# SOS for Struggling College Students: Improving Retention Through a Mentoring-Based Comprehensive Academic Success Program

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# SOS for Struggling College Students:
## Improving Retention Through a Mentoring-Based
## Comprehensive Academic Success Program

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## Abstract

Due to a unique tiered system of academic standing, which varies by classification, some Mountain View University students below a 2.0 grade-point-average (GPA) receive academic interventions, while others do not. Good standing is defined as achieving a 1.5 GPA for freshmen, 1.65 for sophomores, 1.85 for juniors, and 2.0 for seniors. Every semester, there are approximately 400 students placed on academic warning or probation and enrolled in academic success center (ASC) courses, while approximately 400 students below a 2.0 GPA remain in good standing due to the tiered system. Students receiving the interventions are at a distinct advantage. This study assessed the success of the Academic Success Studies Program – comprised of faculty mentoring and three academic success courses – by examining five semesters of student GPA and retention rate data, measured after one and two semesters. Findings indicated that participation in the program correlated with considerable improvement in both student success metrics.

## Introduction

Studies have shown that approximately 40% of college students will leave college in the first three years (Thatcher, 2016; Tinto, 2012). Many academic administrators have wondered why so many college students do not complete their degrees, leading some educators to believe that many of these educationally at-risk students lack the academic skills needed to succeed in college (Richman et al., 2014). Research indicated that many students have not received the experience and training in their high school programs necessary to flourish as a self-regulated learner in college (Edgecombe, 2011), while Cloete (2018) suggested that the academic tasks at the college level tend to demand a far higher-level of thinking and independent learning than that encountered in secondary school. Additionally, self-efficacy and effective time management, key aspects of self-regulated learning, are predictors of success in college academics (Renes, 2020).

Tinto (2012) underscored that institutions "must eventually address the four conditions that are known to promote student retention, namely expectations, support, assessment and feedback, and involvement" (p. 114). Currently, universities have placed emphasis on academic services and student success programs in order to support and retain students who are struggling academically. Many college administrators have tried to determine if the cost of retaining a student and the type(s) of intervention implemented to help each student are worth the investment (Olbrecht et al, 2016; Thatcher, 2016). However, retention data strongly endorses the application of intervention to help struggling college students persist through their academic program (Richman, 2014; Tinto, 2012). Some studies have also shown the academic benefits of providing a monitored probation program for high-risk students. León et al. (2019) found that 4,673 students who took a required course due to academic probation "were 20% more likely to persist and graduate" (p. 43) than those students who did not take the course.

In the spirit of student support, as advised by Tinto (2012), Mountain View University has designed a program to meet the needs of underperforming students as defined by their academic status, including students on warning, probation, and suspension. Each semester, the Academic Success Center works with the registrar's office to enroll students in any of these categories into one of the Academic Success Center courses, which are designed to intervene and to help remedy students' low academic performance. Students are enrolled in one of three academic success courses designed to improve notetaking, testing, reading, and time management skills, while providing increased opportunities for faculty-to-student mentoring.

Mountain View University has employed a unique tiered system to determine academic standing based on classification. A standardized 1,000-point total has been mandated for all residential courses, grading for each class is determined by a 10-point scale, and a non-weighted GPA has been used to determine academic standing. Freshmen have been required to maintain a minimum GPA of a 1.5 for good academic standing, sophomores a minimum GPA of 1.65, and juniors a minimum GPA of 1.85. In order to be in good academic standing as a senior, and in order to confer a degree, a minimum GPA of a 2.0 must be achieved. Standard best practices across diverse universities require a minimum GPA of a 2.0, regardless of classification. Because

of this system, there have been many students below a 2.0 GPA, but above the tiered cut-off score, who are technically in good standing and are not receiving interventions. This provides an opportunity to identify and study two groups: (1) students below a 2.0 GPA who are receiving intervention through required enrollment into an ASC course, and (2) students below a 2.0 GPA who are not receiving the intervention of being enrolled in an ASC course.

