



Patterns and Outcomes of Failing Grades at Southeast Community College

January 15, 2018 | *As of data pulled on 12/22/2017 at 8:30am.*

As part of the Open Pathways option for accreditation from the Higher Learning Commission (HLC), institutions are required to undertake a major Quality Initiative designed to suit its present concerns or aspirations. SCC will submit our Quality Initiative proposal to HLC, which will focus on improving student success and outcomes by August 2018. As a first step toward understanding current student performance and identifying opportunities to increase student success, and thus inform the scope of the Quality Initiative proposal, the Office of Institutional Research conducted a preliminary study about the patterns and outcomes of students who received failing grades compared to students who never received a failing grade.

The first goal of this particular study was to examine factors that contribute to students receiving failing grades in credit courses at Southeast Community College (SCC). The second goal was to examine the eventual completion or transfer outcomes of students who received failing grades compared to those students who never received a failing grade at SCC.

To achieve those goals, this study looked at data from each starting cohort from the 2012-2013 academic year to the 2016-2017 academic year and their grades through Fall 2017. The data consisted of 256,831 valid grades received by 21,599 undergraduate students (excluding all dual credit students). Valid grades were defined as grades of A-F, W, NP, or P. The data excludes sections without a valid grade assigned (e.g., lab sections). Each cohort has data from more than 4,000 students. Overall, failing grades account for 11.7% of all valid grades in the study. Figure 1 shows the distribution of valid grades in the current study.

Figure 1

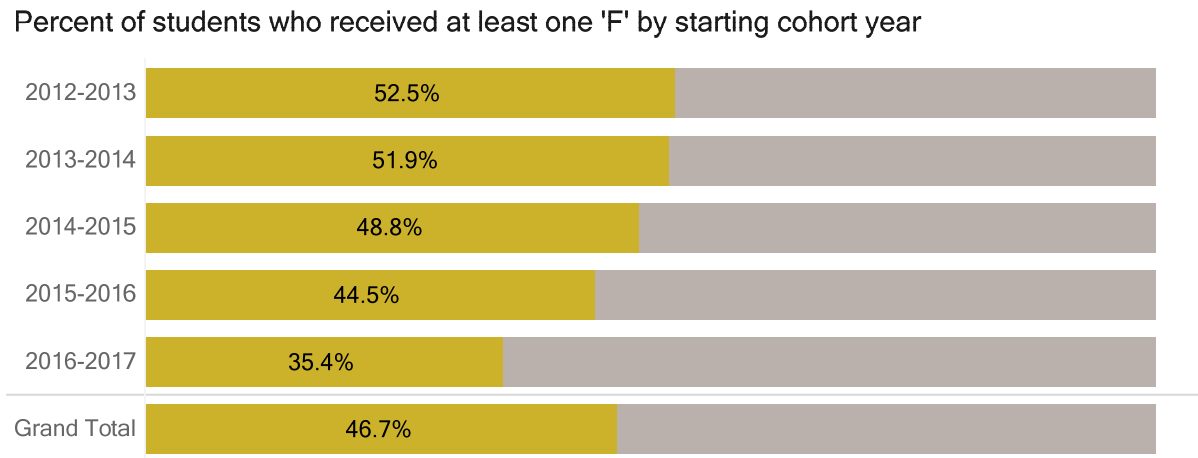
Frequency of all grades

A		30.8% (n=78,994)
B		30.7% (n=78,794)
C		15.8% (n=40,552)
P		0.1% (n=153)
D		4.7% (n=12,167)
F		11.6% (n=29,891)
NP		0.0% (n=32)
W		6.3% (n=16,248)

Percent of students who receive an 'F'

Overall, nearly half (46.7%) of the students in this study have received at least one failing grade during their time at SCC. Students from older cohorts have a higher probability of receiving at least one failing grade in their academic careers at SCC. One important aspect to consider when evaluating comparisons across cohorts is the total number of courses taken and completed. Students whose starting cohort is 2012 have been enrolled for a longer period of time and, on average, taken and completed more courses than students whose starting cohort is 2016. Figure 2 shows that the proportion of students who have received at least one failing grade increases in older cohort years.

