## Summer Advantage Summary 2016

The 2016 Summer Advantage Program included 3 components. The two workshop components were intended to advance students' placement in English and Math courses. The third component was a one day orientation to Norco College. In all, 1,058 students applied to the program and 606 were invited to attend a workshop and/or NOW. Four hundred and eighteen students completed the entire program (Workshop and NOW). The table below indicates the number of completers for each component.

| Component | \# Students |
| :---: | :---: |
| English Workshops | 123 |
| Math Workshops | 229 |
| NOW | $530^{*}$ |

*12 of these students did not complete their assigned workshop and did not receive early registration.

The table below indicates the number of levels advanced in the English workshops. The majority of students advanced two levels in the English series.

## Number of Levels Advanced - English

| English Levels Advanced | \# Students | Percent |
| :---: | :---: | :---: |
| 0 | 12 | $9.8 \%$ |
| 1 | 35 | $28.5 \%$ |
| 2 | 60 | $48.8 \%$ |
| 3 | 16 | $13.0 \%$ |

The table below indicates the number of levels advanced in the Math workshops. The majority of students did not advance in the math series.

Number of Levels Advanced - Math

| Math Levels Advanced | \# Students | Percent |
| :---: | :---: | :---: |
| 0 | 134 | $58.5 \%$ |
| 1 | 59 | $25.8 \%$ |
| 2 | 34 | $14.8 \%$ |
| 3 | 2 | $0.9 \%$ |

## Summer Advantage 2016 Analysis

An analysis of the Fall 2016 enrollment and success of Summer Advantage students was completed. Three-hundred and ninety-three of the 418 SA students enrolled past census in Fall 2016.

The overall success rates for all Fall 2016 enrollments were compared. This comparison includes all courses a student enrolled in, not just Math and English. All enrollments of SA participants were compared to all enrollments of first-time students at Norco College. There were 1,286 enrollments of SA participants and $868(67.5 \%)$ received successful grades. The comparison group had a success rate of $\mathbf{6 1 . 4 \%}$, with 1,584 of 2,581 enrollments receiving successful grades. There is a significant difference in course success ( $\mathrm{t}=3.779, \mathrm{p}<.01$ ) and retention ( $\mathrm{t}=2.067, \mathrm{p}=.039$ ) between groups, with the SA group being higher in both. SA students enrolled in 12.30 units on average, while all other first-time Norco students enrolled in 9.52 units on average.

|  | Success | Retention |
| :---: | :---: | :---: |
| SA Enrollments | $\mathbf{6 7 . 5} \boldsymbol{*}^{*}$ | $\mathbf{8 9 . 3} \boldsymbol{*}^{*}$ |
| First-time students Enrollments | $61.4 \%$ | $87.0 \%$ |

*T-tests show that the differences between groups for success and retention are significant. Retention-Percentage of students who do not withdraw from class and receive a valid grade.

The overall success of SA students compared to all other first time students at Norco College was disaggregated by gender and ethnicity.

|  | SA Student Success Rate |  | First time student success <br> rate |  |
| :--- | :---: | :---: | :---: | :---: |
| Total | 393 | $67.5 \%$ | 951 | $61.4 \%$ |
| Female | 190 | $66.9 \%$ | 457 | $60.9 \%$ |
| Male | 191 | $67.2 \%$ | 475 | $61.9 \%$ |
| Unknown | 12 | $80.0 \%$ | 19 | $59.6 \%$ |


|  | SA Student Success Rate |  | First time student success rate |  |
| :--- | :---: | :---: | :---: | :---: |
| Total | 393 | $67.5 \%$ | 951 | $61.4 \%$ |
| Asian/PI | 21 | $76.6 \%$ | 80 | $78.2 \%$ |
| African American | 19 | $83.9 \%$ | 54 | $46.0 \%$ |
| Hispanic | 264 | $63.9 \%$ | 561 | $57.5 \%$ |
| Native American/Alaskan |  |  | 2 | $50.0 \%$ |
| White | 3 | $66.7 \%$ | 5 | $100.0 \%$ |
| Two or more races | 86 | $72.5 \%$ | 243 | $67.8 \%$ |
| Unknown |  |  | 6 | $50.0 \%$ |


|  | Average Unit Course Load |
| :---: | :---: |
| Summer Advantage | $12.30^{*}$ |
| First-time students | 9.52 |

