



Students Recommended for Support

The purpose of this report is to examine success metrics among first-time, full-time (FTFT) undergraduate students recommended for support (SRS). Students are identified as SRS during the holistic review process for a number of reasons, including (but not limited to): 1) low math test scores in high school; 2) struggling in math during high school; 3) struggling with composition or writing; 4) low composition/writing test scores; and/or 5) a low high school GPA. First year cumulative GPA, first year academic probation, and first spring, second fall, and third fall persistence are evaluated by support program engagement as well as SRS reason.

Executive Summary

The proportion of SRS students who participate in support programming during their first year has more than doubled between FA16 and FA19. This report defines 'SRS participants' as an SRS student who participates in the Community for Excellence (C4E), the Academic Advancement Center (AAC), Key Learning Communities (Key), academic coaching, Student Athlete Support Services, or a combination of these programs. As a whole, SRS students who participate in these programs persist to their first spring at a slightly higher rate, persist to second and third fall at slightly lower rates, with a slightly higher first year academic probation rate and similar cumulative GPA compared to non-participating SRS students. Students who participate in two or more programs, including students with multiple structurally underserved attributes, are more successful compared to students who do not participate, or participate in just one program.

- Students who participate in academic coaching have a similar first spring persistence rate and lower second and third fall persistence rates compared to SRS students overall. Cumulative first year GPA is similar, while first year academic probation is higher. However, students who meet regularly with their academic coach are more successful compared to students who meet occasionally or have no contact with their coach; this group is more likely to be structurally underserved. Compared to other support programs, these students have the highest first spring persistence rate, and persist to second fall at a higher rate compared to Key and C4E participants. They also have the lowest first year academic probation rate, and the highest first year cumulative GPA compared to all other programs.
- SRS students who participate in Key Communities have similar success outcomes compared to SRS students overall, with a slightly higher first spring persistence rate (2 PP) and lower probation rate (2 PP).
- SRS C4E participants persist to their first spring and second and third fall at slightly higher rates compared to SRS students overall (2-3 PP); however, their average academic probation rate is higher (5 PP) and average first year GPA is lower.
- SRS student athletes are more successful across all outcomes compared to SRS students overall.
- Among SRS students who struggle in math and/or have low math test scores in high school, those who successfully complete a math course (Math 101 in particular) during their first year are much more successful compared to students who do not enroll in any math courses.
- Among SRS students who struggle with composition or writing and/or have low test scores in these areas in high school, those who successfully complete a composition course (CO 130 or CO 150) during their first year are much more successful in terms of persistence outcomes compared to those students who do not enroll in these courses.

- Students with one or more structurally underserved attributes are more likely to be supported by multiple programs. In general, success outcomes vary by attribute group and support status, but students who are served by more than one program tend to be more successful compared to students who are served by one program or do not participate in any programming. This finding holds for students with multiple attributes.

Methodology

All SRS students from the FA16-FA19 FTFT cohorts (N=2,552) are included. Observed success metrics are reported by individual support program participation as well as by program combination for students who participate in two or more programs, as well as by SRS reason. Success outcomes include first year probation rate (one or both terms), first year cumulative GPA, and first spring, second fall, and third fall persistence; outcomes by programs and SRS reason are compared to the SRS overall rates.

SRS Characteristics

SRS students are more likely to be structurally underserved (racially minoritized, first gen, and/or Pell recipients) with a lower HS GPA. Table 1 displays SRS demographics compared to CSU overall.

Table 1. Students Recommended for Support and CSU Overall (FA16-FA19 FTFT Cohorts)

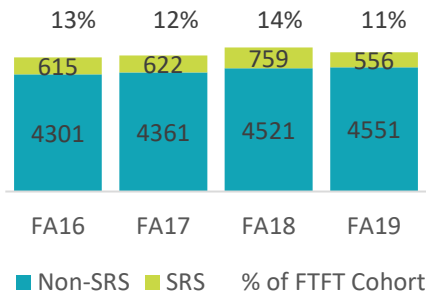
	Hdct	RM	FG	Pell	2+ Attr*	NR	Female	STEM	Avg HS GPA
SRS Overall	2552	41.4%	36.5%	32.8%	33.8%	25.7%	54.3%	23.5%	3.25
CSU Overall	20286	27.5%	22.9%	21.3%	19.2%	34.5%	55.2%	40.6%	3.65

*Two or more structurally underserved attributes: first generation, racially minoritized, and/or Pell recipient

SRS students are less likely to be nonresidents (9 PP) and STEM (17 PP), with a similar proportion of females. Average HS GPA is lower by 0.40 grade points. SRS students are 14 percentage points (PP) more likely to be racially minoritized, 14 PP more likely to be first gen, and 12 PP more likely to be Pell recipients compared to CSU students overall; these proportions are similar over time. One in three SRS students have two or more structurally underserved attributes, compared to 1 in 5 in the general student population. This proportion is reflective of the populations that C4E, Key, and AAC serve. About 60% of multiple attribute SRS students participate in one or more of these programs in FA16, FA17 and FA18; this proportion grows to 94% for the FA19 cohort.

Figure 1 displays the headcount and proportion of first-time, full-time SRS students as part of each fall cohort.

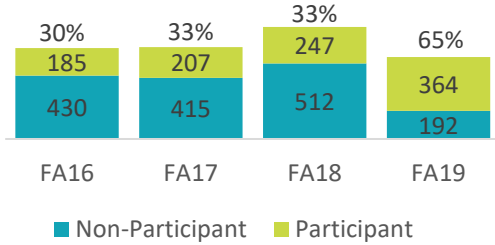
Fig 1. Percent SRS by Cohort Term



The proportion of each cohort who are SRS is relatively consistent over the past four cohort terms. The number of SRS students increases in FA18 by about 20% compared to the previous two years; this number drops in FA19 by 37% compared to FA18, despite a similar overall cohort size. About 6.5% (N=167) of SRS students who start between FA16 and FA19 are not included in a FTFT fall cohort, and therefore not represented in this analysis. This averages out to about 30 students per fall term; the majority do not persist to the end of their first term or are spring starts.

Figure 2 displays the headcount and proportion of SRS students who participate in one or more of the specified programs.

Fig 2. SRS Participation by Cohort Term



The proportion of SRS students who participate increases by about 3 PP from FA16 to FA17, remains stable in FA18, and increases by more than 30 PP in FA19. This is due to an increase in the number of students served by the academic coaching program (i.e., 57 students in FA18 and 200 in FA19).

