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This report examines outcomes for participants in the Fiat Lux program, specifically, retention and GPA. The Fiat Lux Scholars program serves students who are first generation and meet specific financial criteria (starting with the Fall 2018 cohort), while the comparison group of non-participating students from the Fall 2018 cohort consisted of students who met all selection criteria, but either opted out of the program or did not submit documents on time. Prior year cohorts were compared to students who were also first generation, Pell eligible in the first term, and had similar high school GPA. Compared to students with similar characteristics, Fiat Lux participants had higher retention rates and GPAs, but differences did not always reach statistical significance (*note that due to changes in the program, data from earlier cohorts may not reflect the current efficacy of the program*). Overall, Fiat Lux participation appears to primarily impact first year retention and first year GPA.

Background

The Fiat Lux program was founded to empower income eligible, first-generation students to be academically successful at UC Merced. Selection criteria for the program are first-generation college students (e.g. neither parent has a 4-year degree) and who are income eligible (i.e., eligible for Pell and/or Cal grants, with \$0 Expected Family Contribution and \$0 Assets). Students were ranked by high school GPA and were selected in descending order to reach the program cap of 150 students. **Selection criteria (and financial support, as detailed in the next paragraph) was changed for the 2018-19 Academic year, which limits the ability to make longitudinal comparisons. As such, we consider each cohort separately in our analysis.**

First Year participants for Fall 2018 completed several requirements¹, including 3 workshops, 2 counselor meetings, 1 social event, 3 community scholar meetings, 1 professional development, 1 faculty reception, and 4 hours a week of study sessions. In addition, Fiat Lux Scholars were guaranteed (beginning with the Fall 2018 cohort) a \$20,000 minimum of gift aid per year for 4 years of program participation and were guaranteed access to 4 years of on-campus housing.

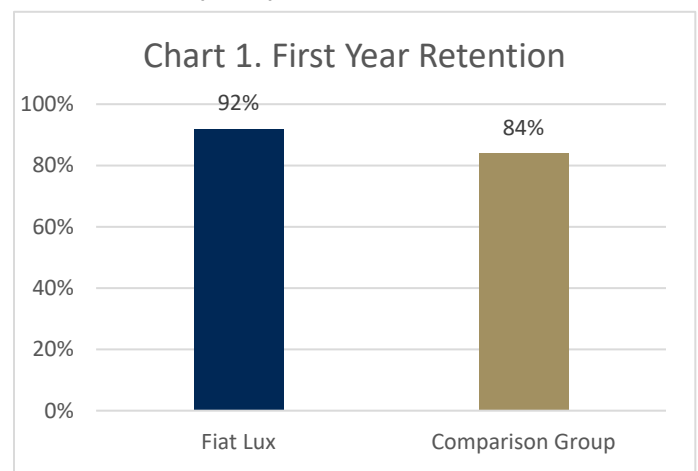
The goal of the Fiat Lux Scholars Program remains to empower, support, and connect students at UC Merced through a structured system of resources and intrusive advising that promotes campus engagement, familiarizes participants with the culture of higher education, and motivates them to achieve academically and persist in college².

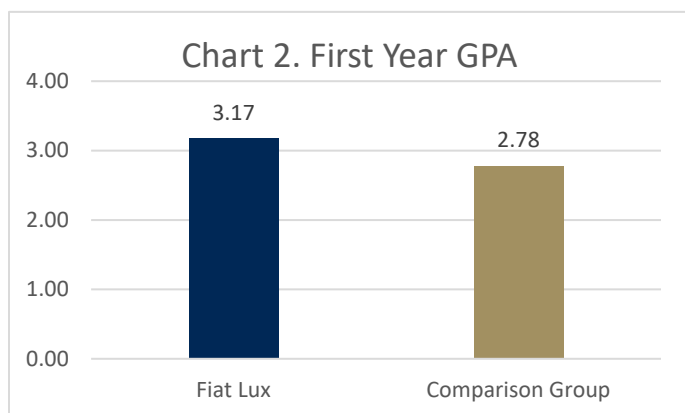
Academic Outcomes – Fall 2018 cohort

In order to evaluate potential associations between participation in the Fiat Lux program and first year academic outcomes, we selected a comparison group of students who met all Fiat Lux criteria but who did not participate. These students were also first-generation college students who met the same financial eligibility guidelines and had high school GPAs above the same 3.72 cutoff as their Fiat Lux peers.

Retention to Semester 2 Retention to the second semester did not significantly³ differ between Fiat Lux students and the comparison group (*not pictured*). 3 students (3%) of the comparison group, and 5 students (4%) of the Fiat Lux group were not retained to the second semester.

First Year Retention Retention to the second year was significantly³ higher for Fiat Lux students. Chart 1 shows that 8% (10 students) of the Fiat Lux group, and 17% (83 students) of the comparison group were not retained to the second year.