*Significant difference ( $t=15.113, p<.01$ )

Comparison of Math and English enrollments

|  | Enrolled in Math <br> and English | Enrolled in Math <br> or English | Not enrolled in <br> Math or English | Did not Enroll |
| :---: | :---: | :---: | :---: | :---: |
| SA Participants | $335 / 393(85.2 \%)$ | $48 / 393(12.2 \%)$ | $10 / 393(2.5 \%)$ | 25 |
| First-Time Students | $292 / 951(30.7 \%)$ | $326 / 951(34.3 \%)$ | $333 / 951(35.0 \%)$ | $\mathrm{n} / \mathrm{a}$ |

Comparison of success rates with similar units/intensity-cohorts narrowed down to students who enrolled in at least one math or English Couse and attempted 12 or more units in Fall 2016.
$\left.\begin{array}{|c|c|c|}\hline \text { Comparison of Overall Success } & \text { Enrollments } & \text { Success Rate } \\ \hline \begin{array}{c}\text { Summer Advantage Students } \\ (\mathrm{n}=288)\end{array} & 1023 & 69.5 \%^{*} \\ \hline \text { All First-Time Students } \\ (\mathrm{n}=353)\end{array} \mathrm{1302}\right] 63.9 \%$
*Significant difference $(t=2.855, p=.004)$

## English Analysis

Success rates were compared for SA English participants and all other students enrolled in the same English sections. Of the 123 SA English participants who completed the program, 105 enrolled in an English course in Fall 2016. Sixty-seven of these students succeed in their English class (63.8\%). The comparison group showed a success rate of $66.3 \%$ (780/1177). A t-test to compare means was completed to see if the difference in success rates was significant. A t-value of 0.510 and a p-value greater than .05 were obtained. These success rates are not significantly different from each other. Success rates for SA English participants by the number of English levels advanced and by English course were done. The tables below indicate results.

|  | Success | Percent |
| :---: | :---: | :---: |
| SA English Participant | $67 / 105$ | $63.8 \%$ |
| Non-Participants | $780 / 1177$ | $66.3 \%$ |

Not a significant difference ( $t=-0.510, p>.05$ )

| English Levels <br> Advanced | Count | Percent <br> Successful |
| :---: | :---: | :---: |
| 0 | $9 / 11$ | $81.8 \%$ |
| 1 | $19 / 28$ | $67.9 \%$ |
| 2 | $33 / 52$ | $63.5 \%$ |
| 3 | $6 / 14$ | $42.9 \%$ |
| Total | $67 / 105$ | $63.8 \%$ |


|  | SA English Participant |  | Non-Participants |  |
| :--- | :---: | :---: | :---: | :---: |
| Course | Count | Percent Successful | Count | Percent Successful |
| English-60A | $5 / 5$ | $100 \%$ | $92 / 112$ | $82.1 \%$ |
| English-60B | $5 / 6$ | $83.3 \%$ | $89 / 107$ | $83.2 \%$ |
| English-50 | $30 / 47$ | $63.8 \%$ | $219 / 358$ | $61.2 \%$ |
| English-80 | $7 / 12$ | $58.3 \%$ | $79 / 154$ | $51.3 \%$ |
| English-1A | $20 / 35$ | $57.1 \%$ | $302 / 449$ | $67.3 \%$ |
| Total | $\mathbf{6 7 / 1 0 5}$ | $\mathbf{6 3 . 8 \%}$ | $\mathbf{7 8 0 / 1 1 7 7}$ | $\mathbf{6 6 . 3 \%}$ |

