ID" numbers. A "History ID" number is created every time a student visits the Math Center. The "History ID" number may have more than one "Reason Code" associated with it, e.g., AABSKSKL, MATH V02, and MATH V03.
(E) "Number of Student Course Enrollments": Count of Math course enrollments in which students received tutoring. Many of the tutored students were enrolled in more than one Math class.

## - Success Rates in Basic Skills Courses

In fall 2014, the overall success rate for students who received tutoring in MATH V01, MATH V10, or MATH V11A was lower than the corresponding rate for non-tutored students in the same sections.

| Basic Skills | Fall 2014 |  |  |
| :--- | :---: | :---: | :---: |
| Tutoring Category | Enrolled | Success | Rate |
| Tutored Students | 29 | 12 | $41.4 \%$ |
| Non-Tutored Student | 624 | 355 | $56.9 \%$ |
| Difference in Rates |  |  |  |

## Success Rate Formula

(Number of A, B, C or P grades divided by (Number of A through W grades) times 100

Note: pp = percentage point/s

## - Demographics of Tutored Students

In the table below, fall 2014 tutored students, whose Student IDs were matched to grade records, are categorized by ethnicity and gender. Students are counted for each course in which they received tutoring. Success rates for each demographic group are indicated in the right-hand column.

| Demographic Characteristic Demographic Group | Students |  | Successful |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Count | Percent | Number | Rate |
| Ethnicity |  |  |  |  |
| Asian | 3 | 1.8\% | 1 | 33.3\% |
| Black or African American | 5 | 2.9\% | 2 | 40.0\% |
| Hispanic | 105 | 61.1\% | 72 | 68.6\% |
| Native American | 3 | 1.7\% | 1 | 33.3\% |
| Pacific Islander | 0 | -- | -- | - |
| Two or More Ethnicities | 7 | 4.1\% | 5 | 71.4\% |
| White | 47 | 27.3\% | 34 | 72.3\% |
| Unreported or Not Available | 2 | 1.1\% | 1 | 50.0\% |
| Totals | 172 | 100.0\% | 116 | 67.4\% |
| Gender |  |  |  |  |
| Female | 100 | 58.14\% | 69 | 69.0\% |
| Male | 70 | 40.70\% | 45 | 64.3\% |
| Unreported or Not Available | 2 | 1.16\% | 2 | 100.0\% |
| Totals | 172 | 100.0\% | 116 | 67.4\% |

- Ethnicity: Hispanic students accounted for the greatest percentage of tutored students: $\underline{\mathbf{6 1}} \mathbf{\%}$.
- Gender: The majority of tutored students were female: $\underline{\mathbf{5 8} \%}$.


## - FINAL GRADES

To obtain a final grade for a course in which a student was tutored, the Student ID (900 Number) and the Course ID are required. The SARS "Reason Code" is the data element in which the Course ID can be entered. If a student has one/more tutoring sessions and a Course ID is not entered for at least one session, then a match to the Grades File cannot be made.

In fall 2014, 244 students were tutored in 299 courses for which a Course ID was entered in SARS. Of those 299, 172 (58\%) were matched to a grades record. The remaining 127 SARS records were not matched to a grades record because (a) the students had dropped the courses, (b) incorrect Course IDs were entered in SARS, or (c) incorrect Student IDs were entered in SARS. Of the 244 students who received tutoring, the Student IDs for 24 students were not able to be matched to any VC course records (in Banner).

## - DATA TABLES

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Fall 2014 - Math Center

## - SUCCESS RATES BY COURSE

This table indicates the courses in which students received tutoring.
Successful refers to the number of students receiving an $A, B, C$, or $P$ in the course.