In this study, students enrolled in ASC courses below a 2.0 GPA were compared to a control group of students who were not in ASC courses (also below a 2.0 GPA). Two archival sets of data were compared in terms of: (a) retention after one semester, (b) retention after two semesters, and (c) improved GPA. Statistically significant improvement in all three categories was demonstrated in the findings.

### Academic Success Studies Program Background

Improvement in the retention of students is not just essential to school administrators. Failure to complete one's degree in a reasonable amount of time affects students financially, academically, and often results in unmet goals. The academic success studies courses have provided the university with an opportunity to focus on retaining students who are on the verge of dropping from a degree program and from the institution. With the help of the registrar's office, the ASC created an intervention plan based on the academic status of these students. An academic success plan offers students an opportunity to strengthen their academic skills, while continuing to take courses on their degree completion plans, stay enrolled, and successfully recover good academic standing. Since 2015, the ASC has been focused on effectively tracking academic services and student success by incorporating more detailed reporting that helps monitor the health of the center and its programs.

### Academic Success Faculty Mentoring

Mentoring students has been an integral part of this comprehensive approach to helping struggling students since the establishment of the success center. Students are encouraged to make appointments with the Academic Success Center faculty members for individual assistance with time management, organization, and study habits. Guidance in the areas of effective notetaking, active listening, reading college textbooks, test-taking, test anxiety, and memory improvement is provided. Peer mentors also promote the study skills courses that are available. Most of these courses provide direct mentoring for students or promote the mentoring program as part of their curriculum.

Thomas (2008) described the kind of learning that takes place in these mentoring-based study skills courses with limited class size:

> Participatory approaches, drawing on the students' previous experiences and their existing knowledge and skills, can help to build relations between students, as well as promoting a deeper understanding of the issues, [lack of a sense of belonging, lack of connectedness, etc.]. For example, peer learning and teaching about study skills and IT can be used to ensure the cohort has comparable skill levels and forms social alliances. (pp. 73-74)

Believing that class size contributes to a greater sense of connectedness and community, the administration has allowed the department to provide a small class experience in all but one academic success course.

Wernersbach et al. (2014), using the LASSI test for study skills, found that among the students who took college study skills courses, "academically underprepared student scores increased, reflecting that their anxiety, motivation, and testing strategy skills were at a level similar to comparison students" (n.p.). Such academic success courses have been adopted into the curriculum of Mountain View University for more than 30 years.

### Academic Success Program

In 2015, the advising and success center was renamed as a college since it has many similarities to the University College model. The vision for the name change was to officially designate the center as a college, which included two degree-offerings. In addition, the college had approximately 90 employees, consisting of full-time staff, contracted faculty, and part-time adjuncts. This change allowed the university to centralize all academic student services into one area, including subject-based tutoring, peer-mentoring, the writing center, student advising, testing services, the office of disabilities, the student-advocate office, and language tutoring. This strategic centralization of multiple academic student services provided a clear opportunity to evaluate the effectiveness of programs designed to strengthen at-risk students.

The Academic Success Center (ASC) was established to provide oversight to the academic success studies courses, as well as various student services, including testing, tutoring, peer-mentoring, and the writing center. Several Academic Success Center studies courses have been available to all students, but they are required for students who are not in good academic standing because of their overall GPA. The ASC has considered these courses to be a "funnel approach" to academic success (see Figure 1).