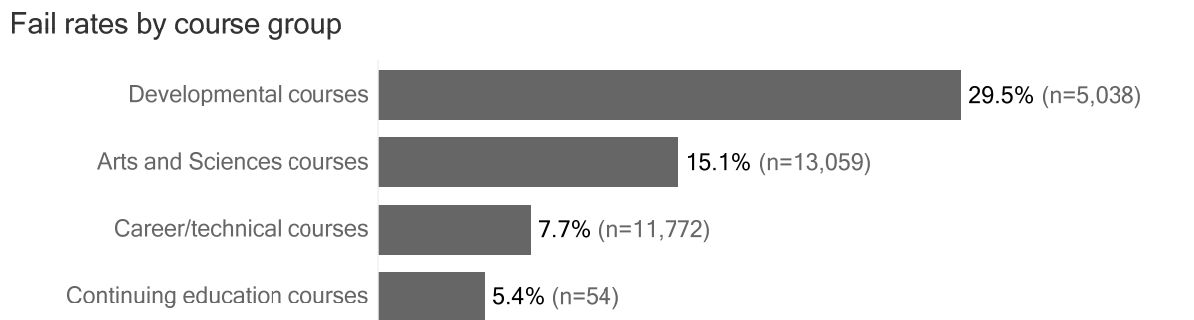
Figure 2



Student Group and Course Group

SCC courses were classified into one of four groups depending on the level and subject of the course. In comparing the failure rates by course group, we see that developmental courses had the highest proportion of failing grades (29.5% of grades assigned in these courses were failing grades), followed by Arts and Sciences courses (15.1%), Career/technical Education courses (7.7%), and Continuing Education courses (5.4%).

Figure 3



Similarly, SCC students were classified into one of three groups based on their declared major. When looking at student group (Figure 4), undeclared students received the highest proportion of failing grades (20.0% of grades received), whereas career/technical students received the lowest (8.3%).

Figure 4

Fail rates by student group

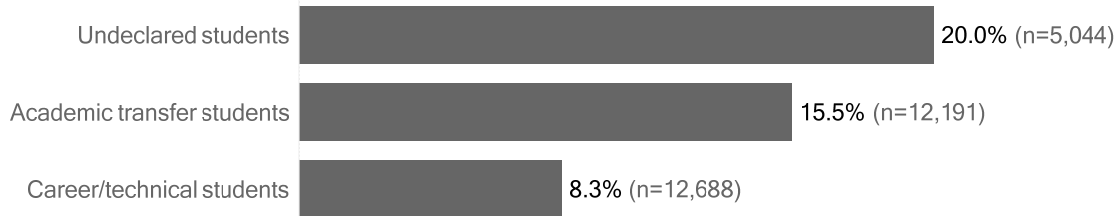
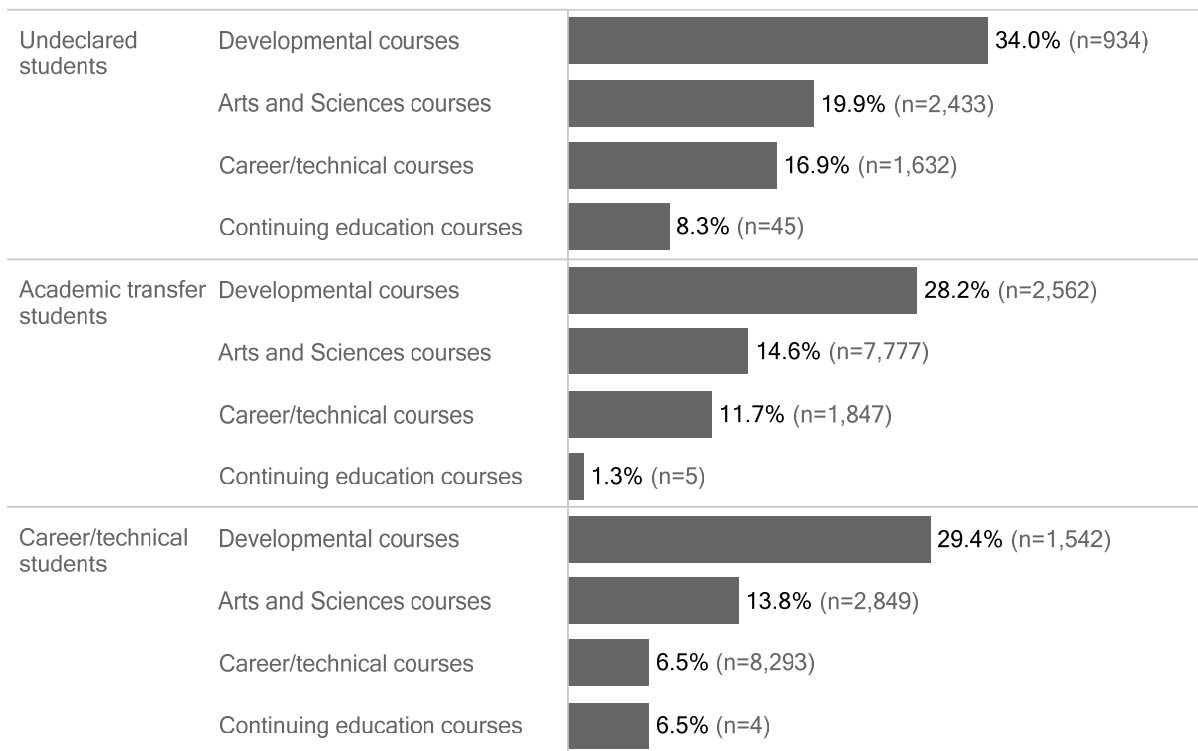


