What We Know About PC’s First-Generation College Students

You have probably heard discussion of first-generation college students, but what does that term mean? How does it apply at Porterville College? This Research Brief covers this topic.

Who is first generation?

First, let's start with the definition. There actually is not a single agreed-upon definition of who qualifies as a first-generation student. There are two definitions used most often. Some federal programs, like the TRIO Program or the McNair Scholars program, named after astronaut Ronald McNair, define first-generation as individuals neither of whose parents completed a Bachelor’s degree. We have used that definition at PC in the past when breaking out students in our Student Satisfaction Survey. As of Fall 2018, that includes 88.2% of Porterville College students.

A narrower definition is the one used by the California Community College system and you’ll see it in most community college reports on the issue, including from the PC and KCCD IR Offices. It includes as first-generation anyone neither of whose parents has any education beyond high school. By this definition, 59.3% of PC students count as first-generation, as of Fall 2018. Most of this report will use that definition.

(Note that while some research shows that mother’s education may be more important in a student’s educational prospects, when we discuss first-generation students, we consider the higher of either parent. Also, the way the question is framed is inclusive, listing “Parent 1” and “Parent 2,” so we have no ability to distinguish between parents of different genders).

But, it is sometimes better to consider the issue as a continuum, thus the table below. As you can see, for more than a quarter of PC students, neither parent has more than a 9th grade education. By the most popular definition of first generation (the one we’ll use in most of this report), nearly 60 percent of our students would qualify. By another, it’s nearly 90%.
Fall 2018 Students by Highest Level of Parental Education (either parent)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
<th>Valid %</th>
<th>Cum %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>402</td>
<td>9.3%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Grade 9 or less</td>
<td>1,096</td>
<td>25.3%</td>
<td>27.9%</td>
<td>27.9%</td>
</tr>
<tr>
<td>Grade 10-12, non Grad</td>
<td>419</td>
<td>9.7%</td>
<td>10.7%</td>
<td>38.6%</td>
</tr>
<tr>
<td>High School Grad</td>
<td>813</td>
<td>18.8%</td>
<td>20.7%</td>
<td>59.3%</td>
</tr>
<tr>
<td>Some College, no Degree</td>
<td>753</td>
<td>17.4%</td>
<td>19.2%</td>
<td>78.4%</td>
</tr>
<tr>
<td>AA/AS Degree</td>
<td>385</td>
<td>8.9%</td>
<td>9.8%</td>
<td>88.2%</td>
</tr>
<tr>
<td>BA/BS Degree</td>
<td>282</td>
<td>6.5%</td>
<td>7.2%</td>
<td>95.4%</td>
</tr>
<tr>
<td>Graduate/Professional Degree</td>
<td>180</td>
<td>4.2%</td>
<td>4.6%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Total</td>
<td>4,330</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

So, who are first-generation students and how do they differ from other students? The remainder of this report will focus on that question. Keep in mind however, that parental education is a continuum and that some of these differences are fairly small. Each student is unique.

We group these differences into three broad categories: demographics (including program participation) attitudes and behaviors, and outcomes.

Demographics and Program Participation

The data in the charts below come from fall 2018. The first breaks down the percentage of first-generation students by ethnicity1. While a large portion of every ethnic group is first-gen, the group with the highest percentage is Hispanic/Latinx at nearly 70%.

The next chart includes a breakdown by age. While a majority of every age group is first-generation, that percentage is lower for the youngest group of students, those under age 20. Dual enrollment is likely a factor here as dual enrollment programs are more likely to attract non-first generation students.

Next, we break down first-generation and non-first generation students by education goal. Note that first-generation students are more likely to choose a goal other than transferring to a four-year institution.

1 Note that ethnic groups with fewer than 30 students in fall 2018 are excluded from the chart.
Lastly, we look at participation in various programs. First generation students are nearly twice as likely to be economically disadvantaged\(^2\), and nearly three times as likely to participate in the EOP&S program. Similarly, they are also more likely to be in the CalWorks program, to be former Foster Youth, or to participate in the DSPS program.

Perhaps because they are more likely to participate in these programs, first generation students are also more likely to complete each of the steps of the matriculation process. As students progress through those steps, the gap between first generation students and their counterparts grows larger.

Lastly, we look at unit load. The differences here are not large. The most significant gap is at the lowest level. First-generation students are substantially more likely to take non-credit classes. This is most likely because the only non-credit classes currently offered are English for 2\(^{nd}\) Language Learners.

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\(^2\) Economically disadvantaged is defined as participating in one of several public assistance programs, including CalWorks, TANF, SSI, etc.
Percentage of First-Generation Students by Age, Fall 2018

First-gen and non-first gen Students by Education Goal, Fall 2018

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Program Participation by First-Generation Status, Fall 2018

<table>
<thead>
<tr>
<th>Program</th>
<th>First-gen</th>
<th>Non-first-gen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economically Disadvantaged</td>
<td>56.0%</td>
<td>29.3%</td>
</tr>
<tr>
<td>EOPS</td>
<td>20.1%</td>
<td>6.8%</td>
</tr>
<tr>
<td>CalWorks</td>
<td>2.9%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Foster Youth</td>
<td>2.6%</td>
<td>1.4%</td>
</tr>
<tr>
<td>DSPS</td>
<td>4.2%</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