**Figure 1** *Funnel Approach*
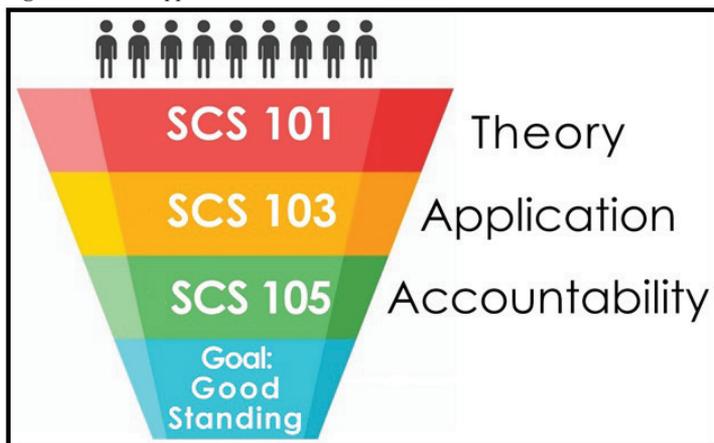
**Success 101**

The first course, Success 101, Theory for Academic Success, presents basic study skills with emphasis on the research-proven theories of academic success. This course is worth one-hour credit and is required for students who are placed on academic warning after one semester of not meeting the required GPA for good standing. This course equips students by introducing them to the theory behind study strategies such as time management, memory, and test-taking. Topics include ownership/self-efficacy, time management/planning, listening/notetaking, text-book mastery and academic policies. Students are also introduced to other resources available to them.

**Success 103**

Students who did not reach the required GPA after being on academic warning for one semester are placed on academic probation. These students are limited to 13 credit hours and are placed in Success 103, Practical Applications of Academic Success. This course guides the students in the application of the study skills that were learned in the first course. Students are required, as part of the curriculum, to take advantage of the academic resources the university provides, based on their own needs. Students may choose from the Counseling Center, the Writing Center, Tutoring, or the Career Center. Mentoring of students is still a goal of this course, so class size is limited to 15 students.

**Success 105**

Success 105, Accountability for Academic Success, is designed for students on academic probation who did not reach the required GPA by the end of one semester. The class size is also limited to 15 students. This is a one-hour credit course emphasizing accountability and mentoring. Students create and maintain a plan for completing assignments and preparing effectively for exams. They complete two self-assessments to determine their level of progress in the application of various study skills, access their current semester grades, and approximate their semester GPA at mid-term.

A notable feature of this accountability course is a 30-minute individual conference with the professor. The first estimation of semester GPA is calculated during the conference based on current course grades. Students are led through a reflection of their accomplishments and challenges through the first half of the semester. Strategies for successfully completing the semester are also discussed. As part of the meeting, the overall needs of the students, as well as issues concerning their spiritual life are addressed. Toward the end of the course, students access their grades in all courses and approximate their semester GPA. The course concludes with a reflection survey, focusing on areas of improvement, areas that still need to be addressed, and a thorough plan for final exam preparation.
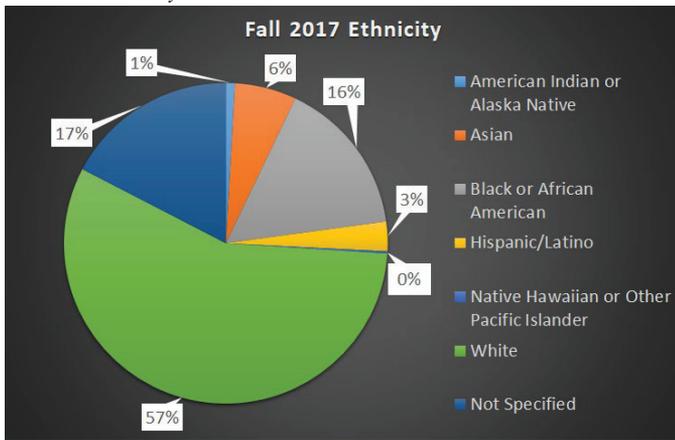
### Program Demographics

Between 2015-2019, the ASC serviced more than 70,000 students through academic support services and 2,183 students enrolled in academic success studies courses. Currently, the

ASC has consisted of four contracted full-time faculty members and one chair who serves as administrator and faculty member. The ASC offers an average of 18 one-credit hour course sections with approximately 15-20 students per section per semester. Rather than presenting demographics from five semesters, this study provides an in-depth look at the semester in the middle (Fall 2017), representative of a typical semester in the Academic Success Center.