Figure 5 shows the failure rates of the three student groups for each of the three course groups. This interaction revealed that:

- Regardless of the type of course taken, undeclared students had the highest failure rates.
- Regardless of the student group, the highest proportion of failing grades were in developmental courses.

Figure 5

Fail rates by student group and course group

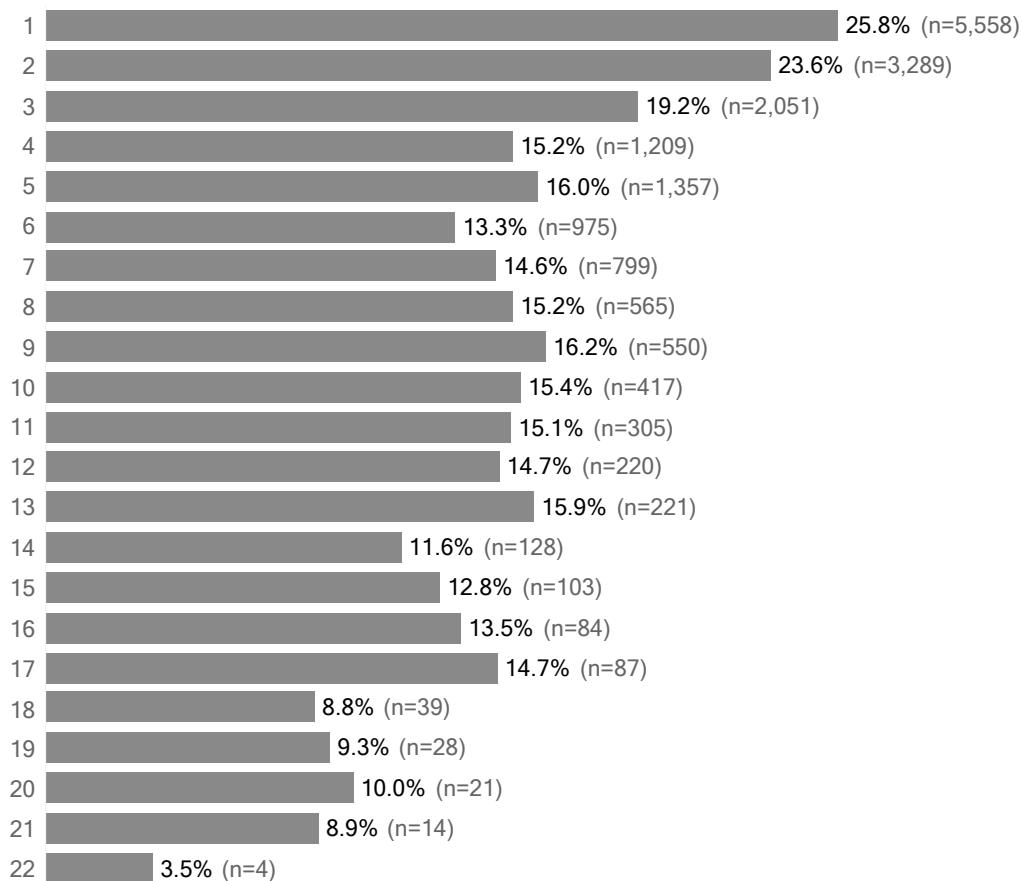


When are students most likely to receive an 'F'?

Figure 6 shows that students are at the highest risk of receiving an 'F' during their first three terms of attendance. Approximately 26% of students received an 'F' during their first term. By their second term, approximately 24% of students received an 'F' and 19% in their third term. The failure rate for students in their second and third years (terms 5 through 12) levels out around 14-16%. These results are affected by attrition since students who receive an 'F' in their first few terms are less likely to continue enrolling at SCC.

