

# Student Success of C4E Scholarship Recipients

This report explores various measures of student success for C4E scholarship recipients compared to non-C4E scholarship recipients as well as displaying results by specific C4E outreach program. C4E status is determined by receipt of a specific group of scholarships during a student’s cohort term. The C4E scholarship awards have additional outreach programs, which makes them a unique financial aid award. Students may receive more than one of the C4E scholarships. The priority ordering of each outreach program/scholarship is included as an appendix.

## Demographics

Prior work by Institutional Research has shown significant associations between demographic variables and measures of student success; therefore, it is important to understand demographic differences between C4E and non-C4E students before assessing any differences in various measures of student success. Table 1 and 2 display the demographics of C4E students from the FA11 and FA12 freshman and transfer student cohorts compared to students who are not a recipient of a C4E scholarship award.

Table 1.

FA11 and FA12 Freshman Cohort Demographics by C4E Status

|                | First Generation (%) | Pell Recipient (%) | Minority (%) | Female (%) | Resident(%) | Average Index |
|----------------|----------------------|--------------------|--------------|------------|-------------|---------------|
| C4E (463)      | 73.9%                | 73.4%              | 63.7%        | 62.0%      | 96.8%       | 112.9         |
| Non-C4E (8405) | 23.3%                | 20.7%              | 16.7%        | 55.3%      | 74.8%       | 115.2         |

Table 2.

FA11 and FA12 Transfer Cohort Demographics by C4E Status

|                | First Generation (%) | Pell Recipient (%) | Minority (%) | Female (%) | Resident(%) | Average Index (N) |
|----------------|----------------------|--------------------|--------------|------------|-------------|-------------------|
| C4E (28)       | 78.6%                | 71.4%              | 60.7%        | 60.7%      | 78.6%       | 106.4 (5)         |
| Non-C4E (2551) | 32.7%                | 31.8%              | 14.3%        | 47.6%      | 75.9%       | 107.7 (938)       |

In terms of demographics, C4E freshmen and transfer students have much higher rates of first generation students, Pell Grant recipients, and minority students compared to non-C4E freshmen and transfer students. C4E freshmen also have a lower average index compared to non-C4E freshmen. The number of transfer students with an index score is shown for transfer students since many of these students are missing an index value.

## Student Success

Student success is measure by retention to the second-fall semester and cumulative success at the end of the second-fall (the average cumulative completed credits at CSU and the average cumulative CSU GPA). The following sections first compare C4E students to non-C4E students as well as providing the metrics’ gaps by first generation status and Pell recipient status in order to give a reference level for C4E students’ success. Second, the student success metric is provided by C4E scholarship group in order to assess variation within the C4E programs.

**Second-Fall Retention by C4E Status**

Tables 3 and 4 provide the second fall retention rates of C4E students from the FA11 and FA12 freshman or transfer cohorts compared to non-C4E students. Additionally, the cohorts' gaps in second fall retention for first generation and Pell recipients are also provided to give a baseline of what might be expected of the C4E group based solely on demographics.

Table 3.

Freshman Cohorts' Second-Fall Retention Rates by C4E Status

|                            | FA11              |                | FA12              |                |
|----------------------------|-------------------|----------------|-------------------|----------------|
|                            | Cohort Size       | Retention Rate | Cohort Size       | Retention Rate |
| C4E                        | 224 <sup>1</sup>  | 83.0%          | 239 <sup>1</sup>  | 82.8%          |
| Non-C4E                    | 4195 <sup>1</sup> | 84.8%          | 4210 <sup>1</sup> | 86.8%          |
| C4E Gap                    |                   | -1.8%          |                   | -4.0%          |
| First Gen Gap <sup>1</sup> |                   | -8.2%          |                   | -6.8%          |
| Pell Gap <sup>1</sup>      |                   | -4.6%          |                   | -6.4%          |

C4E freshmen are retained to the second-fall at a lower rate compared to non-C4E freshmen in both FA11 and FA12. The C4E gap in second-fall retention rates ranges from -1.8 to -4 percentage points.

<sup>1</sup>First generation and Pell recipient gap analysis from IR interactive

Table 4.