Demographic breakdown according to ethnicity, gender, and age is presented in Figures 2, 3, and 4 from a sample size of 375 students.
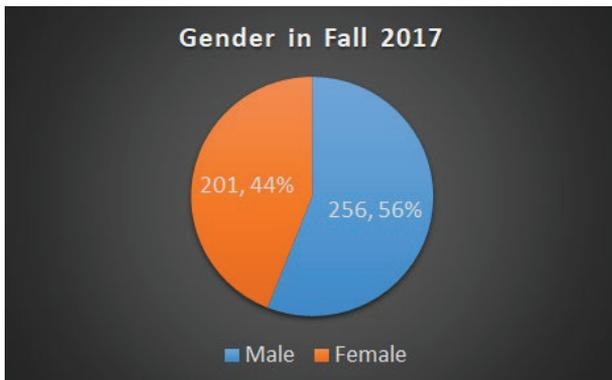
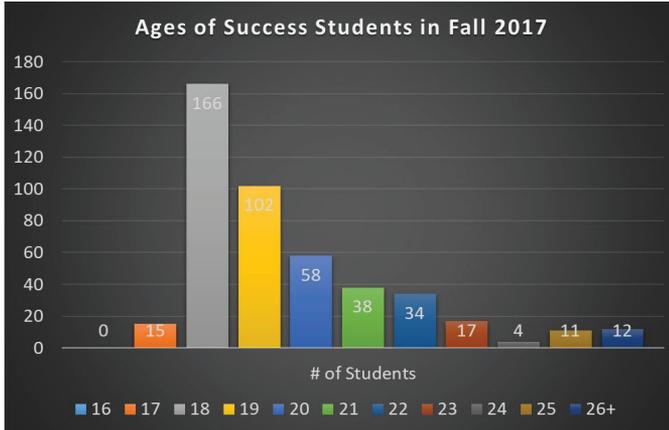**Figure 2**

*Fall 2017 Ethnicity*



**Figure 3**

*Fall 2017 Gender*

**Figure 4**
*Fall 2017 Age of Students*



**Ages of Success Students in Fall 2017**

Bar values by age group: 16 = 0, 17 = 15, 18 = 166, 19 = 102, 20 = 58, 21 = 38, 22 = 34, 23 = 17, 24 = 4, 25 = 11, 26+ = 12

# of Students

■ 16   ■ 17   ■ 18   ■ 19   ■ 20   ■ 21   ■ 22   ■ 23   ■ 24   ■ 25   ■ 26+

### Rationale

Multiple factors affect whether a student will remain in school and finish a degree. Lane (2018) suggests that "Psychosocial factors, such as stress, appear to play a role in whether a student successfully integrates into college that critical first year and have a strong impact on whether the student remains in college past the first year" (n. p.). Offering student mentoring services as a vital component of student support through the Academic Success Center serves to address these factors that are related to success.

Increasing retention is a necessary goal for any academic success program. Including mentoring as part of an academic success program creates a more rounded approach. Satyanarayana et al. (2014), while observing students in a four-year community college, "showed that mentoring and tutoring helped freshmen students get about 3–5 percentage points higher grades…" which would indicate "a 9 to 12 percent increase in retention rate" (p. 5). The study recognized that these students are more likely to persist in college as a result of these intervention methods (Satyanarayana, 2014, p. 5). The addition of a mentoring facet to college success courses is a desirable step toward helping students reach their academic potential and achieve their goals. In addition, meeting the needs of the unprepared students is part of the mission of the ASC. Targeting these students with personal support measures has been a priority for the Academic Success Center.

### Methodology

Due to Mountain View University's unique tiered system of good academic standing, there are hundreds of students with a GPA that falls below a 2.0 who do not receive the intervention of a required ASC course. In order to be in good academic standing, freshmen are required to have a minimum 1.5 overall GPA, sophomores are required to have a minimum 1.65

overall GPA, juniors are required to have a 1.85 overall GPA, and seniors are required to have a minimum 2.0 overall GPA (required to graduate). This leaves a large control group of students below a 2.0 GPA who are not required to take an ASC course. The purpose of this study was to compare students below a 2.0 GPA who received the intervention of an ASC course with the control group of students below a 2.0 GPA who did not receive that intervention.