Figure 6

Number (and percent) of students who received at least one 'F' by term sequence

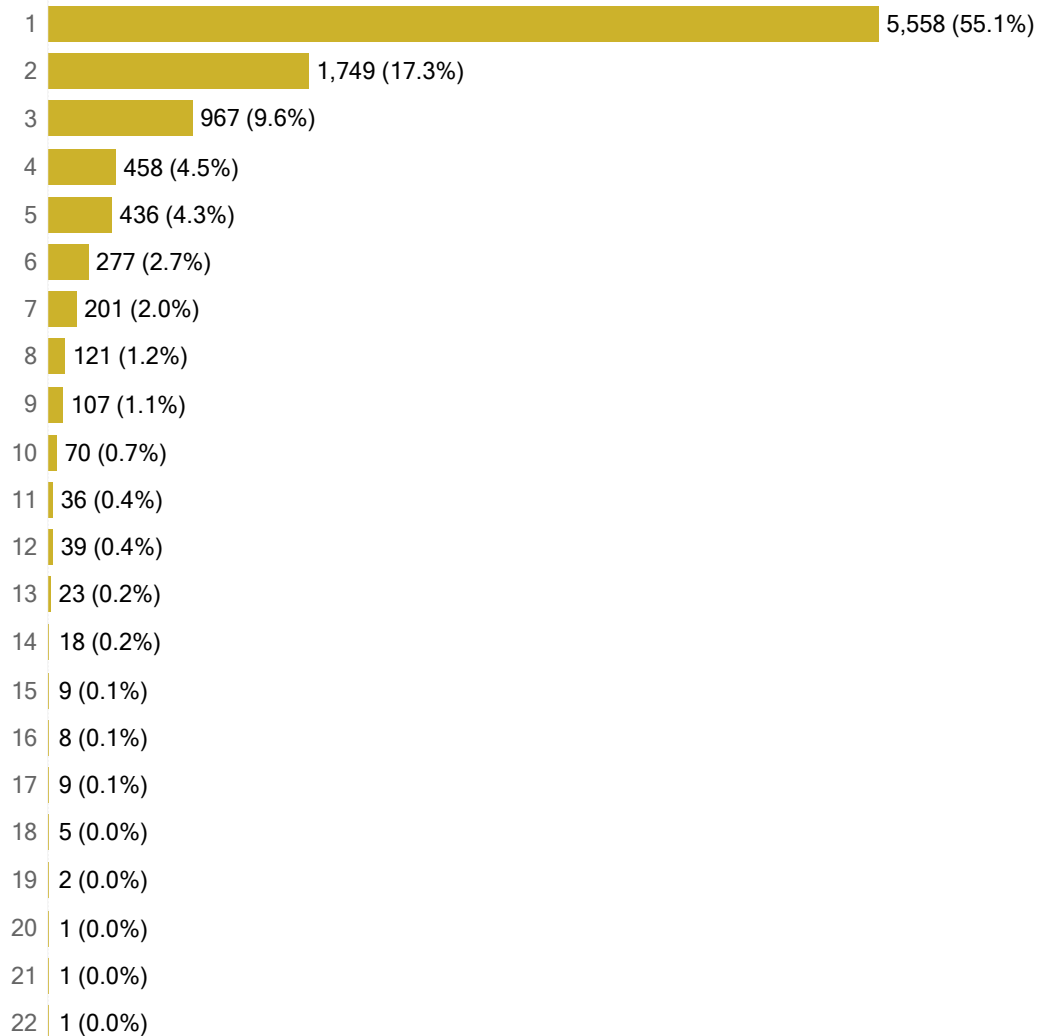


When are students most likely to receive their first 'F'?

Similar to the previous section, students have the highest risk of receiving their first 'F' during their first three to four terms of attendance. Of the 21,599 students in the study, 10,096 (46.7%) received at least one failing grade. Of the students who received at least one 'F', more than half (55.8%, n=5,558) receiving that first failing grade in the first term they attended SCC and nearly three-fourths (72.4%) receiving their first 'F' in the first two quarters of attendance.

Figure 7

Term sequence in which students received their first 'F' | Number (and percent) of those who received an 'F'



Outcomes when students receive an 'F'