Transfer Cohorts' Second-Fall Retention Rates by C4E Status

|                            | FA11              |                | FA12              |                |
|----------------------------|-------------------|----------------|-------------------|----------------|
|                            | Cohort Size       | Retention Rate | Cohort Size       | Retention Rate |
| C4E                        | 15 <sup>1</sup>   | 86.7%          | 13 <sup>1</sup>   | 92.3%          |
| Non-C4E                    | 1340 <sup>1</sup> | 84.9%          | 1211 <sup>1</sup> | 87.0%          |
| C4E Gap                    |                   | 1.8%           |                   | 5.3%           |
| First Gen Gap <sup>1</sup> |                   | -3.2%          |                   | -10.1%         |
| Pell Gap <sup>1</sup>      |                   | -2.5%          |                   | -4.8%          |

C4E transfer students are retained to the second-fall at a higher rate compared to non-C4E transfer students in both FA11 and FA12. The C4E gap in second-fall retention rates ranges from 1.8 to 5.3 percentage points. The cohort sizes of C4E transfer students are very small, which lends itself to volatility in retention rates.

<sup>1</sup>First generation and Pell recipient gap analysis from IR interactive

Considering the demographics of C4E freshman (nearly three quarters first-generation or Pell recipient) it is appropriate to compare their second-fall retention rate gap to the FA11 and FA12 first generation and Pell recipient cohorts' gaps. Even though C4E freshman are not retained at a higher rate compared to non-C4E freshmen, the gap in C4E retention is significantly smaller than the gap for first generation students or Pell recipients. In terms of retention rates for both freshman and transfer students, C4E students appear to be doing better than would be expected if they did not participate in the outreach programming.

**Second-Fall Retention within C4E**

Tables 5 and 6 provide the second fall retention rates of C4E students from the FA11 and FA12 freshman or transfer cohorts by C4E outreach program.

Table 5.

Freshman Cohorts' Second-Fall Retention Rates by C4E Grouping

|                               | FA11        |                | FA12        |                |
|-------------------------------|-------------|----------------|-------------|----------------|
|                               | Cohort Size | Retention Rate | Cohort Size | Retention Rate |
| Access Award                  | 1           | 100%           | 0           | NA             |
| Alliance Partnership          | 69          | 83%            | 56          | 77%            |
| Daniels Fund                  | 28          | 93%            | 23          | 96%            |
| Denver Scholarship Foundation | 10          | 90%            | 47          | 77%            |
| First Generation              | 29          | 72%            | 26          | 85%            |
| Gear Up                       | 3           | 100%           | 3           | 100%           |
| Native American Legacy        | 4           | 100%           | 3           | 67%            |
| Program Based Partnership     | 40          | 88%            | 57          | 86%            |
| STARS                         | 39          | 74%            | 24          | 88%            |
| GATES                         | 1           | 100%           | 0           | NA             |

The Alliance Partnership, First Generation and STARS outreach programs have freshman retention rates that are at or below the overall C4E average freshman retention rate. Please note the volatility of retention rates due to the small number of students within some of the outreach programs.

Table 6.

Transfer Cohorts' Second-Fall Retention Rates by C4E Grouping

|                        | FA11        |                | FA12        |                |
|------------------------|-------------|----------------|-------------|----------------|
|                        | Cohort Size | Retention Rate | Cohort Size | Retention Rate |
| Access Award           | 5           | 80%            | 6           | 100%           |
| Daniels Fund           | 4           | 100%           | 1           | 100%           |
| First Generation       | 2           | 50%            | 6           | 83%            |
| Native American Legacy | 4           | 100%           | 0           | NA             |

The very small number of C4E transfer students makes interpretation by outreach program more problematic; however, the First Generation outreach program has consistently lower retention rates compared to the overall C4E transfer retention rate.

**Cumulative GPA and Cumulative Credits by C4E Status**

Tables 6 and 7 provide the average cumulative GPA and completed credits at the end of the second-fall semester for C4E and non-C4E freshman and transfer cohorts. Similar to the prior section, overall gaps by first generation and Pell recipient status are provided as reference points.

Table 6.