Success by Support Program

This section focuses on five programs that provide support to SRS students: academic coaching, the Academic Advancement Center (AAC), Key Communities (Key), C4E (Community for Excellence), and Student Athlete Support Services. It is possible that students are supported by other campus services or programming (i.e., Fostering Success); only the aforementioned programs are detailed in this report. Program success outcomes by cohort term are available in the [Appendix](#).

Table 2 displays SRS demographics by program; please note that programs are not mutually exclusive and students can be represented across multiple programs. Program demographics by cohort term can be viewed in the [Appendix](#).

Table 2. SRS Demographics by Program Participation (FA16-FA19 FTFT Cohorts)

Program	Hdct	RM	FG	Pell	2+ Attr	NR	Female	STEM	HS GPA	2+ Prog
Non-Participants	1549	26.7%	25.0%	22.1%	18.4%	28.8%	52.4%	22.5%	3.19	-
Participants Overall	1003	64.2%	54.1%	49.4%	57.6%	21.0%	57.4%	25.0%	3.34	34.3%
Academic Coaching	257	36.6%	30.4%	28.8%	30.0%	37.4%	56.8%	30.4%	3.23	0.78%
AAC	57	77.2%	96.5%	75.4%	87.7%	8.8%	78.9%	28.1%	3.42	77.2%
Key	583	72.2%	61.6%	55.9%	65.7%	16.8%	56.1%	22.3%	3.37	57.3%
C4E	432	88.9%	76.2%	70.1%	85.2%	3.9%	62.3%	25.7%	3.46	71.3%
Athlete Support Services	47	61.7%	34.0%	36.2%	40.4%	55.3%	27.7%	10.6%	3.17	61.7%
SRS Overall	2552	41.4%	36.5%	32.8%	33.8%	25.7%	54.3%	23.5%	3.25	12.5%
CSU Overall	20286	27.5%	22.9%	21.3%	19.2%	34.5%	55.2%	40.6%	3.65	-

About 40% of SRS students engage with one of the five programs; about 1 in 3 participants engage in more than one program. As a whole, participants are much more likely to hold two or more structurally underserved identities compared to SRS non-participants, with more than twice the proportion of racially minoritized, first gen, and Pell recipients. They are 8 PP less likely to be residents, 5 PP more likely to be female, 2 PP more likely to be STEM, with a higher average HS GPA compared to non-participants. Compared to SRS students overall, participants are also much more likely to hold multiple attributes (24 PP) and less likely to be nonresidents (5 PP). Proportion of STEM majors and females are similar. Average HS GPA is higher (.10 grade points).

SRS students who participate in academic coaching are less likely to be structurally underserved compared to SRS students overall, with a smaller representation of racially minoritized (5 PP), first gen (6 PP), and Pell recipients (4 PP). They also have the lowest proportion of students with two or more structurally underserved

attributes among SRS groups. Female representation is slightly higher (2.5 PP) as is the proportion of nonresidents (12 PP) and STEM majors (7 PP). This group has a similar average HS GPA compared to SRS students overall. As this program is designed to serve students who do not meet the requirements for other support programs, very few students participate in other support programming.

Table 3 displays demographics among students who are selected to participate in academic coaching by level of interaction with their coach compared to SRS students overall.

Table 3. Demographics by Academic Coaching Level of Interaction (FA19 FTFT Cohort, SRS Only)

	Hdct	Pct	RM	FG	Pell	2+ Attr	NR	Female	STEM	HS GPA
FA19 SRS Overall	556	10.9%	40.3%	34.9%	35.3%	33.3%	30.4%	57.7%	24.5%	3.30
Academic Coaching	201	36.2%	37.3%	32.3%	31.3%	32.8%	35.3%	54.2%	23.4%	3.24
Met Regularly	43	21.4%	46.5%	46.5%	41.9%	46.5%	39.5%	65.1%	18.6%	3.25
Contact	40	19.9%	37.5%	30.0%	30.0%	32.5%	40.0%	60.0%	37.5%	3.27
No Communication	118	58.7%	33.9%	28.0%	28.0%	28.0%	32.2%	48.3%	20.3%	3.22

Students who meet regularly with their coach comprise just over 21% of academic coaching students, students who have occasional contact comprise about 20%, and about 59% of students have no communication. Students who meet regularly are much more likely to be racially minoritized, first gen, and Pell recipients compared to the other coaching groups, and are more likely to hold two or more structurally underserved identities. This is also true compared to SRS students overall. Students in the contact group are more likely to hold those identities compared to students with no communication, although the gap is much smaller, in comparison. About 40% of those who meet regularly and have contact are nonresidents, compared to about 30% of those without communication. Female representation is highest in the regular meeting group as well (65%), followed by the contact group (60%), and the no communication group (48%). Students with contact are the most likely to be STEM majors (38%); among the other groups, STEM representation is about 20%. Average high school GPA is also highest among the contact group (3.27), followed by the regular meeting group (3.25), and the no communication group (3.22).

Table 4 displays success outcomes by level of participation in academic coaching compared to SRS students overall.

Table 4. Success Metrics by Academic Coaching Level of Interaction (FA19 FTFT Cohort, SRS Only)

	Hdct	Pct	1st Spring Persist %	2nd Fall Persist %	1st Yr Probation %	1st Yr EOT Cum GPA
FA19 SRS Overall	556	10.9%	91.7%	75.7%	22.3%	2.76
Academic Coaching	201	36.2%	93.5%	76.6%	21.9%	2.76
Met Regularly	43	21.4%	97.7%	81.4%	11.6%	2.92
Contact	40	19.9%	92.5%	72.5%	22.5%	2.82
No Communication	118	58.7%	92.4%	76.3%	25.4%	2.68

Students who meet regularly with their coach persist to first spring (98%) and second fall (81%) at higher rates compared to the other groups by about 5 PP. Their first year academic probation rate is much lower as well, by more than 10 PP. First year cumulative GPA is also noticeably higher and exceeds the contact group by a tenth of a point, and the no communication group by almost one-quarter of a point. Success outcomes for this group are also higher compared to SRS students overall. The contact and no communication groups have roughly similar persistence and probation outcomes.

AAC students are significantly more likely to be structurally underserved; almost 88% have two or more underserved identities compared to SRS students and CSU students overall. They are more likely than students in any other support program to participate in multiple programs. Female representation is also notably higher compared to other groups, including SRS students and CSU overall. Over 90% are residents, with a larger proportion of STEM majors compared to SRS overall. Their average HS GPA is about two-tenths of a point higher compared to the SRS average, and about one-quarter of a point lower compared to the University average.