Figure 8 shows the graduation/retention status for students in the term that they receive their first 'F'. As shown, more than half of students are retained after the first term in which they receive an 'F' (52.7%) and approximately one-quarter will drop out (23.3%) or transfer out of SCC.

Figure 8

Graduation/retention status at end of term when students received their first 'F'

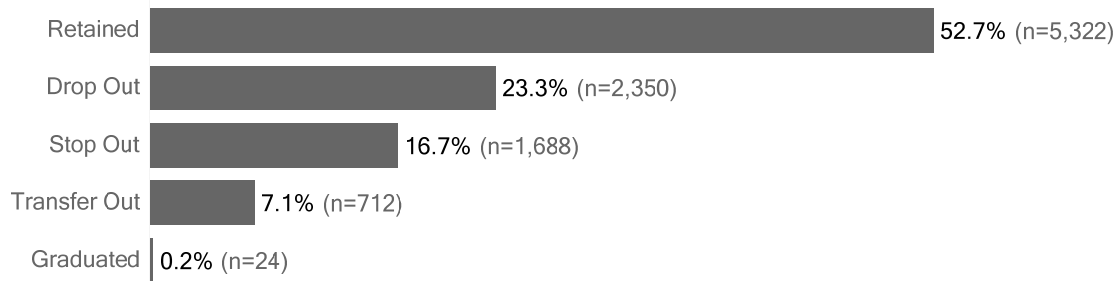
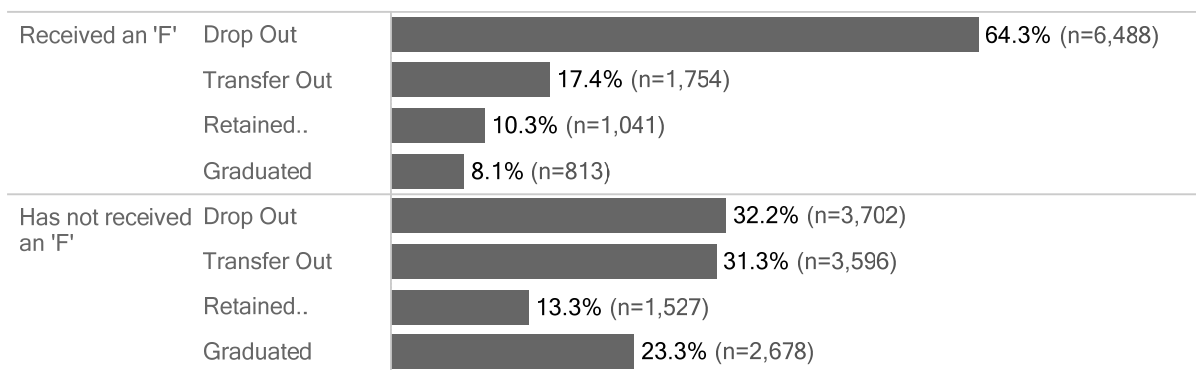


Figure 9 shows the graduation/retention status for all students after the most recent term in which they enrolled based on whether they ever received a failing grade. Students who received an 'F' during their time at SCC were twice as likely to have dropped out in their most recent term compared to those who never received a failing grade (64.3% and 32.2% respectively) and three times *less* likely for that term to have resulted in graduation (8.1% and 23.3% respectively).