To assess the effectiveness of the Academic Success program, three different components of student success were analyzed: (a) retention after one semester, (b) retention after two semesters, and (c) improved GPA. For consistency, only data from the fall semesters was analyzed, as data from spring semesters differs greatly from fall for a variety of reasons. After receiving IRB approval, data from five semesters, starting in the Fall of 2015 and ending in the Fall of 2019, was collected by running archival data reports through our Argos database and was checked for accuracy by removing duplicate entries. The results were first organized into a chart and included percentages (see Table 1).

**Table 1**

*Total Data Results*

|  | Students < 2.0 GPA | Students | 1 Sem | % Ret | 2 Sem | % Ret | GPA | % Imp |
|---|---|---|---|---|---|---|---|---|
| Fall 2015 | Without ASC Courses | 388 | 278 | 71.6% | 193 | 52.0% | 72 | 29.1% |
|  | With ASC Courses | 452 | 359 | 79.4% | 298 | 70.3% | 119 | 34.6% |
| Fall 2016 | Without ASC Courses | 417 | 278 | 66.6% | 200 | 49.7% | 76 | 30.6% |
|  | With ASC Courses | 440 | 363 | 82.5% | 296 | 67.2% | 126 | 35.6% |
| Fall 2017 | Without ASC Courses | 458 | 328 | 71.6% | 207 | 44.6% | 88 | 27.9% |
|  | With ASC Courses | 375 | 299 | 79.7% | 245 | 64.5% | 126 | 43.4% |
| Fall 2018 | Without ASC Courses | 434 | 302 | 69.5% | 194 | 41.7% | 95 | 31.1% |
|  | With ASC Courses | 449 | 374 | 83.2% | 311 | 60.8% | 125 | 37.5% |
| Fall 2019 | Without ASC Courses | 413 | 279 | 67.5% | 158 | 28.2% | 83 | 28.8% |
|  | With ASC Courses | 467 | 401 | 85.8% | 318 | 45.6% | 165 | 43.1% |

The data from Fall 2017 was dummy coded, entered into SPSS, and analyzed using a binary logistic regression. When dummy coding the data in SPSS, students who took an ASC

course below a 2.0 GPA were coded as a "1" and students who did not take an ASC course who were below a 2.0 GPA were coded as a "0". Students who were retained after one semester were coded as a "1" and those not retained after one semester were coded as a "0". Students who were retained after two semesters were coded as a "1" and students who were not retained after two semesters were coded as a "0". Finally, students whose GPA improved after one semester were coded as a "1" while students whose GPA did not improve after one semester were coded as a "0".

## Results and Discussion

Students below a 2.0 GPA who took an ASC course (375) and students below a 2.0 GPA who did not take an ASC course (458) in Fall 2017 were included in the analysis (N=833). The students below a 2.0 GPA who were not enrolled in an ASC class (458) served as a control group for this analysis. The binary logistic regression analysis found that students who took an ASC course exhibited an increase in retention after one semester (e =.63, p<.001; Nagelkerke $R^2$ = .014), and after a second semester the increase was sustained (e = .44, $p$ <.001; Nagelkerke $R^2$ = .052). The students who were enrolled in an academic success course also tended to improve their GPA after one semester (e =.32, p<.001; Nagelkerke $R^2$ = .033).
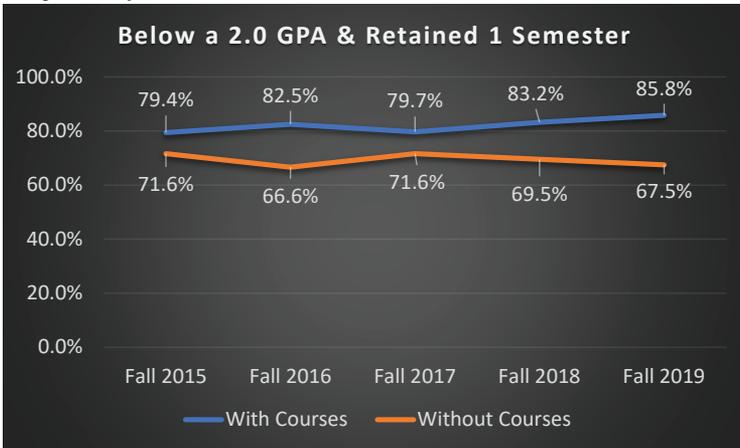
**Retention After One Semester**