About 2 in 3 Key students have two or more structurally underserved identities, with significantly higher representation of racially minoritized, first gen, and Pell students compared to SRS students and CSU overall. Female representation is similar compared to both groups; this group is less likely to be nonresidents. The proportion of STEM majors is similar to SRS overall; average HS GPA is higher compared to the SRS average (.12 grade points), and lower than the CSU average (.28 grade points). Over half of Key students participate in at least one other program.

The majority SRS C4E participants hold two or more underserved identities (85%) and are more than twice as likely to be racially minoritized, first generation, and Pell recipients compared to SRS students overall, and more than three times as likely compared to the University overall. These students are primarily in-state residents and more likely to be female (7-8 PP) relative to both comparison groups. SRS C4E students have a slightly larger representation of STEM majors (3 PP) and a higher average HS GPA compared to SRS students overall, with lower STEM representation (15 PP) and HS GPA (0.20) compared to the overall CSU average. Seven in ten C4E students participate in at least one other program.

SRS student athletes are the smallest program (n=47) of those highlighted in this report; 62% of student athletes are also served by at least one additional program. About 40% of SRS student athletes have two or more underserved identities, which is almost 7 PP higher than the SRS average, and about 20 PP higher than CSU overall. They are about 20 PP more likely to be racially minoritized compared to SRS students overall, with a slightly lower proportion of first gen students (3 PP) and a slightly higher proportion of Pell recipients (3 PP). This group has the largest proportion of nonresidents at 55%, which is twice the proportion for SRS students overall. Just over one-quarter are female, which is half the SRS rate; and STEM representation is much lower (13 PP). Their HS GPA is the lowest of any group.

Students who do not participate in any of the listed programs are less likely to be structurally underserved compared to SRS students overall (11-15 PP per attribute), and more closely resemble overall CSU proportions for these attributes. About 29% are nonresidents, which is slightly more than SRS students (3 PP) but less than the CSU average (6 PP). Female representation is lower compared to both groups (2-3 PP). STEM representation is similar to SRS and about half of the CSU average; average HS GPA is lower compared to the SRS and CSU overall averages.

Table 5 displays demographics by the specific combination of programs students participated in during their first year.

Table 5. SRS Student Demographics by Number of Programs (FA16-FA19 FTFT Cohorts)

Program	Hdct	Pct	RM	FG	Pell	2+ Attr	NR	Female	STEM	HS GPA
SRS Non-Participants	1549	61.4%	26.7%	25.0%	22.1%	18.4%	28.8%	52.4%	22.5%	3.19
SRS 1 Program	659	100.0%	51.7%	41.9%	38.1%	43.2%	27.3%	56.4%	25.6%	3.28
Academic Coaching	255	38.7%	36.5%	30.6%	29.0%	30.2%	37.3%	57.3%	30.2%	3.24
AAC	13	2.0%	61.5%	100.0%	46.2%	76.9%	23.1%	92.3%	38.5%	3.40
Key	249	37.8%	50.6%	40.2%	35.3%	39.0%	27.3%	51.4%	20.1%	3.26
C4E	124	18.8%	83.9%	66.1%	62.9%	76.6%	6.5%	64.5%	28.2%	3.43
Athlete Support Services	18	2.7%	55.6%	16.7%	27.8%	33.3%	33.3%	33.3%	11.1%	3.11
SRS 2+ Programs*	344	100.0%	88.1%	77.6%	70.9%	85.2%	9.0%	59.3%	23.8%	3.44
AAC and Key	9	2.6%	66.7%	100.0%	88.9%	88.9%	22.2%	100.0%	22.2%	3.47
AAC and C4E	8	2.3%	87.5%	100.0%	75.0%	87.5%	0.0%	62.5%	12.5%	3.46
Key and C4E	271	78.8%	91.5%	78.2%	72.0%	88.6%	3.3%	60.5%	25.1%	3.47
Key and Athlete	25	7.3%	64.0%	44.0%	44.0%	48.0%	76.0%	24.0%	12.0%	3.17
Key, Athlete, C4E	3	0.9%	66.7%	66.7%	33.3%	33.3%	0.0%	33.3%	0.0%	3.63
Key, AAC, and C4E	26	7.6%	88.5%	96.2%	88.5%	96.2%	0.0%	73.1%	26.9%	3.43
SRS Overall	2552	100.0%	41.4%	36.5%	32.8%	33.8%	25.7%	54.3%	23.5%	3.25

*Note: Programs with headcounts <3 are not displayed; the sum of program participants will not equal the total '2+ Programs Overall' count.

Two-thirds of SRS participants engage with just one program during their first year on campus. The majority participate in academic coaching (39%), Key (38%), and C4E (19%); 13 students participate in AAC (2%), and 18 participate in Student Athlete Support Services (3%). They are twice as likely to hold two or more underserved attributes compared to SRS non-participants, and 10 PP more likely compared to SRS students overall. Nonresident, female, and STEM representation is similar to non-participants and SRS overall; HS GPA is higher.

One-third of SRS participants engage with two or more programs during their first year. The majority participate in Key and C4E (79%), about 8% participate in AAC, Key, and C4E, 7% in Key and Student Athlete Support Services, and the remaining 6% participate in AAC and Key, AAC and C4E, or Key, C4E, and Student Athlete Support Services. These students are much more likely to be structurally underserved compared to those students who participate in one program or none at all, with 85% holding two or more structurally underserved identities. Almost all (91%) are residents, with a larger representation of female students and a higher average HS GPA compared to students who participate in one support program and SRS students overall.

Table 6 displays success metrics by overall program participation. Percentage point and grade point differences between each program/program combination and SRS overall are also displayed.