Figure 9

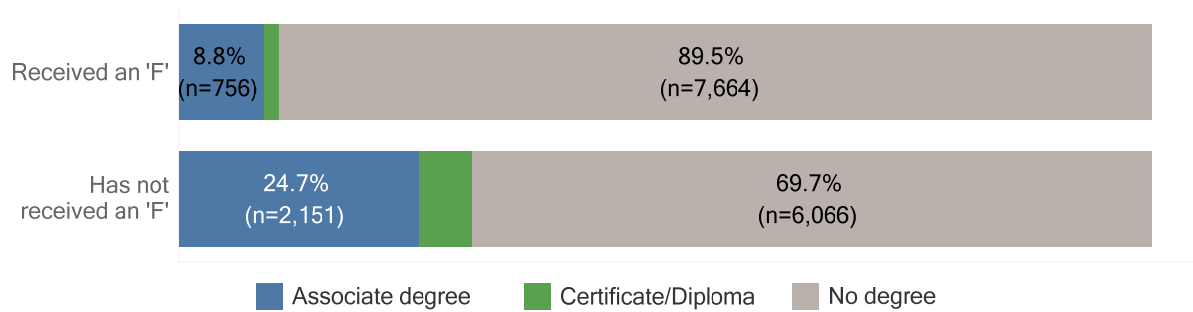
Graduation/retention status at end of most recent term enrolled | Received an 'F' or not



As shown in Figure 10, students who received a failing grade during their time at SCC are much less likely to complete their program of study and earn a degree from SCC. Among students who received an 'F', only 8.8% went on to complete an associate degree and an additional 1.7% completed a certificate or diploma. This compares to 24.7% and 5.6% of students who did *not* receive an 'F'. Please note that students with a starting cohort year of 2016-17 have been excluded from these analyses since not enough time has elapsed for them to complete a program of study.

Figure 10

Highest degree completed at SCC based on whether students received an 'F'



Outcomes when students receive an 'F' in their first term

As shown in Figure 11, students who failed a course during their first term of attendance on average were enrolled at SCC for fewer terms (3.1 terms) than those students who did not receive a failing grade during their first term (4.8 terms).

Figure 11

Average number of terms attended based on whether students received an 'F' in their first term or not



Figure 12 shows the percent (and number) of students who were enrolled for a specific number of terms, separated by those who did and did not receive a failing grade in their first term. As shown, more than one-third of students who failed in their first term were enrolled for just that single term (35.1%). Another 24.4% of those students enrolled for just two terms. Among students who did not receive an 'F' in their first term, only 19.6% were enrolled for just a single term.

Figure 12

Number of terms attended based on whether students received an 'F' in their first term

