

DATE: December 12, 2017

TO: Adrienne Hypolite

FROM: Doreen Finkelstein, Research Analyst

RE: Owl Scholar analyses for program review

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**Introduction:**

This study looked at the demographics and success rates of students who were referred to the Owl Scholars program in the 2016-17 academic year.

In order to be eligible for referral to the Owl Scholars program, students had to be enrolled in one of the following 11 courses:

- Math 1A, Math 105, Math 220
- English 1T, English 110, English 209
- ESL 25, ESL 227, ESL 236, ESL 237, ESL 249

The study looked at all students who were referred to the Owl Scholars program, **regardless of whether or not they received program services**. Most students were referred to the program by faculty between the third and fourth weeks of the quarter (around Oct. 10-21 for fall quarter, Jan. 23-Feb. 3 for winter quarter, and April 24-May 5 for spring quarter). A few students were self-referred.

**Results Overview:**

- 399 students were referred to the Owl Scholars program for 430 courses.
- Student groups *more* likely to be referred than their classmates were:
  - African American students
  - Latinx students (except those enrolled in English)
  - Male students (except those enrolled in ESL)
  - Students who reported a low income (\$25,000 or less)
  - Students who were 25 or younger (except those enrolled in ESL)

- Student groups *less* likely to be referred than their classmates were:
  - Asian students
  - White students
  - Female students (except those enrolled in ESL)
  - Students who did not report a low income
  - Students who were 26 or older (except those enrolled in ESL)
- Overall, Owl Scholars were referred for 38% of eligible sections. When an instructor referred students, the average number of students referred per section ranged between 4 and 9. Owl Scholars were referred for:
  - 48% of eligible English sections
  - 39% of eligible Math sections
  - 26% of eligible ESL sections
- Overall, students referred as Owl Scholars had a 33% success rate.
  - Fall quarter success rate was 33%
  - Winter quarter success rate was 38%
  - Spring quarter success rate was 27%

## Results Detail:

### 1. *Who was referred to the Owl Scholars program?*

399 students were referred to the Owl Scholars program in 2016-17. Some students were referred more than once: e.g., for different courses in the same quarter, or for different quarters over the year. Overall, the 399 students were referred 430 times.

Table 1 shows the demographics (ethnicity, gender, income level, and age) of students referred to the Owl Scholars program compared to the full population of students who were enrolled (as of census) in at least one of the 11 program-eligible courses. The table shows the percentage rate of each student group among all students in the program-eligible courses; the percentage rate of the student group among Owl Scholar-referred students; and the count of Owl Scholar-referred students for that student group.

The last column of the table contains the difference between the percentage rates in the first and second columns of the tables. Negative differences indicate that a student group is disproportionately *more* likely to be referred to the Owl Scholars program -- in other words, their percentage rate among those referred to Owl Scholars is larger than their percentage rate among students in the program-eligible courses. Positive differences indicate that a student group is disproportionately *less* likely to be referred to the program -- in other words, their percentage rate among those referred to Owl Scholars is smaller than their percentage rate among students in the program-eligible courses.

All counts and percents reflect unique headcount: each student is only counted once in the data set even if they had multiple enrollments or multiple referrals to the program.

- ***Ethnicity findings:*** African American (-3% difference) and Latinx (-3% difference) students were slightly more likely to be referred than their classmates, while White (+5% difference) and Asian (+3% difference) students were slightly less likely to be referred.
- ***Gender findings:*** Male students were more likely to be referred (-5% difference) than their female classmates (+6% difference).
- ***Income level findings:*** Students who reported a low income (\$25,000 or less) were slightly more likely to be referred (-4% difference) than their classmates who did not report a low income (+4% difference).
- ***Age findings:*** Students who were 25 or younger were more likely to be referred (-6% difference) than their older classmates (+6% difference).

Table 1 Owl Scholar Students vs. All Students Enrolled in Program-Eligible Courses				
Academic Year (Fall 2016-Spring 2017)				
Student Group	Percent of All Students in Program-Eligible Courses*	Percent of Owl Scholar-Referral Students	Count of Owl Scholar-Referral Students	Difference: % All Students - % Owl Scholar
<b>By Ethnicity</b>				
African American	5%	8%	32	-3%
Asian	30%	27%	106	+3%
Filipinx	5%	5%	21	0%
Latinx	32%	35%	140	-3%
Native American	0%	1%	2	0%
Pacific Islander	2%	2%	8	0%
White	24%	19%	75	+5%
Ethnicity Not Stated	3%	4%	15	-1%
<b>By Gender</b>				
Female	51%	46%	183	+6%
Male	48%	53%	213	-5%
Gender Not Stated	1%	1%	3	0%
<b>By Income</b>				
Low Income (\$25,000 or less)	29%	33%	132	-4%
Not Low Income	71%	67%	267	+4%
<b>By Age</b>				
25 years or younger	79%	84%	337	-6%
26 years or older	21%	16%	62	+6%
Total	100%	100%	399	

Note: Percents may not appear to sum due to rounding.