Completion of Matriculation Steps by First-Generation Status, Fall 2018

<table>
<thead>
<tr>
<th>Step</th>
<th>First Generation</th>
<th>Non First Generation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment</td>
<td>96%</td>
<td>94%</td>
</tr>
<tr>
<td>Orientation</td>
<td>91%</td>
<td>88%</td>
</tr>
<tr>
<td>Seen A Counselor</td>
<td>92%</td>
<td>87%</td>
</tr>
<tr>
<td>Ed Plan</td>
<td>83%</td>
<td>76%</td>
</tr>
<tr>
<td>Comprehensive Ed Plan</td>
<td>60%</td>
<td>51%</td>
</tr>
</tbody>
</table>

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Attitudes and Behaviors

Next, we turn to differences in attitudes and behaviors. One source for this would be our Student Satisfaction Survey, which we conduct every three years. While in the past, we have often found differences, with first generation students having a more positive opinion of several college services than non-first generation students, the 2018 version of the survey did not find any statistically significant differences.³

Every three years, we conduct the Community College Survey of Student Engagement (CCSSE), a national survey that focuses on characteristics and behaviors of students and colleges that are likely to

³ As noted above, the Student Satisfaction Survey has, thus far, used a broader definition of first-generation, counting any student whose parents did not have a four-year college degree as first-generation. That definition may be reconsidered in the next version of the survey, to be conducted in spring 2021.
promote student success. In the 2017 version of the survey, we noted a number of differences between first-generation and non first-generation students. Here is a quick summary.

In a series of questions about how often students engage in certain (positive or negative) behaviors, first-generation students were less likely to:

- Discuss ideas from readings or classes with others outside of class (q4q)
- Have serious conversations with students who differ from them. (q4r)

First-generation students also rated examinations at the college as more challenging than non first generation students. (q7)

In a series of questions about how students spend their time, first-generation students were more likely to spend their time on:

- Working for pay (q10b)
- Providing for dependents (q10d)
- Commuting to and from classes (q10e)

In a series of questions about how much students’ experience at Porterville College has contributed to their knowledge, skills, and personal development in various areas, first-generation students said that the college contributed more in the following areas:

- Acquiring job-or work-related knowledge or skills (q11a)
- Working effectively with others (q11f)
- Gaining information about career opportunities (q11i)

In a series of questions about the frequency of use of certain services, satisfaction with those services, and importance of each, first-generation students more frequently used:

- Career counseling (12b)
- Skills labs (12e)
- Financial aid advising (12g)
First-generation students viewed the following services as more important than non-first-generation students:

- Career counseling (12b)
- Financial aid advising (12g)
- Student organizations (12i)

(There were no statistically significant differences in satisfaction regarding these services).

When asked which issues might cause them to withdraw from class or from the college, first-generation students were more likely to cite caring for dependents (23b) and less likely to cite transferring to a 4-year college or university (23e).

Most of these differences were not large, but taken in sum, they provide some evidence that first-generation students are somewhat more likely to focus on immediate career and financial gains rather than a broader liberal arts education and the college experience. This may be a reflection both of differences in knowledge and experience, and differences in their objective economic circumstances.

Here is a link to the CCSSE instrument.

Here is a breakdown of the first-generation and non-first-generation responses to these questions for Porterville College.

Outcomes

Having looked at how first-generation students differ in terms of demographics, participation, and some attitudes and behaviors, we now turn to outcomes.

The charts below come from Elements of Student Success, a cohort-based system we use to track student outcomes. These are broken out by a variety of student characteristics, from demographics to participation in certain programs, but our focus here is on the difference between first-generation and non-first-generation students.

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4 Note, this link requires a KCCD Tableau user license.
For most of these measures, first-generation students perform less well than their peers. While the college has made progress, in some cases very substantial progress, on most of these metrics, the gap between first generation students and non-first generation ones persist. In some cases, the gap has narrowed slightly, while in others, it has actually expanded.

First term successful course completion is one area where there has been substantial improvement, but the gap between first-generation students and non-first generation ones has gone from small to several percentage points. The college has made substantial progress in completion of college-level English and math in students’ first years, but disparities persist there as well.

We track completion of college-level units in multiple ways: 12 units in the first term, 15 in the first year, and 30 in the first year. In all of these, there is improvement over time, but gaps persist for first-generation students.

Lastly, we look at the percentage of students who complete a degree, certificate, or transfer to a four-year institution within three years of enrollment. Here, the gap is smaller, but we still see disparities between first generation and non-first generation students.
Completion of College-level English in First Year

- 2014-15: First Generation 13.0%, Not First Generation 24.8%
- 2015-16: First Generation 21.4%, Not First Generation 25.5%
- 2016-17: First Generation 36.6%, Not First Generation 42.4%
- 2017-18: First Generation 39.4%, Not First Generation 47.9%
- 2018-19: First Generation 57.2%, Not First Generation 49.6%

Completion of College-level Math in First Year

- 2014-15: First Generation 27.0%, Not First Generation 30.3%
- 2015-16: First Generation 32.9%, Not First Generation 34.0%
- 2016-17: First Generation 47.1%, Not First Generation 47.1%
- 2017-18: First Generation 49.7%, Not First Generation 58.3%
- 2018-19: First Generation 51.0%, Not First Generation 55.5%
Completion of both College-level English and Math in First Year

Completion of 12 College-level Units in First Term

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Conclusion

Similar to national studies, first generation students at Porterville College show some differences in demographics, attitudes and behaviors, and most importantly, outcomes, from their peers. They are more likely to focus on short-term job goals and less aware of other options. They may have other competing influences in their lives that conflict with their educational paths. And despite our substantial progress in improving outcomes for all students, first generation students still lag behind their peers in several outcomes. Narrowing these achievement gaps will require focused effort and attention to the issue.

Questions, as always, are welcome. You can contact the research office at research@portervillecollege.edu.