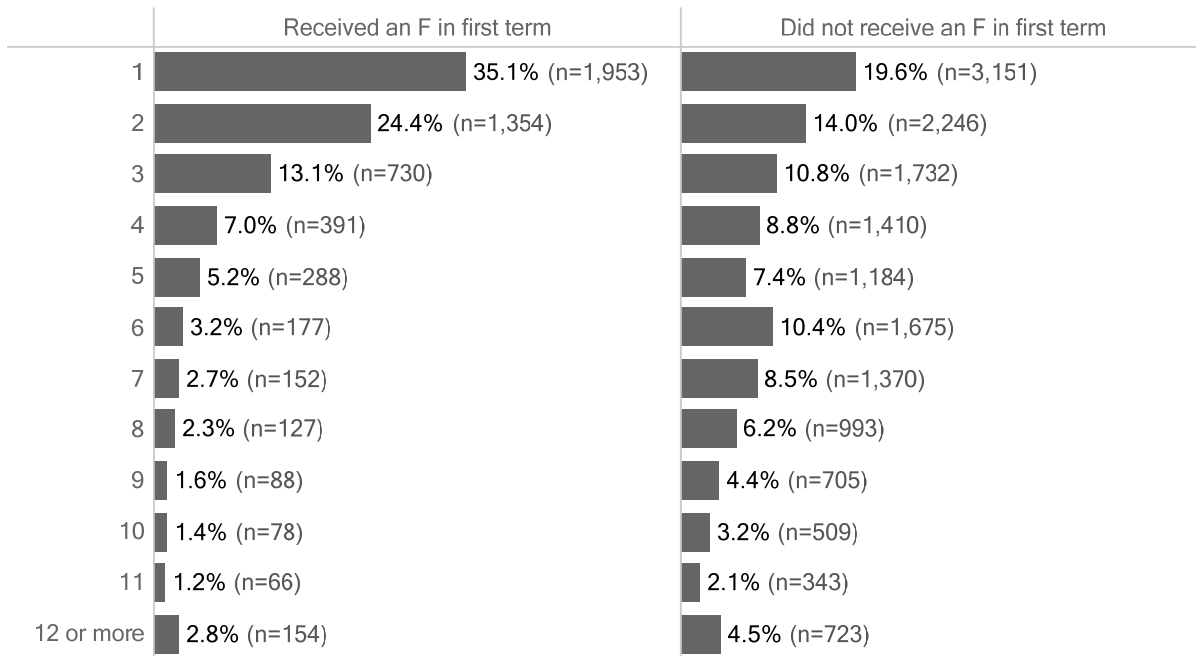


Figure 13 shows the graduation/retention status for all students *after their first term* at SCC based on whether they received an 'F' during that term or not. Students who received an 'F' during their first term were less likely to continue for a second term compared to those who never received a failing grade (49.3% and 70% respectively) and three times more likely to drop out (27.2% and 8.5% respectively).

Figure 13

Graduation/retention status at end of their first term | Received 'F' in first term or not

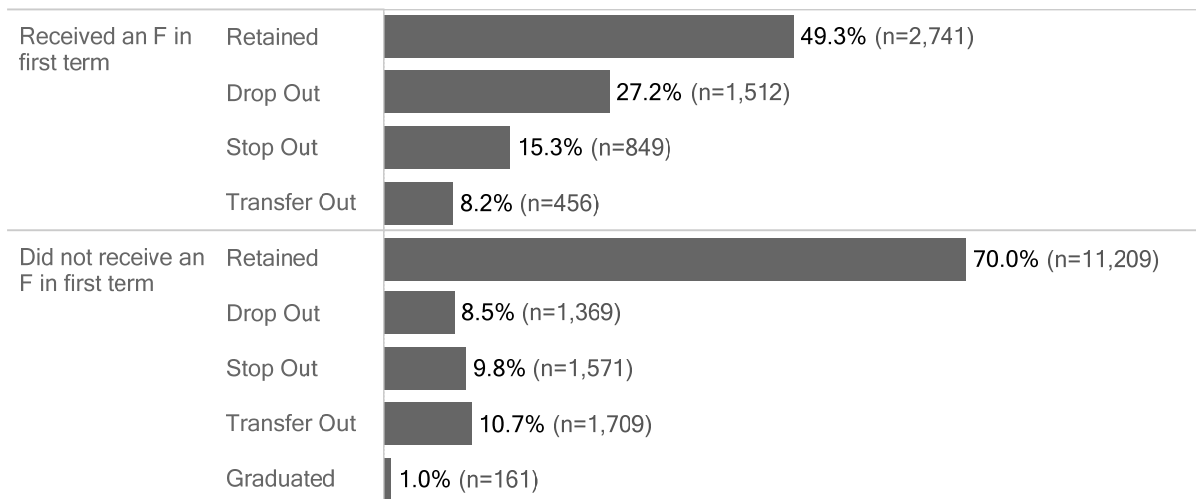


Figure 14 shows that students who receive a failing grade in their first term are much less likely to earn an award from SCC than those who receive a failing grade later in their college career. Among all students who receive a failing grade, 11.5% will eventually complete an award. Among those who receive a failing grade in their first term, only 4.9% will do so. As noted in the earlier section, students with a starting cohort year of 2016-17 have been excluded from these analyses.