## Math Analysis

Success rates were compared for Math SA participants and all other students enrolled in the same Math sections. Of the 229 SA Math participants who completed the program, 195 enrolled in a Math course in Fall 2016. One hundred and seventeen of these students succeed in their Math class ( $60.0 \%$ ). The comparison group showed a success rate of $\mathbf{6 1 . 6 \%}$ (1534/2491). A t-test to compare means was completed to see if the difference in success rates was significant. A $t$-value of 0.437 and a $p$-value greater than .05 were obtained. The success rates of these two groups are not significantly different from each other. Success rates for SA Math participants by the number of Math levels advanced and by Math course were done. The tables below indicate results.

|  | Success | Percent |
| :---: | :---: | :---: |
| SA Math <br> Participant | $117 / 195$ | $60.0 \%$ |
| Non-Participants | $1534 / 2491$ | $61.6 \%$ |

Not a significant difference ( $t=-0.437, p>.05$ )

| Math Levels Advanced | Count | Percent <br> Successful |
| :---: | :---: | :---: |
| 0 | $60 / 108$ | $55.9 \%$ |
| 1 | $30 / 54$ | $55.6 \%$ |
| 2 | $26 / 31$ | $83.9 \%$ |
| 3 | $1 / 2$ | $50.0 \%$ |
| Total | $\mathbf{1 1 7 / 1 9 5}$ | $\mathbf{6 0 . 0 \%}$ |


|  | SA Math Participant |  | Non-Participants |  |
| :--- | :---: | :---: | :---: | :---: |
| Course | Count | Percent Successful | Count | Percent Successful |
| Math-64 | $1 / 1$ | $100 \%$ | $23 / 30$ | $76.7 \%$ |
| Math-65 | $28 / 64$ | $43.8 \%$ | $204 / 333$ | $61.3 \%$ |
| Math-52 | $35 / 46$ | $76.1 \%$ | $295 / 455$ | $64.8 \%$ |
| Math-53 | $3 / 3$ | $100 \%$ | $91 / 133$ | $68.4 \%$ |
| Math-35 | $29 / 49$ | $59.2 \%$ | $385 / 799$ | $48.2 \%$ |
| Math-36 | $6 / 11$ | $54.5 \%$ | $109 / 161$ | $67.7 \%$ |
| Math-11 | $3 / 5$ | $60.0 \%$ | $77 / 120$ | $64.2 \%$ |
| Math-12 | $7 / 10$ | $70.0 \%$ | $226 / 292$ | $77.4 \%$ |
| Math-25 | $1 / 1$ | $100 \%$ | $25 / 27$ | $92.6 \%$ |
| Math-5 | $3 / 4$ | $75.0 \%$ | $72 / 92$ | $78.3 \%$ |
| Math-1B | $1 / 1$ | $100 \%$ | $27 / 49$ | $55.1 \%$ |
| Total | $117 / 195$ | $60.0 \%$ | $1534 / 2491$ | $61.6 \%$ |

Spring 2017 Analysis

| Term-to-Term Persistence | Summer Advantage | All Other First-Time College <br> Students |
| :---: | :---: | :---: |
| Fall 16-Spring 17 | $335 / 393^{*}$ | $705 / 951$ |
|  | $85.2 \%$ | $74.1 \%$ |
| Fall 16-Fall 17 | $284 / 393^{*}$ | $538 / 951$ |
|  | $72.3 \%$ | $56.6 \%$ |

*Indicates significant difference between groups ( $t=4.859, p<.01$ )
*Indicates significant difference between groups (t=5.656, p< .01)

| Pipeline Completion | Summer Advantage | All Other First-Time College <br> Students |
| :---: | :---: | :---: |
| English | $192 / 393^{*}$ | $180 / 951$ |
|  | $48.9 \%$ | $18.9 \%$ |
| Math | $92 / 393^{*}$ | $79 / 951$ |
|  | $23.4 \%$ | $8.3 \%$ |

*Indicates significant difference between groups ( $t=10.588, p<.01$ )
*Indicates significant difference between groups (t=6.514, p<.01)