Freshman Cohorts' Second-Fall Average CSU Cumulative GPA and Completed Credits by C4E Status

|                            | FA11                     |         |             | FA12                     |         |             |
|----------------------------|--------------------------|---------|-------------|--------------------------|---------|-------------|
|                            | Cohort Size <sup>1</sup> | Cum GPA | Cum Credits | Cohort Size <sup>1</sup> | Cum GPA | Cum Credits |
| C4E                        | 181                      | 2.86    | 41          | 194                      | 2.85    | 40          |
| Non-C4E                    | 3515                     | 2.97    | 42          | 3622                     | 2.99    | 42          |
| C4E Gap                    |                          | -0.11   | -1.1        |                          | -0.14   | -2.0        |
| First Gen Gap <sup>2</sup> |                          | -0.20   | -1.7        |                          | -0.11   | -1.1        |
| Pell Gap <sup>2</sup>      |                          | -0.14   | -1.4        |                          | -0.08   | -1.1        |

<sup>1</sup> Only includes students who persisted to the end of their second fall semester

<sup>2</sup> First generation and Pell recipient gap analysis calculated from the overall cohorts

C4E freshmen have a slightly lower average number of cumulative completed credits and GPA at the end of their second fall semester compared to non-C4E freshmen in both cohorts. In FA11 the C4E gap (for both measures) is a smaller magnitude than the reference points, but in FA12 the C4E gap (for both measures) is larger in magnitude.

Table 7.

Transfer Cohorts' Second-Fall Average CSU Cumulative GPA and Completed Credits by C4E Status

|                            | FA11                     |         |             | FA12                     |         |             |
|----------------------------|--------------------------|---------|-------------|--------------------------|---------|-------------|
|                            | Cohort Size <sup>1</sup> | Cum GPA | Cum Credits | Cohort Size <sup>1</sup> | Cum GPA | Cum Credits |
| C4E                        | 12                       | 2.92    | 43          | 12                       | 2.72    | 34          |
| Non-C4E                    | 1106                     | 2.96    | 42          | 1031                     | 2.99    | 41          |
| C4E Gap                    |                          | -0.05   | 1.8         |                          | -0.27   | -7.6        |
| First Gen Gap <sup>2</sup> |                          | -0.18   | -1.0        |                          | -0.17   | -3.9        |
| Pell Gap <sup>2</sup>      |                          | -0.01   | -1.6        |                          | -0.15   | -3.1        |

<sup>1</sup> Only includes students who persisted to the end of their second fall semester

<sup>2</sup> First generation and Pell recipient gap analysis calculated from the overall cohorts

C4E transfer students have a lower GPA at the end of their second fall semester compared to non-C4E transfer students in both cohorts. In FA11 the C4E gap for GPA is a smaller magnitude than the reference points, but in FA12 the C4E gap for GPA is larger in magnitude.

In FA11 C4E transfer students have a slightly higher average completed credits compared to non-C4E, but in FA12 the C4E cohort has a significantly lower average (with a gap that has much larger magnitude than the reference points). The volatility of results is due to the small number of transfer students.

C4E students are not performing better than might be expected (based solely on demographics) in terms of their cumulative success at the end of their second fall semester.

**Cumulative GPA and Cumulative Credits within C4E**

Tables 8 and 9 provide the average cumulative GPA and completed credits at the end of the second-fall semester for C4E students from the FA11 and FA12 freshman or transfer cohorts by C4E outreach program.

Table 8.

Freshman Cohorts' Second-Fall Average CSU Cumulative GPA and Completed Credits by C4E Grouping

|                               | FA11                     |         |             | FA12                     |         |             |
|-------------------------------|--------------------------|---------|-------------|--------------------------|---------|-------------|
|                               | Cohort Size <sup>1</sup> | Cum GPA | Cum Credits | Cohort Size <sup>1</sup> | Cum GPA | Cum Credits |
| Access Award                  | 1                        | 3.65    | 46          | 0                        | NA      | NA          |
| Alliance Partnership          | 54                       | 2.86    | 40          | 41                       | 2.58    | 38          |
| Daniels Fund                  | 26                       | 2.95    | 42          | 22                       | 3.12    | 42          |
| Denver Scholarship Foundation | 9                        | 2.90    | 43          | 36                       | 2.79    | 40          |
| First Generation              | 20                       | 2.92    | 42          | 21                       | 3.17    | 46          |
| Gear Up                       | 3                        | 3.06    | 45          | 3                        | 3.13    | 41          |
| Native American Legacy        | 4                        | 2.43    | 40          | 2                        | 3.16    | 37          |
| Program Based Partnership     | 35                       | 2.76    | 40          | 49                       | 2.90    | 40          |
| STARS                         | 28                       | 2.87    | 43          | 20                       | 2.67    | 40          |
| GATES                         | 1                        | 2.87    | 45          | 0                        | NA      | NA          |

<sup>1</sup> Only includes students who persisted to the end of their second fall semester

In terms of GPA for the freshman cohorts, the Alliance Partnership and STARS program participants have GPA's that are consistently at or below the overall C4E GPA. It should be noted that C4E participation is defined by a students' cohort term and the analysis did not exclude students who did not meet renewal criteria for the award.