First Year GPA Cumulative first year GPA was significantly higher⁴ for Fiat Lux participants, who attained an average first year GPA of 3.17, while the comparison group had an average first year GPA of 2.78 (see Chart 2).

Preparatory Courses There was not a significant difference³ in the proportion of Fiat Lux and the comparison group who enrolled in a Math 005 course, with 60% of Fiat Lux (71 students), and 67% of the comparison group (338 students) who had taken Math 005. Writing I enrollments also did not significantly differ; 71% of Fiat Lux students (85 students) and 74% of the comparison group (373 students) had taken Writing I (*not pictured*).

Academic Outcomes – Fall 2017 cohort

For the Fall 2017 cohort of students participating in the Fiat Lux program, we compared students to other Fall 2017 entering frosh with similar characteristics in order to control for effects of student background and academic preparation. We selected the comparison group to have the same high school GPA range as Fiat Lux students, as well as being first generation and Pell eligible in the first term.

First Year Retention [Prior analysis](#) had found that first year retention was significantly higher for this cohort, with 88% of Fiat Lux students retained to the second year, compared to 77% for the comparison group.

Second Year Retention There was not a significant difference³ in the proportion of students who were retained to the third year; 80% of the Fiat Lux students from the Fall 2017 cohort returned for their third year (103 students), compared to 72% of the comparison group (828 students).

Second Year GPA Cumulative GPA at the end of the second year was significantly⁴ higher for Fiat Lux participants, 2.95 compared to 2.82.

Preparatory Courses There was not a significant difference³ in the proportion of Fiat Lux and the comparison group who enrolled in a Math 005 course, with 78% of Fiat Lux (101 students), and 72% of the comparison group (825 students) who had taken Math 005. Writing I enrollments also did not significantly differ; 71% of Fiat Lux students (91 students) and 67% of the comparison group (771 students) had taken Writing I (*not pictured*).

Academic Outcomes – Fall 2016 cohort

For the Fall 2016 cohort of students participating in the Fiat Lux program, we compared students to other Fall 2016 entering frosh with similar characteristics in order to control for effects of student background and academic preparation. We selected the comparison group to have the same high school GPA range as Fiat Lux students, as well as being first generation and Pell eligible in the first term.

First Year Retention There was not a significant difference³ in the proportion of students who were retained to the second year; 85% of the Fiat Lux students from the Fall 2016 cohort returned for the second year (112 students), compared to 78% of the comparison group (630 students).

Second Year Retention [Prior analysis](#) found that the Fall 2016 Fiat Lux cohort second year retention was significantly higher³, with 76% of Fiat Lux students retained to the third year, compared to 67% for the comparison group.

Third Year Retention There was not a significant difference³ in the proportion of students who were retained to the fourth year; 71% of the Fiat Lux students from the Fall 2016 cohort returned for the fourth year (94 students), compared to 66% of the comparison group (536 students).

Third Year GPA Cumulative GPA at the end of the third year was not significantly⁴ different between Fiat Lux students (2.85) and the comparison group (2.80).

Preparatory Courses There was not a significant difference³ in the proportion of Fiat Lux and the comparison group who enrolled in a Math 005 course, with 80% of Fiat Lux (106 students), and 75% of the comparison group (605 students) who had taken Math 005. Writing I enrollments also did not significantly differ³; 77% of Fiat Lux students (101 students) and 73% of the comparison group (591 students) had taken Writing I (*not pictured*).

Conclusion

Note that program selection criteria and program benefits have changed over time for the Fiat Lux program, which may account for different impacts for different cohorts.

Overall, Fiat Lux participation appears to primarily impact first year retention, and first year GPA.

Retention rates were not consistently, significantly higher for participants in the Fiat Lux program over time. First Year retention was significantly higher for Fiat Lux students in the Fall 2018 and Fall 2017 cohorts, but was not significant for the Fall 2016 cohort. Second Year retention was not significantly higher for Fiat Lux students in the Fall 2017 cohort but was significantly higher for those in the Fall 2016 cohort. Third year retention was not significantly higher for Fiat Lux students in the Fall 2016 cohort.

Cumulative GPA was significantly higher at the end of the first year (Fall 2018 cohort) as well as the second year (Fall 2017 cohort) but not at the end of the third year (Fall 2016 cohort).

Preparatory course enrollments (in particular, Math 005 and Writing 001) did not differ between Fiat Lux students and the comparison groups, showing similarity in academic background.

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ENDNOTES

1. Retrieved from http://fiatlux.ucmerced.edu/First_Year_Scholars
 2. Retrieved from <http://fiatlux.ucmerced.edu/History>.
 3. Calculated via Chi-square test of independence; a threshold of $p < .05$ was used for significance testing
 4. Calculated via an independent samples t-test; a threshold of $p < .05$ was used for significance testing
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