Table 6. Success Metrics by Overall Program Participation (FA16-FA19 FTFT Cohorts)

	Hdct	1st Spring Persist %	2nd Fall Persist %	3rd Fall Persist %	1st Yr Probation %	1st Yr EOT Cum GPA
SRS Non-Participants	1549	90.9%	78.7%	67.2%	27.0%	2.62
Academic Coaching Overall	257	91.1%	73.9%	49.1%	32.3%	2.63
vs. SRS Overall		-0.5	-4.2	-17.2	4.4	0.02
SRS AAC Overall	57	94.7%	87.7%	80.0%	15.8%	2.86
vs. SRS Overall		3.2	9.6	13.7	-12.1	0.25
SRS Key Overall	583	93.5%	79.1%	67.4%	25.9%	2.64
vs. SRS Overall		1.9	0.9	1.1	-2.0	0.03
SRS C4E Overall	432	94.7%	80.3%	68.0%	32.4%	2.51
vs. SRS Overall		3.1	2.2	1.7	4.5	-0.11
Athletes	47	95.7%	87.2%	74.3%	23.4%	2.71
vs. SRS Overall		4.2	9.1	8.0	-4.5	0.09
SRS Overall	2552	91.5%	78.1%	66.3%	27.9%	2.62

Academic coaching students persist to second and third fall at lower rates compared to other programs, SRS non-participants, and SRS overall. About 1 in 3 students are on academic probation their first year, and first year cumulative GPA is similar to that of both comparison groups. However, it is important to note that success metrics for the FA19 cohort are significantly better compared to FA18 (see [Appendix](#) for outcomes by cohort term).

SRS AAC students persist at higher rates and earn a higher first year cumulative GPA compared to other individual programs, SRS non-participants, and SRS students overall. AAC students have the lowest academic probation rate across individual programs at 16%, which is 12 PP lower compared to SRS overall.

SRS Key participants persist at a 1-2 PP higher rate compared to SRS students across terms, with a lower first year academic probation rate (2 PP) and a similar GPA. Second and third fall persistence rates are roughly equivalent to SRS non-participants.

SRS C4E participants persist to their first spring at a higher rate compared to SRS overall (3 PP), with slightly higher second and third fall persistence rates (2 PP). They are more likely to be on academic probation their first year (5 PP), and earn a lower cumulative GPA (about one-tenth of a point). Compared to SRS non-participants, C4E students have slightly higher persistence rates, a higher probation rate (5 PP), and a lower GPA.

SRS student athletes have strong outcomes compared to other programs as well as SRS students overall and SRS non-participants. After AAC participants, student athletes have the next highest overall outcomes compared to other support programs.

Table 7 displays success metrics by number of support programs.

Table 7. Success Metrics by Number of Programs (FA16-FA19 FTFT Cohorts)

	Hdct	1st Spring Persist %	2nd Fall Persist %	3rd Fall Persist %	1st Yr Probation %	1st Yr EOT Cum GPA
SRS Non-Participants	1549	90.9%	78.7%	67.2%	27.0%	2.62
1 Program Overall	659	90.6%	73.9%	57.9%	29.7%	2.61
Academic Coaching	255	91.0%	73.7%	48.2%	32.2%	2.64
vs. SRS Overall		-0.6	-4.4	-18.1	4.3	0.02
SRS AAC	13	84.6%	76.9%	66.7%	15.4%	2.88
vs. SRS Overall		-6.9	-1.2	0.4	-12.5	0.27
SRS Key	249	90.0%	73.1%	60.2%	22.9%	2.71
vs. SRS Overall		-1.6	-5.0	-6.1	-5.0	0.09
SRS C4E	124	91.1%	74.2%	58.7%	38.7%	2.37
vs. SRS Overall		-0.4	-3.9	-7.6	10.8	-0.25
SRS Athletes	18	94.4%	83.3%	56.3%	38.9%	2.47
vs. SRS Overall		2.9	5.2	-10.0	11.0	-0.14
2+ Programs Overall*	344	96.2%	83.7%	72.8%	27.9%	2.60
AAC & Key	9	100.0%	100.0%	75.0%	0.0%	3.10
vs. SRS Overall		8.5	21.9	8.7	-27.9	0.49
AAC & C4E	8	100.0%	87.5%	100.0%	12.5%	2.77
vs. SRS Overall		8.5	9.4	33.7	-15.4	0.16
Key & C4E	271	95.9%	81.9%	70.2%	31.4%	2.53
vs. SRS Overall		4.4	3.8	3.9	3.5	-0.09
Key & Athlete	25	96.0%	88.0%	87.5%	12.0%	2.86
vs. SRS Overall		4.5	9.9	21.2	-15.9	0.24
Key, Athlete, & C4E	3	100.0%	100.0%	100.0%	33.3%	2.74
vs. SRS Overall		8.5	21.9	33.7	5.5	0.12
AAC & Key & C4E	26	96%	88%	79%	19%	2.87
vs. SRS Overall		4.6	10.3	12.7	-8.6	0.25
SRS Overall	2552	91.5%	78.1%	66.3%	27.9%	2.62

*Note: Programs with headcounts <3 are not displayed; the sum of program participants will not equal the total '2+ Programs Overall' count.

SRS students who engage in one program during their first year persist to their first spring at a similar rate compared to SRS students overall, persist to second and third fall at lower rates (4 PP and 8 PP, respectively), with a slightly higher first year academic probation rate (2 PP) and similar first year cumulative GPA (2.63). Compared to SRS non-participants, SRS students have a similar first spring persistence rate, persist to second and third fall at a lower rate, with a slightly higher probation rate and similar first year cumulative GPA.

SRS students who participate in academic coaching persist to first spring at a similar rate compared to SRS overall, but persist to second fall at a 4 PP lower rate, and to third fall at an 18 PP lower rate. Academic probation is about 4 PP higher; first year GPA is similar.

SRS students who only participate in AAC their first year persist to their first spring at a 7 PP lower rate compared to SRS students overall, with similar second and third fall persistence rates. Academic probation is much lower (13 PP); GPA is much higher (0.27 grade points).

SRS students who only participate in Key their first year have a similar first spring persistence rate, and persist to second and third fall at a 4 PP lower rate compared to SRS students overall. Academic probation is lower (6 PP) and GPA is higher by about one-tenth of a grade point.

SRS students who only participate in C4E have a similar spring persistence rate, persist to second fall at a 4 PP lower rate, and persist to their third fall at an 8 PP lower rate compared to SRS overall. They are more likely to be on academic probation (11 PP) and earn a lower GPA (0.25 grade points).

SRS student athletes persist to their first spring and second fall at a higher rate compared to SRS students overall; this group is the only single program with positive second fall persistence gaps. However, third fall persistence is about 10 PP lower, first year academic probation is 11 PP higher, and first year GPA is lower.

Overall, students who participate in two or more programs have stronger persistence outcomes, with a similar probation rate and slightly lower cumulative GPA compared to students who participate in one program and SRS students overall.

All students who participate in AAC and Key (N=9) persist to their first spring and second fall, and persist to third spring at 75%. None of these students are on academic probation during their first year, and they earn a much higher GPA (3.10) compared to SRS students in any other program and SRS overall.

