UNIVERSITY OF
South Carolina

Case Study

How the University of South Carolina used CircleIn to Help Boost Student Success in Gateway Courses, Increase Pass Rates and Improve Retention.

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VICE PROVOST FOR UNDERGRADUATE AFFAIRS AND
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THE UNIVERSITY OF SOUTH CAROLINA

UNIVERSITY OF South Carolina

ABOUT THE UNIVERSITY

The University of South Carolina (USC) is a top-tier public research institution with a rich history of academic excellence and a commitment to student success. As the flagship university of the state, USC recognizes the transformative power of peer-to-peer learning and comprehensive academic support in fostering student achievement, retention, and overall success.

Campus Characteristics

- Research I institution
- Flagship university of South Carolina
- 35,000+ students across all campuses
- 27,000+ undergraduate students on the Columbia campus
- 25% of undergraduates are first-generation college students
- 300+ degree programs

FOREWARD

We believe that implementing CircleIn during this period has helped to increase pass rates (ABC). The use of CircleIn is one of our ongoing efforts to support student success. CircleIn helps to bridge the gaps our students are experiencing in terms of academic support, peer engagement, and connection to their classmates. Looking ahead, we are optimistic that this platform will not only expand our peer led learning opportunities but also cultivate a robust, long-term framework for virtual peer support, particularly across our courses with high DFW rates. CircleIn has the potential to transform the way our students interact, study, and support one another, creating a more connected and academically successful student body.

Dr. Lara Lomicka Anderson,
Vice Provost for Undergraduate Affairs
Dean of Undergraduate Studies

UNIVERSITY OF South Carolina

THE ACADEMIC TEAM

Donna Arnett PhD
Provost

Lara Lomicka Anderson PhD
Vice Provost

Janice Bass PhD
Dean, Undergrad Studites

Lydia Frass
Director of Assessment

Chris Gulino
Assistant Director Course Support

SUPPORTED BY THE OFFICE OF THE PROVOST

Our Provost initiated a Student Success Team, led by Dr. Lomicka-Anderson, to promote efforts to enhance the undergraduate experience, ensuring that students at The University of South Carolina have access to comprehensive academic support and enriching developmental experiences. The team included representatives from our Student Success Center, Deans of Colleges/Schools, Institutional Research, the Office of the Provost, CircleIn, and IT. Each month the team meets to discuss project preparations, challenges, successes and review and evaluate data. The work of the Student Success Team is multifaceted, focusing on academic excellence for undergraduate students, including student retention, academic advising, integrative and experiential learning, and living and learning communities.

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THE PROBLEM

The University of South Carolina (USC), an institution known for its commitment to innovation and academic excellence, is seeking to improve its comprehensive academic support to its diverse student body. With over 27,000 students enrolled across hundreds of degree programs, the university recognizes the critical importance of supporting students in courses with high DFW rates. For years, USC has offered traditional supplemental instruction (SI) and peer tutoring programs. Despite widespread implementation of traditional academic support models, persistent challenges remain in effectively reducing DFW rates. Certain student populations, including those with complex scheduling constraints or those facing unique personal barriers, continue to struggle with accessing and participating in SI sessions (McDaniel et al., 2023)

As remote learning became increasingly prevalent, USC found itself at a crossroads. University leadership recognized that enhancing academic retention and reducing DFW rates required diverse support strategies for students enrolled in gateway courses (Hillstock & Havice, 2014). This challenge was further complicated by the university's scale and increasing larger freshmen class size. How could USC effectively decrease DFW rates and increase the equity and accessibility of peer support across such a vast and varied student population? The traditional semester-based SI model, with its predetermined course list and fixed schedules, offers support for students but some students are unable to attend SI sessions.

The university needed an innovative solution that could build on existing SI support and bridge the gap between limited resources and the growing demand for flexible, accessible academic support. This situation presented both a challenge and an opportunity for USC to pilot a new approach to student support, one that could potentially serve as a model for other large institutions facing similar issues in the rapidly changing landscape of higher education. How could the University of South Carolina offer extra support to decrease DFW rates and increase the equity/accessibility of peer support?

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THE CIRCLEIN SOLUTION

In partnership with CircleIn, the University of South Carolina brought CircleIn's Virtual Student Community to campus, launching an exciting new virtual peer support program that supplements existing SI services without increasing overhead costs to students. The program was designed to help USC decrease the DFW rates and increase the ABC pass rates, ultimately contributing to strengthening USC's retention rates.

