From: Mallory Newell, College Researcher, De Anza College
To: Christina Espinosa-Pieb and Jerry Rosenberg

## Re: Representation of Targeted Groups in Pre-Collegiate Mathematics Courses

Targeted students (Hispanic, African Ancestry, Pacific Islander and Filipino) were compared to all other ethnic groups of students at De Anza College enrolled in Math 210, 212, and 114 between fall 2007 and spring 2010. Success rates for students are calculated on $A, B, C$, and $P$, non success rates include D, F, NP and I, and withdraw rates include W. The 'Targeted Students' population resulted in 8,027 students and the 'Other Students' population resulted in 13,715 students for a total of 21,742 students over the time period.

- Between fall 2007 and spring 2010, 37\% of students enrolled in pre-collegiate math courses were from the targeted student population (see figure 1).
- When compared to the fall 2009 student population at De Anza College, targeted students make up $21 \%$ of the total student population (see figure 2 ) and $37 \%$ of the pre-collegiate math population.
- When analyzing the targeted populations' success rate, the average success rate for targeted students is $52 \%$ compared to $62 \%$ for other students (see figure 3 ).
- The non success rate for targeted students is also higher than non students - targeted students non success rate on average is $28 \%$ compared to $22 \%$ for other students (see figure 3 ).
- Withdraw rates follow the same pattern with targeted students withdrawing on average at $20 \%$ and other students withdrawing at $17 \%$ (see figure 3 ).


## Questions to Explore:

- Why are targeted students overrepresented in pre-collegiate math classes?
- Why are the success rates of targeted students lower than other groups?
- How does this affect their transfer rate?
- What policies or practices can be implemented to address these issues?

Figure 1 - Pre-Collegiate Math Enrollment - Fall 2007 to Spring 2010

|  | Targeted <br> Students | Other <br> Students | Total <br> Enrollments | Total <br> Percent |
| :--- | :--- | :---: | :---: | :---: |
| MATH210. | $46 \%$ | $54 \%$ | 4,710 | $100 \%$ |
| MATH212. | $39 \%$ | $61 \%$ | 5,726 | $100 \%$ |
| MATH114. | $32 \%$ | $68 \%$ | 11,306 | $100 \%$ |
| Total | $37 \%$ | $63 \%$ | 21,742 | $100 \%$ |

Enrollment calculated on grades opposed to unduplicated count of students between fall 2007 and spring 2010 - including summer terms.
Targeted students include: Hispanic, African Ancestry, Pacific Islander and Filipino.
Figure 2 - Fall 2009 Enrollment by Ethnicity

| Targeted Students |  | Other Students |  |
| :--- | :---: | :--- | :---: |
| African Ancestry | $3 \%$ | Multiple/Other | $20 \%$ |
| Filipino | $5 \%$ | Native American | $1 \%$ |
| Hispanic | $12 \%$ | White | $23 \%$ |
| Pacific Islander | $1 \%$ | Asian | $35 \%$ |
| Targeted Students | $\mathbf{2 1 \%}$ | Other Students | $\mathbf{7 9 \%}$ |

*De Anza Fast Facts (Fall 2009)
Figure 3 - Success Rates in Pre-Collegiate Math - Fall 2007 to Spring 2010

|  | Success | Non Success | Withdraw | Total Enrollments | Total \% |
| :--- | :---: | :---: | :---: | :---: | :---: |
| MATH210 |  |  |  |  |  |
| Targeted | $51 \%$ | $29 \%$ | $20 \%$ | 2,176 | $100 \%$ |
| Other | $59 \%$ | $23 \%$ | $17 \%$ | 2,534 | $100 \%$ |
| MATH212 |  |  |  |  |  |
| Targeted | $51 \%$ | $28 \%$ | $21 \%$ | 2,260 | $100 \%$ |
| Other | $59 \%$ | $22 \%$ | $19 \%$ | 3,466 | $100 \%$ |
| MATH114 | $53 \%$ | $27 \%$ | $19 \%$ | 3,591 | $100 \%$ |
| Targeted | $64 \%$ | $21 \%$ | $15 \%$ | 7,715 | $100 \%$ |
| Other |  | $28 \%$ | $20 \%$ | 8,027 | $100 \%$ |
| TOTAL | $52 \%$ | $22 \%$ | $17 \%$ | 13,715 | $100 \%$ |
| Targeted Avg. |  |  | 21,742 |  |  |
| Other Avg. | $62 \%$ |  |  |  |  |
| Total |  |  |  |  |  |

Enrollment for fall 2007 through spring 2010 - including summer terms.
Targeted students include: Hispanic, African Ancestry, Pacific Islander and Filipino.
Success = A, B, C, and P, Non Success = D, F, NP, I, Withdraw $=W$