Students who participate in AAC and C4E (N=8) have very high persistence rates; only one student did not persist to second fall. This group also has the lowest academic probation rate (12.5%) across all programs, both individual and combined. Average first year GPA exceeds the overall SRS average by nearly two-tenths of a point.

Students in Key and C4E (N=271) are about 4 PP more likely to persist to each of the specified terms compared to the SRS overall rates; however, they are more likely to be on academic probation (4 PP) and earn a lower GPA by about one-tenth of a point.

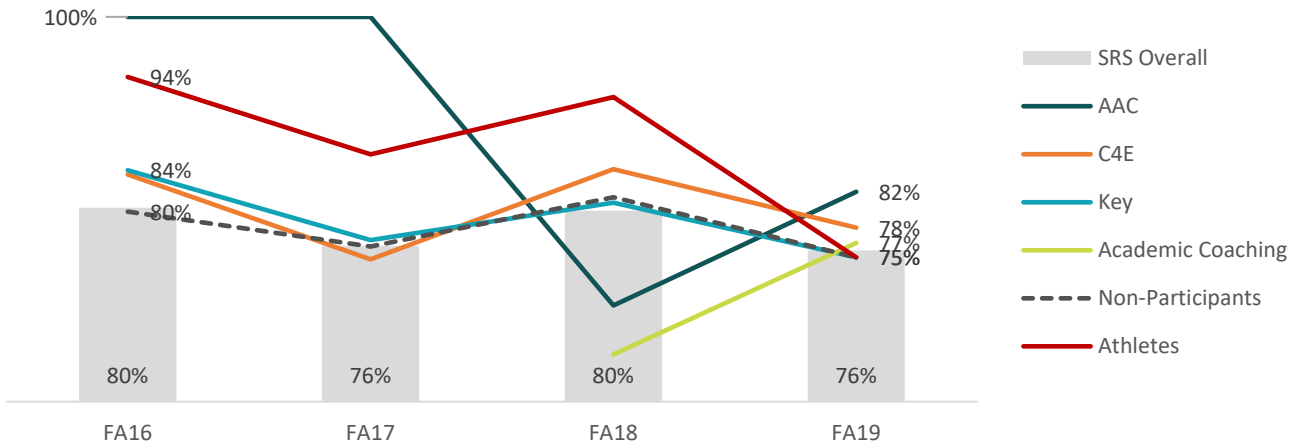
Student athletes who participate in Key (N=25) also have higher persistence outcomes compared to SRS students overall, a much lower first year probation rate (16 PP), and a higher first year GPA by nearly one-quarter of a point.

Student athletes who participate in Key and C4E (N=3) all persist to their first spring, second fall, and third fall; average GPA is above the SRS average by more than one-tenth of a point.

Students in AAC, Key, and C4E (N=26) have strong persistence outcomes across terms, persisting to their first spring at a 5 PP higher rate, second fall at a 10 PP higher rate, and to third spring at a 13 PP higher rate compared to SRS overall. First year academic probation is about 20%, which is 9 PP lower than the overall SRS average, and first year GPA (2.87) is also higher by one-quarter of a point.

Figure 3 displays second fall persistence over time by overall program participation; students are duplicated across programs.

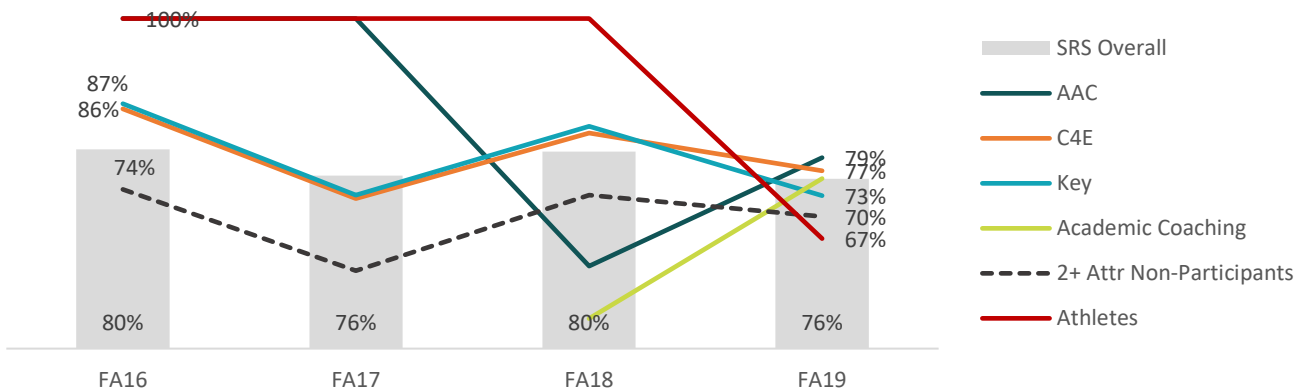
Fig 3. Second Fall Persistence by Program Participation and Cohort Term



C4E, Key, athletes, and SRS non-participants follow a similar trajectory across cohorts, in that the FA17 cohort rates drop compared to FA16, increase for FA18, and decrease for the FA19 cohort. Persistence rates for Key are similar to non-participants for the FA17-FA19 cohorts; rates for C4E exceed the non-participant rate for all cohorts except for FA17. Rates for AAC are stable across FA16 and FA17, drop significantly for the FA18 cohort, and increase for the FA19 cohort; however, these rates are volatile given the small headcounts by cohort term. For example, there are only 10 AAC students in the FA18 cohort and three did not persist, so if an additional one or two students persist from that cohort, the rate would remain stable (see [Appendix Table 3](#)). Student athletes have strong persistence outcomes for the FA16-FA18 cohorts; persistence for the FA19 cohort dropped to about 75%. Like AAC, it should be noted that headcounts are very small by individual cohort for student athletes. FA18 SRS students who participate in academic coaching have the lowest persistence rate, but this rate increases by more than 10 PP for the FA19 cohort.

Figure 4 displays second fall persistence rates by cohort for students with two or more structurally underserved attributes compared to the overall SRS rates.

Fig 4. Second Fall Persistence for 2+ Attribute Students by Program Participation and Cohort Term



In general, SRS students with two or more attributes closely mirror the persistence patterns observed across programs in Figure 2. The difference in persistence rates between SRS participants and non-participants is much larger for students with multiple attributes compared to SRS students overall across programs. Both SRS athletes and AAC have very small headcounts by individual term, making rates volatile.