| Course | Fall 2014 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tutor Sessions Per Course | Course Enrollments | Course Enrollments with Grades |  |  |
|  |  |  | Count | Successful | Success Rate |
| MATH V01 | 90 | 37 | 20 | 10 | 50.0\% |
| MATH V02 | 8 | 2 | 2 | 2 | 100.0\% |
| MATH V03 | 376 | 101 | 44 | 32 | 72.7\% |
| MATH V04 | 85 | 36 | 29 | 26 | 89.7\% |
| MATH V05 | 13 | 8 | 2 | 2 | 100.0\% |
| MATH V10 | 14 | 9 | 6 | 2 | 33.3\% |
| MATH V11A | 8 | 7 | 3 | 0 | 0.0\% |
| MATH V12 | 10 | 5 | 5 | 3 | 60.0\% |
| MATH V20 | 5 | 4 | 2 | 1 | 50.0\% |
| MATH V21A | 31 | 18 | 11 | 7 | 63.6\% |
| MATH V21B | 4 | 3 | 3 | 2 | 66.7\% |
| MATH V21C | 3 | 2 | 2 | 1 | 50.0\% |
| MATH V23 | 1 | 1 | 1 | 1 | 100.0\% |
| MATH V35 | 12 | 6 | 3 | 3 | 100.0\% |
| MATH V40 | 1 | 1 | 0 | -- | -- |
| MATH V44 | 131 | 55 | 37 | 23 | 62.2\% |
| MATH V46 | 8 | 4 | 2 | 1 | 50.0\% |
| Totals/Av. \% | 800 | 299 | 172 | 116 | 67.4\% |

## - SUCCESS RATE COMPARISONS

This table compares the course success rates of tutored students to those of non-tutored students. The non-tutored students were enrolled in the same course sections as the tutored students.
Overall difference in success rates of tutored students and non-tutored students is $\mathbf{9 . 5}$ points, or $\mathbf{1 6 \%}$.

| Fall 2014 <br> Course | Total Number Enrolled | Tutored Students |  |  | Non- Tutored Students |  |  | Difference$(\mathrm{A})-(\mathrm{B})$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Count | Successful |  | Count | Successful |  |  |  |
|  |  |  | Num. | (A) Rate |  | Num. | (B) Rate | Points | Percent |
| MATH V01 | 437 | 20 | 10 | 50.0\% | 417 | 232 | 55.6\% | -5.6 | - 10.1\% |
| MATH V02 | 36 | 2 | 2 | 100.0\% | 34 | 17 | 50.0\% | 50.0 | 100.0\% |
| MATH V03 | 466 | 44 | 32 | 72.7\% | 422 | 247 | 58.5\% | 14.2 | 24.3\% |
| MATH V04 | 276 | 29 | 26 | 89.7\% | 247 | 124 | 50.2\% | 39.5 | 78.6\% |
| MATH V05 | 81 | 2 | 2 | 100.0\% | 79 | 46 | 58.2\% | 41.8 | 71.7\% |
| MATH V10 | 169 | 6 | 2 | 33.3\% | 163 | 104 | 63.8\% | - 30.5 | - 47.8\% |
| MATH V11A | 47 | 3 | 0 | 0.0\% | 44 | 19 | 43.2\% | -43.2 | -100.0\% |
| MATH V12 | 85 | 5 | 3 | 60.0\% | 80 | 44 | 55.0\% | 5.0 | 9.1\% |
| MATH V20 | 82 | 2 | 1 | 50.0\% | 80 | 50 | 62.5\% | - 12.5 | - 20.0\% |
| MATH V21A | 168 | 11 | 7 | 63.6\% | 157 | 95 | 60.5\% | 3.1 | 5.2\% |
| MATH V21B | 88 | 3 | 2 | 66.7\% | 85 | 56 | 65.9\% | 0.8 | 1.2\% |
| MATH V21C | 38 | 2 | 1 | 50.0\% | 36 | 22 | 61.1\% | -11.1 | - 18.2\% |
| MATH V23 | 27 | 1 | 1 | 100.0\% | 26 | 22 | 84.6\% | 15.4 | 18.2\% |
| MATH V35 | 26 | 3 | 3 | 100.0\% | 23 | 13 | 56.5\% | 43.5 | 76.9\% |
| MATH V44 | 501 | 37 | 23 | 62.2\% | 464 | 272 | 58.6\% | 3.5 | 6.0\% |
| MATH V46 | 29 | 2 | 1 | 50.0\% | 27 | 18 | 66.7\% | -16.7 | - 25.0\% |
| Tot/Av Rate | 2,556 | 172 | 116 | 67.4\% | 2,384 | 1,381 | 57.9\% | 9.5 | 16.4\% |