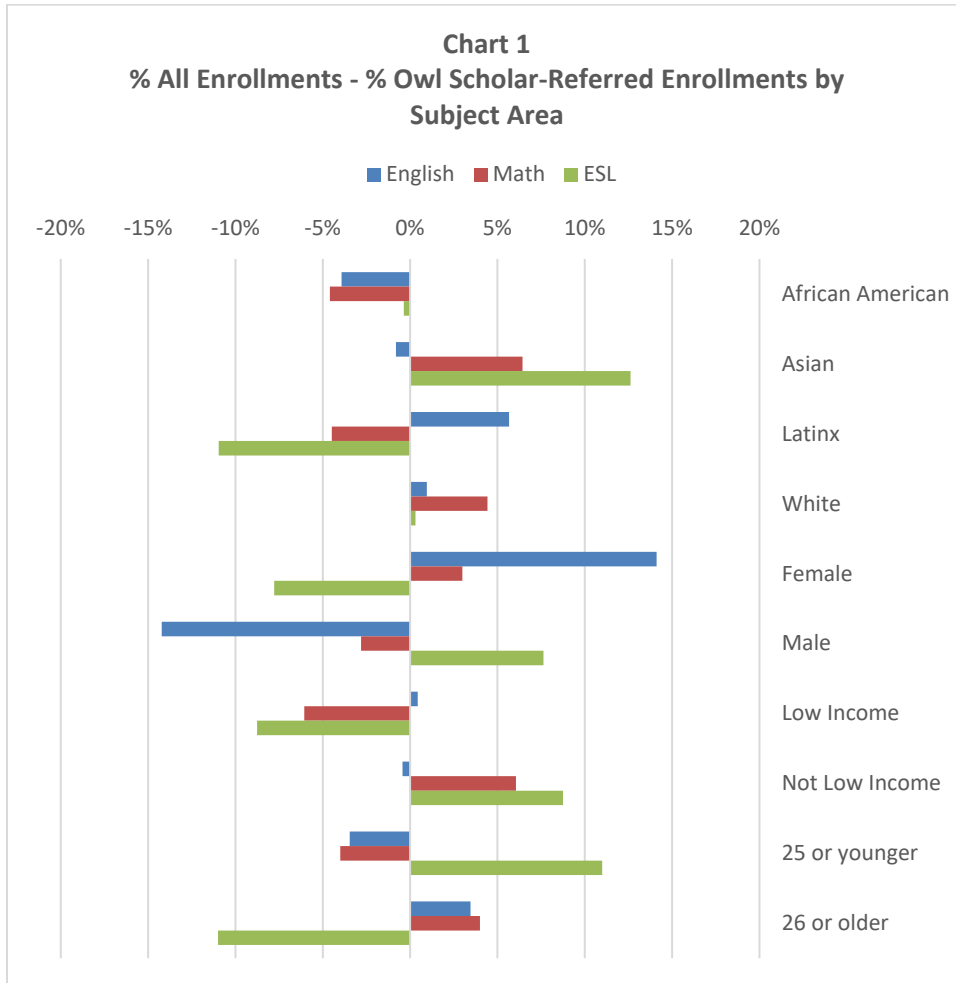
\*Defined as students who, as of census, were enrolled in at least one of the 11 courses eligible for referral into the Owl Scholars program.

**2. What were the differences in the likelihood of referral for these groups for different types of courses?**

Table 1 above shows which student groups were more likely to be referred to Owl Scholars overall, but there were differences by subject area. Chart 1 illustrates the different patterns in referrals for English, Math, and ESL by illustrating the difference between the student group’s percentage rate (as of census) among enrollments in program-eligible courses vs. their percentage rate among those referred to Owl Scholars.

As in Table 1, negative differences indicate that a student group is disproportionately *more* likely to be referred to the Owl Scholars program, while positive differences indicate that a student group is disproportionately *less* likely to be referred to the program. Note that Chart

1 looks at course enrollments, not unique students; students who enrolled more than once in a program-eligible course are duplicated.