Figure 14

Highest degree completed at SCC based on when students received an 'F'

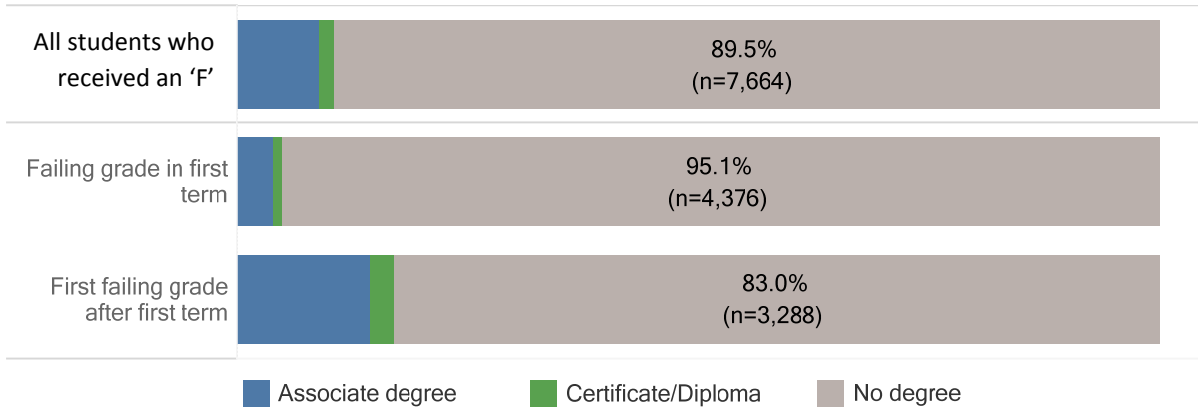
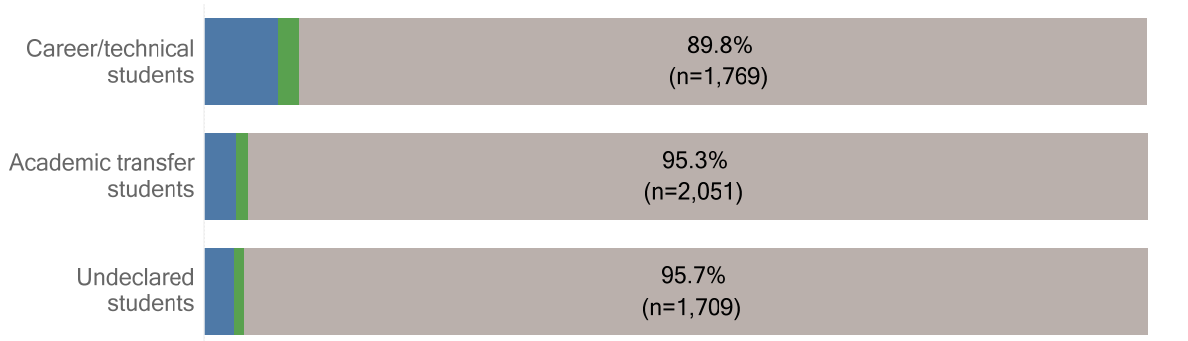


Figure 15 shows that Career/Technical students who received a failing grade during their first term are more likely to complete their program than are Academic Transfer and Undeclared, though their risk of not completing is still very high.

Figure 15

Highest degree completed at SCC among students who received an 'F' in their first term by program type



Summary

The data examined in this report revealed the following patterns:

- Just under half of undergraduate students received at least one failing grade during their time at SCC.
- Students were most likely to receive a failing grade during their first three terms that they attend SCC with the risk being highest during their first term.
- Undeclared students had the highest failure rates; career/technical students had lowest.
- The highest proportion of failing grades was in Developmental courses. This pattern was consistent across all student groups.
- Students who receive at least one failing grade will attend SCC for fewer terms and are less likely to complete a program of study at SCC. This pattern is particularly true if students receive a failing grade during their first term at SCC.