In terms of average cumulative completed credits for the freshman cohorts, the Alliance Partnership and Program based partnership consistently have an average that is at or below the overall C4E average number of completed credits.

Table 9.

Transfer Cohorts' Second-Fall Average CSU Cumulative GPA and Completed Credits by C4E Grouping

|                        | FA11                     |         |             | FA12                     |         |             |
|------------------------|--------------------------|---------|-------------|--------------------------|---------|-------------|
|                        | Cohort Size <sup>1</sup> | Cum GPA | Cum Credits | Cohort Size <sup>1</sup> | Cum GPA | Cum Credits |
| Access Award           | 4                        | 3.06    | 40          | 6                        | 2.42    | 27          |
| Daniels Fund           | 3                        | 3.66    | 59          | 1                        | 2.94    | 41          |
| First Generation       | 1                        | 2.17    | 46          | 5                        | 3.05    | 41          |
| Native American Legacy | 4                        | 2.40    | 35          | 0                        | NA      | NA          |

<sup>1</sup> Only includes students who persisted to the end of their second fall semester

The very small number of C4E transfer students makes interpretation by outreach program more problematic; however, the Access Award outreach program has consistently lower average cumulative completed credits compared to the overall C4E transfer average.

### Conclusions

- In terms of demographics, C4E freshmen and transfer students have much higher rates of first generation students, Pell Grant recipients, and minority students compared to non-C4E freshmen and transfer students. C4E freshmen also have a much lower average index compared to non-C4E freshmen.
- Despite having lower retention rates (compared to non-C4E freshmen), C4E freshmen do have higher retention rates than we would expect them to have compared to the retention rates of first generation and Pell recipient freshmen.
- C4E transfer students are retained to the second-fall at a higher rate compared to non-C4E transfer students in both FA11 and FA12.
  - A possible explanation for the higher than expected retention rates of C4E students is that the C4E program (a combination of financial aid funding and social/academic support) mitigates some of the negative associations between student attributes, like first generation and low-income status, and second-fall retention.
- C4E freshmen have a slightly lower average number of cumulative completed credits and GPA at the end of their second fall semester compared to non-C4E freshmen in both cohorts.
- C4E transfer students have a lower GPA at the end of their second fall semester compared to non-C4E transfer students in both cohorts. However, in FA11 C4E transfer students have a slightly higher average completed credits compared to non-C4E, but in FA12 the C4E transfer cohort has a significantly lower average.
  - Unlike the conclusions drawn from the retention rates, there isn't much evidence to support the statement that C4E students are performing better than might be expected (based solely on demographics) in terms of their cumulative success at the end of their second fall semester.
- The small number of students in each C4E outreach program lends its self to inconclusive quantitative conclusions about the variation in C4E outreach programs; however, a useful next step would be to explore these results based on qualitative knowledge of programmatic differences.

**Appendix**

| <b>Outreach Program</b>                      | <b>Fund</b>    | <b>Priority Order</b> |
|--|----------------|-----------------------|
| Access Award                                 | PTAC           | 1                     |
| Alliance Partnership                         | PTA            | 2                     |
| Alliance Transfer Award                      | PTAT           | 3                     |
| Black Issues Forum/Program Based Partnership | PT; PTNF       | 4                     |
| Boys and Girls Club                          | BGCS; XX1109   | 5                     |
| Bridge Students                              | PTB            | 6                     |
| College Horizon                              | PTH            | 7                     |
| Daniels Fund                                 | X521           | 8                     |
| Denver Scholarship Foundation                | XG62           | 9                     |
| Educational Opportunity Center Partnership   | PTAC           | 10                    |
| First Generation Award                       | 1GEN           | 11                    |
| Gear Up                                      | GEAR           | 12                    |
| Lorenzo de Zavala                            | PT             | 13                    |
| Native American Legacy Award                 | ASNA attribute | 14                    |
| Native American Legacy Eligible              | NALA           | 15                    |
| STARS Partnership                            | PTS            | 16                    |