Success by SRS Reason

As previously mentioned, students are identified as SRS during the holistic review process for a number of reasons, including (but not limited to): 1) low math test scores in high school; 2) struggling in math during high school; 3) struggling with composition or writing; 4) low composition/writing test scores; and/or 5) a low high school GPA. This section discusses success outcomes by SRS academic criteria related to math and composition/writing.

Table 8 displays SRS demographics by SRS criteria. Please note that these are not mutually exclusive and are not assigned to all SRS students, thus students may be included in more than one group or may not have a reason.

Table 8. SRS Student Demographics by SRS Criteria (FA16-FA19 FTFT Cohorts)

SRS Reason	Hdct	RM	FG	Pell	2+ Attr	NR	Female	STEM	HS GPA
Struggled with math in HS	271	35.4%	31.0%	24.7%	25.8%	29.2%	55.7%	19.6%	3.14
Low math test scores	1203	47.8%	41.8%	38.7%	40.7%	23.7%	67.3%	24.2%	3.41
Low HS GPA	369	30.6%	22.5%	22.5%	21.1%	30.1%	33.9%	22.2%	2.86
Struggled with comp/writing in HS	70	41.4%	38.6%	32.9%	34.3%	32.9%	37.1%	21.4%	3.09
Low comp/writ test scores	1015	49.0%	42.9%	40.1%	42.5%	22.1%	62.5%	25.5%	3.43
SRS Overall	2552	41.4%	36.5%	32.8%	33.8%	25.7%	54.3%	23.5%	3.25
CSU Overall	20286	27.5%	22.9%	21.3%	19.2%	34.5%	55.2%	40.6%	3.65

By headcount, low math test scores is the most frequent reason why students are flagged as SRS. This group is more likely to be racially minoritized, first gen, and Pell compared to SRS overall, with almost 41% of students holding two or more structurally underserved identities. The proportion of females is 13 PP higher compared to SRS students overall. Almost one-quarter are STEM majors, and their average HS GPA (3.41) is higher than the SRS average by 0.16 grade points.

Low composition/writing test scores is the next most frequent reason for why students are flagged. This group has the highest proportion of structurally underserved identities compared to all other groupings as well as SRS overall; almost 43% hold two or more structurally underserved identities. About 1 in 5 students are nonresidents, 3 in 5 are female, and 1 in 4 are STEM; this group has the highest average HS GPA compared to all other SRS groupings.

Students flagged for a low HS GPA are the least likely to be structurally underserved; in this respect, they more closely resemble CSU overall in terms of RM, FG, and Pell representation. Two-thirds are male (66%), and about 22% are STEM majors.

Among students flagged for struggling with math in high school, roughly one-third are racially minoritized or first gen, while one-quarter are Pell recipients. These proportions are lower compared to SRS students overall; about 1 in 4 hold two or more underserved attributes, compared to 1 in 3 among SRS students overall. About 30% are nonresidents, 56% are female, 19% are STEM; their average HS GPA (3.14) falls below the SRS average.

The least common SRS indicator is struggling with composition/writing in high school. This group closely resembles SRS students overall in terms of RM, FG, and Pell representation. One-third are nonresidents, and almost two-thirds are male. One in 5 are STEM majors; after the low HS GPA group, this group has the next lowest GPA (3.09).

Table 9 displays success outcomes by each SRS academic reason.

Table 9. Success Outcomes by SRS Reason (FA16-FA19 FTFT Cohorts)

	Hdct	1st Spring Persist %	2nd Fall Persist %	3rd Fall Persist %	1st Yr Probation %	1st Yr Cum GPA
Struggled with comp/writing	70	91.4%	75.7%	59.7%	40.0%	2.35
Low comp/writing test scores	1015	91.8%	77.5%	65.9%	26.2%	2.67
Struggled with math	271	90.4%	72.3%	63.4%	34.3%	2.53
Low math test scores	1203	91.8%	77.8%	66.6%	25.1%	2.68
Low HS GPA	369	91.9%	75.9%	63.1%	35.2%	2.41
SRS Overall	2552	91.5%	78.1%	66.3%	27.9%	2.62

Students with low math test scores have the highest overall outcomes compared to other SRS criteria, and similar outcomes compared to SRS students overall. This group persists to second fall at about 78%, third fall at 67%, with the lowest academic probation rate (25%) and highest average GPA (2.68). Students who struggle with math have the lowest second fall persistence rate compared to other criteria groups, persisting to third fall at a 3 PP lower rate compared to SRS students overall, are more likely to be on academic probation (6 PP), and earn a lower GPA.

Students who struggle with composition or writing are relatively similar to the overall SRS average for first spring, with a slightly lower second fall persistence rate (2PP) and the lowest third fall persistence rate (7 PP below SRS overall) across all groups. They also have the highest first year academic probation rate at 40%, and the lowest first year GPA (2.35). Students with low composition/writing test scores persist to their first spring at a similar rate compared to SRS students overall, and persist to second and third fall at a similar rate. Academic probation is slightly lower, and first year GPA is slightly higher. Compared to students who struggle with composition and writing, this group has stronger success outcomes across all indicators.

Students who are flagged for a low HS GPA have a similar first spring persistence rate, persist to their second fall at a 2 PP lower rate, to third fall at a 3 PP lower rate, with a 7 PP higher academic probation rate and a lower GPA compared to SRS overall.

Table 10 combines students with low test scores in composition or writing and/or struggled in these areas, examining success outcomes by enrollment in a composition course (CO 130 or 150) during their first year.

Table 10. Low Test Scores or Struggled w/ Comp/Writing Outcomes by 1st Year Comp Completion (FA16-FA19 FTFT Cohorts)

	Hdct	Pct	1st Spring Persist %	2nd Fall Persist %	3rd Fall Persist %	1st Yr Probation %	1st Yr Cum GPA
YR1 Composition							
Successful	723	90.4%	96.7%	86.2%	75.2%	20.6%	2.77
Unsuccessful	77	9.6%	81.8%	40.3%	17.6%	85.7%	1.34
<i>Successful v. Unsuccessful</i>			14.9	45.9	57.5	-65.1	1.43
YR1 No composition	270		81.1%	64.1%	48.9%	27.0%	2.66
<i>Successful Composition v. No Composition</i>			15.6	22.1	26.3	-6.4	0.11

The majority of students in this group enroll in either CO 130 or CO 150 (75%); those who successfully complete a course have significantly higher success outcomes compared to students who are unsuccessful, and those who do not take CO 130 or CO 150 during their first year. Students who enroll in these courses but are not successful have much lower success outcomes compared to students who do not attempt these courses, which highlights the importance of enrolling in a composition course that is a good academic fit.