When measuring retention after one semester, the goal was to measure the percentage of ASC students who remained until the next spring semester. For all five semesters, students below a 2.0 GPA who were enrolled in an ASC course were retained at a higher rate than students not enrolled in an ASC course. The lowest difference in retention rates was in Fall 2015 with a 7.8% difference of higher retention. The highest difference in retention rates was in Fall 2019 with a 18.3% difference as compared to the control group. For each column in Table 2, the mean average was found for the total of the five semesters provided. The average retention rate after one semester for students taking an ASC course was 82.1% as compared to a retention rate of 69.4% for students who did not take an ASC course. The average percentage of increase in retention for one semester above the control group was 12.7%.

**Table 2**
*Retained One Semester*

| Retained 1 Semester | With Courses | Without Courses | Percent Difference |
|---|---|---|---|
| Fall 2015 | 79.4% | 71.6% | 7.8% |
| Fall 2016 | 82.5% | 66.6% | 15.9% |
| Fall 2017 | 79.7% | 71.6% | 8.1% |
| Fall 2018 | 83.2% | 69.5% | 13.7% |
| Fall 2019 | 85.8% | 67.5% | 18.3% |
| **Mean Average** | **82.1%** | **69.4%** | **12.8%** |

**Figure 5**

*Comparison of One Semester Retention Rates over 5 Fall Semesters*



Below a 2.0 GPA & Retained 1 Semester

(With Courses: 79.4%, 82.5%, 79.7%, 83.2%, 85.8%; Without Courses: 71.6%, 66.6%, 71.6%, 69.5%, 67.5% over Fall 2015–Fall 2019)

**Retention After Two Semesters**

From the same data, we analyzed how many students were retained two semesters after the intervention. For example, when starting with the students in Fall 2015, we measured how many of them were retained until the Fall 2016 semester. Once again, students enrolled in ASC courses showed statistically significant improvement over the control group of students below a 2.0 GPA who did not take a course. Overall, the percentages of two semesters of retention for students in ASC courses showed an even greater difference than those reported above for one semester. The mean average was found for the total of the five semesters (see Table 3). The lowest difference in retention rates was in Fall 2019 with a 17.4% difference of higher retention when compared to the control group. The highest difference in retention rates was in Fall 2017 with a 19.9% difference as compared to the control group. With the highest retention difference being 19.9% and the lowest being 17.4%, this highlights consistency of a high difference nearing 20% over the course of five semesters.

These findings imply that the study skills training provided to students in ASC courses introduce lasting tools that endure multiple semesters. Two semesters after taking an ASC course, the average retention rate was 61.7% as compared to the control group retention rate of 43.2%. From the graph in Figure 6, it is interesting to note the overall downward trend of retention from Fall 2015 to Fall 2019. However, this downward trend appears to be a university-wide trend. Despite the downward trend, the average difference of students enrolled in an ASC course remained consistently higher for an average of 18.4% more students retained.
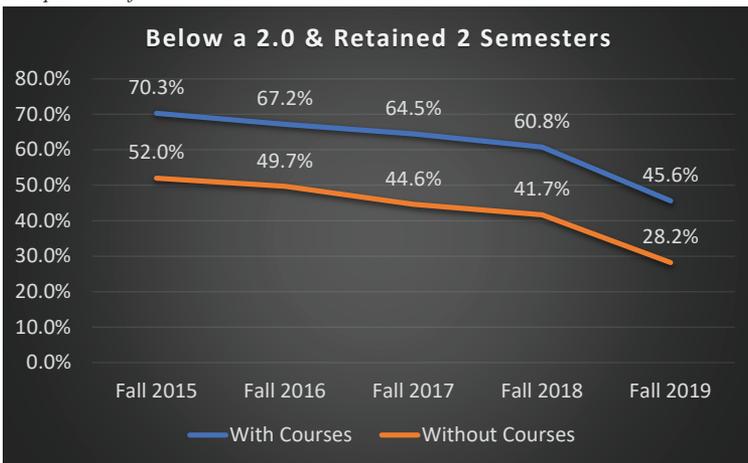
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**Table 3**