- **Ethnicity pattern differences:** While Latinx students overall were more likely to be referred to Owl Scholars, those enrolled in English were *less* likely to be referred than their classmates in English.
- **Gender pattern differences:** While female students overall were less likely to be referred to Owl Scholars than male students, those enrolled in ESL were *more* likely to be referred than their male classmates in ESL.

- **Age pattern differences:** While students who were 26 or older were less likely to be referred to Owl Scholars than their younger classmates, those who were enrolled in ESL were *more* likely to be referred than their younger classmates in ESL.

**3. How often were Owl Scholars referred for each course?**

Table 2 shows the number of sections for each program-eligible course, the number of sections with referred Owl Scholars, the percent of sections with referred Owl Scholars, and the total number of Owl Scholar referrals for the course. The last column contains the average number of Owl Scholar referrals per referring section -- in other words, when a section's instructor referred students to Owl Scholars, how many were referred, on average?

Owl Scholars were referred for 48% of eligible English sections, 39% of eligible Math sections, and 26% of eligible ESL sections. Overall, Owl Scholars were referred for 38% of eligible sections. Although more English sections referred Owl Scholars, most referrals (212 out of 430, or 49%) were for Math courses; 142 (33%) were for English courses, and 76 (18%) were for ESL courses. When the instructor for a section referred students to Owl Scholars, they averaged between 4 to 9 referrals per section.

<b>Course</b>	<b># of Sections Offered</b>	<b># of Sections with Referred Owl Scholars</b>	<b>% of Sections with Referred Owl Scholars</b>	<b># of Owl Scholar Referrals</b>	<b>Average # of Referrals Per Referring Section*</b>
English 1T	4	1	25%	4	4
English 110	30	16	53%	72	5
English 209	29	13	45%	66	5
All English	63	30	48%	142	5
Math 1A	20	8	40%	75	9
Math 105	31	12	39%	76	6
Math 220	20	8	40%	61	8
All Math	71	28	39%	212	8
ESL 25	12	1	8%	5	5
ESL 227	3	1	33%	7	7
ESL 236	12	8	67%	42	5
ESL 237	11	2	18%	11	6
ESL 249	16	2	13%	11	6
All ESL	54	14	26%	76	5
All Eligible Sections	188	72	38%	430	6

\* Calculated as (# of Owl Scholar Referrals) / (# of Sections with Referred Owl Scholars)

#### 4. What were the success rates of Owl Scholars for each course?

Table 3 shows, for each of the 11 program-eligible courses, the head count of Owl Scholar referrals and the success rate (percent of students who achieved an A, B, C, or P grade divided by the total headcount).

Overall, Owl Scholar-referred students had a 33% success rate. The success rate for all students enrolled in these program-eligible courses was 67%, but the lower success rate for Owl Scholar-referred students is not surprising as these students were referred to the program because they were struggling in the class. Also, it is important to keep in mind that all students referred to Owl Scholars are included in this analysis, **including students who were referred but did not receive any program services.**

The success rate varied over the different quarters; winter quarter had the highest success rate (38%) while spring quarter had the lowest (27%). ESL courses had the highest success rates overall, while Math courses had the lowest. There was also a great deal of variance in the success rates of specific courses, both overall and by quarter.

Course	Fall 2016		Winter 2017		Spring 2017		Total	
	Head Count	Success Rate	Head Count	Success Rate	Head Count	Success Rate	Head Count	Success Rate
<b>English</b>								
English 1T			4	50%			4	50%
English 110	26	27%	34	65%	12	25%	72	44%
English 209	26	23%	12	25%	28	25%	66	24%
<b>Math</b>								
Math 1A	48	21%	23	35%	4	50%	75	27%
Math 105	21	29%	31	19%	24	21%	76	22%
Math 220	24	42%	11	0%	26	27%	61	28%
<b>ESL</b>								
ESL 25	5	60%					5	60%
ESL 227			7	71%			7	71%
ESL 236	19	68%	8	13%	15	27%	42	43%
ESL 237			6	33%	5	60%	11	45%
ESL 249			11	64%			11	64%
All Eligible Sections	169	33%	147	38%	114	27%	430	33%

#### Methodology:

The list of students referred to the Owl Scholars program in 2016-17 was received from the program. Demographic information for these students was obtained by linking them via their CWID to the Banner ODS table SS\_Student\_Term\_Attributes.

The list of program-eligible courses in 2016-17 was received from the program. The list of students enrolled in these courses was retrieved from the Banner ODS table Registration\_Analysis. Demographic information for them was then obtained by joining these results to the Banner ODS table SS\_Student\_Term\_Attributes.