Table 11 combines students who receive low test scores in math and/or struggled in math in high school, examining success outcomes by enrollment in math during their first year.

Table 11. Struggled w/ Math/Low Math Scores Success Outcomes by 1st Year Math Completion (FA16-FA19 FTFT Cohorts)

	Hdct	Pct	1st Spring Persist %	2nd Fall Persist %	3rd Fall Persist %	1st Yr Probation %	1st Yr Cum GPA
YR1 Attempted Math 101							
Successful	184	75.7%	99.5%	92.9%	85.4%	13.0%	2.89
Unsuccessful	59	24.3%	94.9%	66.1%	38.3%	52.5%	1.97
<i>Successful v. Unsuccessful</i>			4.5	26.8	47.1	-39.5	0.91
YR1 Attempted Other Math Course							
Successful	446	76.6%	96.4%	87.7%	77.1%	13.2%	2.89
Unsuccessful	136	23.4%	88.2%	61.8%	51.7%	54.4%	2.14
<i>Successful v. Unsuccessful</i>			8.2	25.9	25.4	-41.2	0.75
YR1 No Math Course Attempts	560		85.5%	68.6%	56.6%	30.2%	2.58
<i>Successful Math 101 v. No Math</i>			13.9	24.4	28.9	-17.1	0.30
<i>Successful Other Math v. No Math</i>			10.9	19.1	20.5	-16.9	0.31

One in four students who attempt Math 101 or another math course are unsuccessful. However, students who successfully complete Math 101 in their first year are much more successful across all outcomes compared to students who are unsuccessful in the course, and students who do not attempt a math course at all. These students also have higher persistence outcomes and a slightly lower first year probation rate compared to students who successfully complete a different math course during their first year.

Among students who successfully complete a math course other than Math 101, success outcomes are higher compared to students who are unsuccessful in the course, as well as students who do not attempt a math course during their first year.

Conclusions

The level of support for SRS students is considerably greater since the FA16 cohort; about two-thirds of FA19 cohort students participate in one or more programs during their first year. In general, SRS students who participate support programming during their first year at CSU persist to their first spring at a higher rate compared to other SRS students who do not engage in one of the five support programs detailed in this report. Second and third fall persistence are slightly lower, first year academic probation is slightly higher, and first year GPA is similar compared to non-participating SRS students. However, students who are supported by two or more support programs are more successful in terms of persistence compared to non-participating students, and students who participate in just one program. This finding holds for students with multiple structurally underserved attributes. Specific coursework during the first year can also make a significant difference; students flagged for math and composition/writing in high school who successfully complete courses in these subject areas are much more successful compared to similarly flagged students who do not enroll in these courses during their first year.

Appendix

SRS Demographics by Program and Cohort Term

Table 1. Overall SRS Demographics by Cohort Term

	Hdct	RM	FG	Pell	2+ Attr	NR	Female	STEM	Avg HS GPA
FA16	615	42.9%	37.2%	31.9%	34.0%	25.9%	57.1%	22.1%	3.23
FA17	622	44.1%	39.1%	35.2%	37.9%	19.9%	50.5%	23.3%	3.18
FA18	759	38.9%	34.9%	29.9%	30.7%	27.0%	52.8%	24.1%	3.27
FA19	556	40.3%	34.9%	35.3%	33.3%	30.4%	57.7%	24.5%	3.30

Table 2. Academic Coaching Demographics by Cohort Term

	Hdct	RM	FG	Pell	2+ Attr	NR	Female	STEM	Avg HS GPA
FA18	57	35.1%	22.8%	19.3%	19.3%	45.6%	66.7%	54.4%	3.22
FA19	200	37.0%	32.5%	31.5%	33.0%	35.0%	54.0%	23.5%	3.24

Table 3. AAC Demographics by Cohort Term

	Hdct	RM	FG	Pell	2+ Attr	NR	Female	STEM	Avg HS GPA
FA16	9	77.8%	88.9%	77.8%	88.9%	11.1%	66.7%	44.4%	3.34
FA17	16	87.5%	100.0%	81.3%	93.8%	6.3%	75.0%	6.3%	3.49
FA18	10	60.0%	90.0%	80.0%	80.0%	10.0%	70.0%	40.0%	3.25
FA19	22	77.3%	100.0%	68.2%	86.4%	9.1%	90.9%	31.8%	3.49

Table 4. Key Demographics by Cohort Term

	Hdct	RM	FG	Pell	2+ Attr	NR	Female	STEM	Avg HS GPA
FA16	138	72.5%	65.2%	55.8%	67.4%	16.7%	57.2%	23.2%	3.41
FA17	168	76.2%	63.1%	54.8%	69.0%	10.7%	51.2%	22.6%	3.30
FA18	145	73.1%	58.6%	54.5%	63.4%	15.9%	54.5%	17.9%	3.41
FA19	132	65.9%	59.1%	59.1%	62.1%	25.8%	62.9%	25.8%	3.37

Table 5. C4E Demographics by Cohort Term

	Hdct	RM	FG	Pell	2+ Attr	NR	Female	STEM	Avg HS GPA
FA16	116	86.2%	75.0%	68.1%	81.9%	5.2%	57.8%	30.2%	3.49
FA17	123	95.1%	75.6%	69.9%	89.4%	0.8%	56.1%	22.0%	3.37
FA18	120	86.7%	73.3%	66.7%	81.7%	1.7%	66.7%	25.0%	3.48
FA19	73	86.3%	83.6%	79.5%	89.0%	11.0%	72.6%	26.0%	3.51

Table 6. SRS Student Athlete Demographics by Cohort Term

	Hdct	RM	FG	Pell	2+ Attr	NR	Female	STEM	Avg HS GPA
FA16	16	75.0%	43.8%	43.8%	62.5%	56.3%	31.3%	0.0%	3.16
FA17	7	71.4%	14.3%	28.6%	42.9%	14.3%	14.3%	28.6%	3.30
FA18	12	50.0%	33.3%	33.3%	25.0%	58.3%	8.3%	16.7%	3.18
FA19	12	50.0%	33.3%	33.3%	25.0%	75.0%	50.0%	8.3%	3.13