*Retained Two Semesters*

| Retained 2 Semesters | With Courses | Without Courses | Percent Difference |
|:---:|:---:|:---:|:---:|
| Fall 2015 | 70.3% | 52.0% | 18.3% |
| Fall 2016 | 67.2% | 49.7% | 17.5% |
| Fall 2017 | 64.5% | 44.6% | 19.9% |
| Fall 2018 | 60.8% | 41.7% | 19.1% |
| Fall 2019 | 45.6% | 28.2% | 17.4% |
| **Mean Average** | **61.7%** | **43.2%** | **18.4%** |

**Figure 6**

*Comparison of Two Semester Retention Rates over 5 Fall Semesters*



### Improved Overall GPA After One Semester

When analyzing the data, our third goal was to identify students who earned a higher overall GPA one semester after each fall semester that was observed. In each of the five fall semesters observed, more students enrolled in an ASC course who were below a 2.0 GPA improved their overall GPA as compared to the control group of students below a 2.0 GPA not enrolled in an ASC course. The lowest difference in improved overall GPA was in Fall 2016 with a 5% difference. The highest difference in improved overall GPA was in Fall 2017 with a 15.5% difference as compared to the control group. When running the mean average of all five semesters, an average of 38.8% of students enrolled in ASC courses improved their overall GPA as compared to an average of 29.5% of students in the control group. Out of the three categories analyzed in this paper, the overall GPA improvement showed the lowest average difference in improvement as compared to the control group with an average of 9.3% difference.
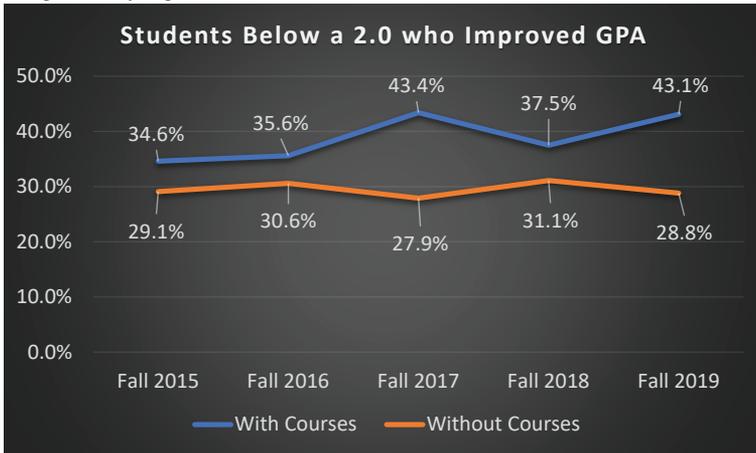
**Table 4**
*Improved Overall GPA*

| Improved Overall GPA | With Courses | Without Courses | Percent |
|:---:|:---:|:---:|:---:|
| Fall 2015 | 34.6% | 29.1% | 5.5% |
| Fall 2016 | 35.6% | 30.6% | 5.0% |
| Fall 2017 | 43.4% | 27.9% | 15.5% |
| Fall 2018 | 37.5% | 31.1% | 6.4% |
| Fall 2019 | 43.1% | 28.8% | 14.3% |
| **Mean Average** | **38.8%** | **29.5%** | **9.3%** |