Table 7. SRS Non-Participant Demographics by Cohort Term

	Hdct	RM	FG	Pell	2+ Attr	NR	Female	STEM	Avg HS GPA
FA16	440	30.2%	26.1%	22.3%	20.5%	30.0%	57.0%	20.5%	3.16
FA17	417	27.1%	26.6%	24.5%	21.3%	25.2%	49.2%	24.9%	3.12
FA18	516	26.7%	27.1%	21.9%	19.6%	30.0%	49.4%	21.9%	3.23
FA19	194	20.1%	12.9%	18.0%	5.7%	30.9%	54.6%	22.7%	3.28

SRS Demographics by SRS Reason Code and Cohort Term

Table 8. Struggled with Math in HS: Demographics by Cohort Term

	Hdct	RM	FG	Pell	2+ Attr	NR	Female	STEM	Avg HS GPA
FA16	74	28.4%	31.1%	17.6%	18.9%	37.8%	56.8%	18.9%	3.14
FA17	66	39.4%	34.8%	28.8%	33.3%	24.2%	50.0%	21.2%	3.06
FA18	76	36.8%	26.3%	25.0%	25.0%	28.9%	51.3%	17.1%	3.12
FA19	55	38.2%	32.7%	29.1%	27.3%	23.6%	67.3%	21.8%	3.27

Table 9. Low Math Test Scores in HS: Demographics by Cohort Term

	Hdct	RM	FG	Pell	2+ Attr	NR	Female	STEM	Avg HS GPA
FA16	301	46.8%	38.5%	34.6%	38.2%	21.9%	63.8%	21.6%	3.37
FA17	277	54.2%	45.1%	42.6%	47.3%	18.8%	65.0%	22.4%	3.31
FA18	313	44.4%	42.5%	35.1%	38.0%	27.2%	73.8%	26.8%	3.49
FA19	312	46.5%	41.3%	42.9%	40.1%	26.3%	66.3%	25.6%	3.46

Table 10. Low HS GPA: Demographics by Cohort Term

	Hdct	RM	FG	Pell	2+ Attr	NR	Female	STEM	Avg HS GPA
FA16	78	41.0%	29.5%	24.4%	25.6%	25.6%	46.2%	23.1%	2.91
FA17	88	26.1%	23.9%	18.2%	19.3%	29.5%	31.8%	21.6%	2.83
FA18	97	28.9%	21.6%	24.7%	20.6%	29.9%	22.7%	18.6%	2.83
FA19	106	28.3%	17.0%	22.6%	19.8%	34.0%	36.8%	25.5%	2.87

Table 11. Struggled with Comp/Writing in HS: Demographics by Cohort Term

	Hdct	RM	FG	Pell	2+ Attr	NR	Female	STEM	Avg HS GPA
FA16	27	33.3%	37.0%	25.9%	25.9%	33.3%	44.4%	18.5%	3.06
FA17	13	61.5%	30.8%	46.2%	46.2%	23.1%	23.1%	7.7%	3.15
FA18	22	36.4%	31.8%	27.3%	27.3%	45.5%	31.8%	40.9%	3.11
FA19	8	50.0%	75.0%	50.0%	62.5%	12.5%	50.0%	0.0%	3.06

Table 12. Low Comp/Writing Test Scores in HS: Demographics by Cohort Term

	Hdct	RM	FG	Pell	2+ Attr	NR	Female	STEM	Avg HS GPA
FA16	247	47.8%	40.1%	36.4%	40.5%	22.7%	57.1%	22.3%	3.37
FA17	212	56.6%	49.1%	41.0%	49.5%	15.6%	59.0%	29.2%	3.38
FA18	247	46.6%	42.5%	39.3%	41.3%	21.9%	66.4%	25.5%	3.51
FA19	309	46.6%	41.1%	43.0%	40.1%	26.2%	66.0%	25.6%	3.46

SRS Success Outcomes by Support Program and Cohort Term

Table 13: Success Outcomes for SRS Academic Coaching Participants (FA18-FA19 FTFT Cohorts)

Cohort Term	Hdct	% 1st Spring	% 2nd Fall	% 3rd Fall	% YR1	YR1 Avg GPA
		Persist	Persist	Persist	Probation	
FA18	57	82.5%	64.9%	49.1%	70.2%	2.08
FA19	200	93.5%	76.5%		21.5%	2.76

Table 14: Success Outcomes for SRS AAC Participants (FA16-FA19 FTFT Cohorts)

Cohort Term	Hdct	% 1st Spring	% 2nd Fall	% 3rd Fall	% YR1	YR1 Avg GPA
		Persist	Persist	Persist	Probation	
FA16	9	100.0%	100.0%	100.0%	22.2%	2.62
FA17	16	100.0%	100.0%	87.5%	6.3%	3.08
FA18	10	80.0%	70.0%	50.0%	20.0%	2.38
FA19	22	95.5%	81.8%		18.2%	2.99

Table 15: Success Outcomes for SRS Key Participants (FA16-FA19 FTFT Cohorts)

Cohort Term	Hdct	% 1st Spring	% 2nd Fall	% 3rd Fall	% YR1	YR1 Avg GPA
		Persist	Persist	Persist	Probation	
FA16	138	93.5%	84.1%	68.8%	22.5%	2.71
FA17	168	94.0%	76.8%	63.1%	32.1%	2.55
FA18	145	93.8%	80.7%	71.0%	26.2%	2.58
FA19	132	92.4%	75.0%		21.2%	2.76

Table 16: Success Outcomes for SRS C4E Participants (FA16-FA19 FTFT Cohorts)

Cohort Term	Hdct	% 1st Spring	% 2nd Fall	% 3rd Fall	% YR1	YR1 Avg GPA
		Persist	Persist	Persist	Probation	
FA16	116	92.2%	83.6%	68.1%	30.2%	2.57
FA17	123	94.3%	74.8%	62.6%	37.4%	2.42
FA18	120	96.7%	84.2%	73.3%	32.5%	2.50
FA19	73	95.9%	78.1%		27.4%	2.59

Table 17: Success Outcomes for SRS Student Athletes (FA16-FA19 FTFT Cohorts)

Cohort Term	Hdct	% 1st Spring	% 2nd Fall	% 3rd Fall	% YR1	YR1 Avg GPA
		Persist	Persist	Persist	Probation	
FA16	16	93.8%	93.8%	62.5%	43.8%	2.37
FA17	7	100.0%	85.7%	85.7%	14.3%	2.95
FA18	12	100.0%	91.7%	83.3%	16.7%	2.65
FA19	12	91.7%	75.0%		8.3%	3.11