**Figure 7**
*Comparison of Improved Overall GPA over 5 Fall Semesters*



Overall, percentages for students enrolled in ASC courses were always higher than the control group of students not enrolled in ASC courses. The difference in percentages was more significant in retention categories than it was in GPA improvement, but all three categories were significant. By running the mean averages on each of the three categories, we were able to determine and rank each category with the highest impact. The highest-ranking category was retaining students for two semesters with an average improvement of 18.4%. This difference of retention of two semesters was consistent across all five fall semesters with the lowest difference being 17.4% and the highest difference being 19.9%. The second-best performing category was the retention of students after one semester with an average improvement of 12.8% as compared to the control group. This average number was less consistent across five semesters with the lowest difference at 7.8% and the highest difference at 18.3%. The third-best performing category was the improved overall GPA after one semester with the average difference of improvement of 9.3%. This category was less consistent across 5 semesters with the lowest difference of improvement at 5.0% and the highest difference at 14.3%. However, some fluctuation is expected due to a variety of external factors. In sum, findings indicated that ASC

students consistently outperformed the control group of students in every category each semester, confirming the value of a comprehensive student success program to at-risk students.

## Limitations and Future Research

When tracking the retention rates after the Fall 2019 semester, it is important to consider the COVID-19 pandemic that started in Spring 2020 and the continued changes through Fall 2020 and Spring 2021. Retention results for Fall 2019 did show a substantial dip, but the students retained as compared to the control group were still significantly higher and consistent with the differences from previous semesters.

Additionally, a limitation of the GPA improvement to consider is that many students did not have a previous GPA due to being new or transfer students. However, this GPA improvement limitation was consistent for both groups studied. Practitioners must also consider that students break enrollment for a variety of reasons including illness, finances, death or illness of a family member, or mental health issues.

Finally, the binary logistic regression analysis was used only on the Fall 2017 semester to serve as a representative sample of the five semesters analyzed. While the overall data reveals that Fall 2017 was typical of the five fall semesters, a binary logistic regression analysis could be performed on all five semesters for more in-depth analysis. Future research could also explore retention rates in light of covariates, such as ethnicity, gender, high school GPA, and SAT or ACT scores.

## Conclusion

The purpose of this paper was to compare students enrolled in ASC courses with an overall GPA below a 2.0 with a control group of students not enrolled in ASC courses with an overall GPA below a 2.0. The success of students enrolled in ASC courses was measured by three criteria: (a) Percentage of students retained one semester, (b) Percentage of students retained two semesters, and (c) Percentage of students whose overall GPA improved. In all three categories, students consistently performed better than their peers. The binary logistic regression analysis revealed the same statistical significance for each category ($p<.001$). Not only did students enrolled in ASC courses outperform their peers in the control group, they also outperformed them by a significant margin for all five semesters. These findings illustrate that a comprehensive program supporting students who struggle academically is associated with greater academic outcomes. This data from the Academic Success Center over the past five years demonstrates the effectiveness of the program.

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# Author Biographies

**Ralph Jernigan, D.Min.,** is currently professor of study skills and student transition courses at Liberty University, where he earned his M. A. Counseling and Doctorate in Ministry degrees. While at Liberty, Dr. Jernigan created and developed a mentoring/accountability course. His research interests include Student Retention, Mentoring and Student Success.

**Dan Berkenkemper, Ed.S.,** is currently an Assistant Professor and Department Chair of the Academic Success Center at Liberty University where he oversees Success Studies and the Eagle Scholars program. He additionally teaches and develops courses in Education, Interdisciplinary Studies, and Emotional Intelligence. His interests include Student Retention and Critical Thinking.

**Orlando Lobaina Ed.D.,** is currently an Associate Dean for General Education at Chamberlain University. He earned an Ed.D. in Educational Leadership and has served as an Associate Professor of Education in graduate and doctoral programs. His research interests focus on higher education, online education, educational leadership, academic success, and retention.

**Melanie Hudson, Ph.D.,** an instructor at Liberty University in the Graduate School of Education and the College of Applied Studies and Academic Success, earned a Ph.D. in Higher Education Administration, which culminated with dissertation/publication, entitled "Growing Grit to Produce Doctoral Persistence". Research interests are grit, persistence, and academic success.