As a peer-led virtual student community, CircleIn engages all student populations with peer support, and bolsters a sense of belonging across the student body. USC administrators, Student Success Center, Institutional Research (IR), IT and faculty helped identify courses to engage in a 2-year pilot with CircleIn. Initially, Accounting 225 (Introduction to Financial Accounting) and Math 141 (Calculus I) were selected in 2023 and Chem 333 (Organic Chemistry) was added in Spring 2024. Each pilot course has a supplemental instructor (SI) assigned by the Student Success Center. Professors and supplemental instructors were trained on how to best encourage students to use CircleIn. The Supplemental Instructors also used CircleIn as their primary means of student communication. At the end of each semester, IR analyzes the impact of CircleIn on grade performance. ABC and DFW rates with these pilot courses were compared to rates from the previous year.

WHY CIRCLEIN?

CircleIn provides an academic-focused peer-led platform that enables students, peer educators, and faculty to communicate with one another on their mobile devices. Other group messaging platforms can be saturated with group chats that are not focused on academic success and can distract a student's attention away from studying. CircleIn's app fosters positive academic behaviors and communication. CircleIn's Virtual Student Community is available to students 24/7 and can transform the traditional classroom into a supportive online community, allowing students to collaborate and study together remotely, leading to a sense of connection that is crucial in today's remote and hybrid learning environments.

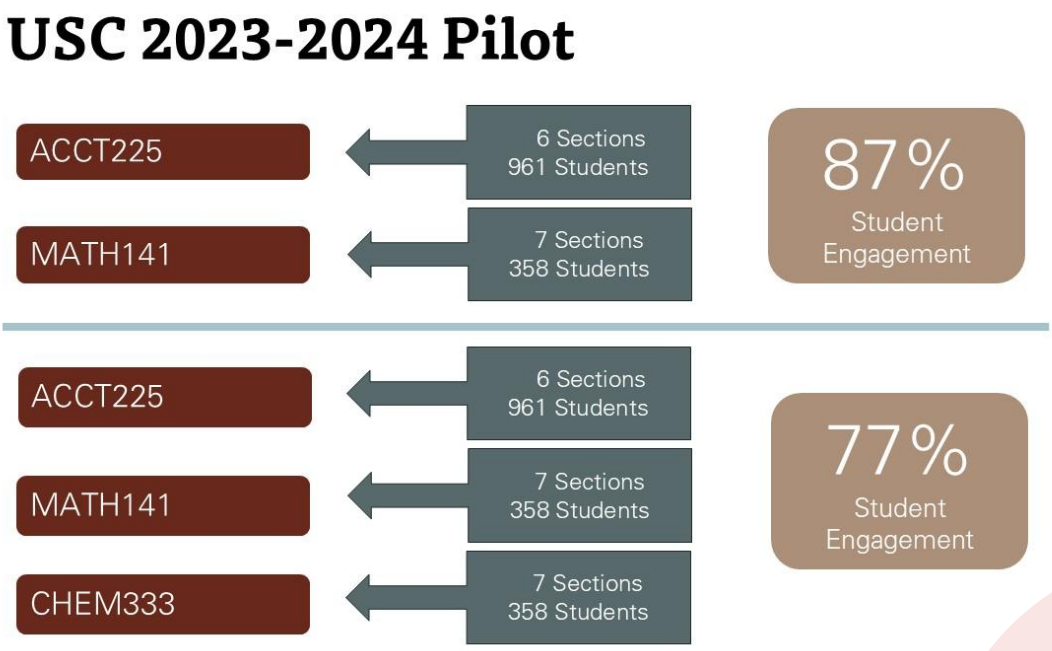
Because CircleIn can be accessed on a PC/Mac, Android or iOS device, CircleIn accommodates students' diverse schedules, and shifting physical locations, making sure that they can engage in peer-to-peer learning whenever and wherever they need support. CircleIn also offers a variety of study tools, such as flashcards, note sharing and time management activities, which promote active learning and knowledge sharing among peers. Additionally, CircleIn offers a feedback tool that guides students to answer 4 questions each week. These responses help instructors

to know when their students are stuck or struggling and can offer more timely remediation.

CircleIn also incentivizes engagement through a point system that rewards students for sharing resources and collaborating with classmates, providing extrinsic motivation to stay involved. For faculty, the platform delivers valuable insights into student study behaviors without adding to their workload, enabling them to identify and address learning gaps effectively.

As institutions face the challenges of remote learning, CircleIn serves as a vital tool to help students overcome obstacles, connect with peers, and continue their education seamlessly. Ultimately, CircleIn is designed to support large and diverse student populations, making it an impactful solution for reducing DFW rates and improving retention and graduation rates across the entire student body.

COURSES IN THIS STUDY

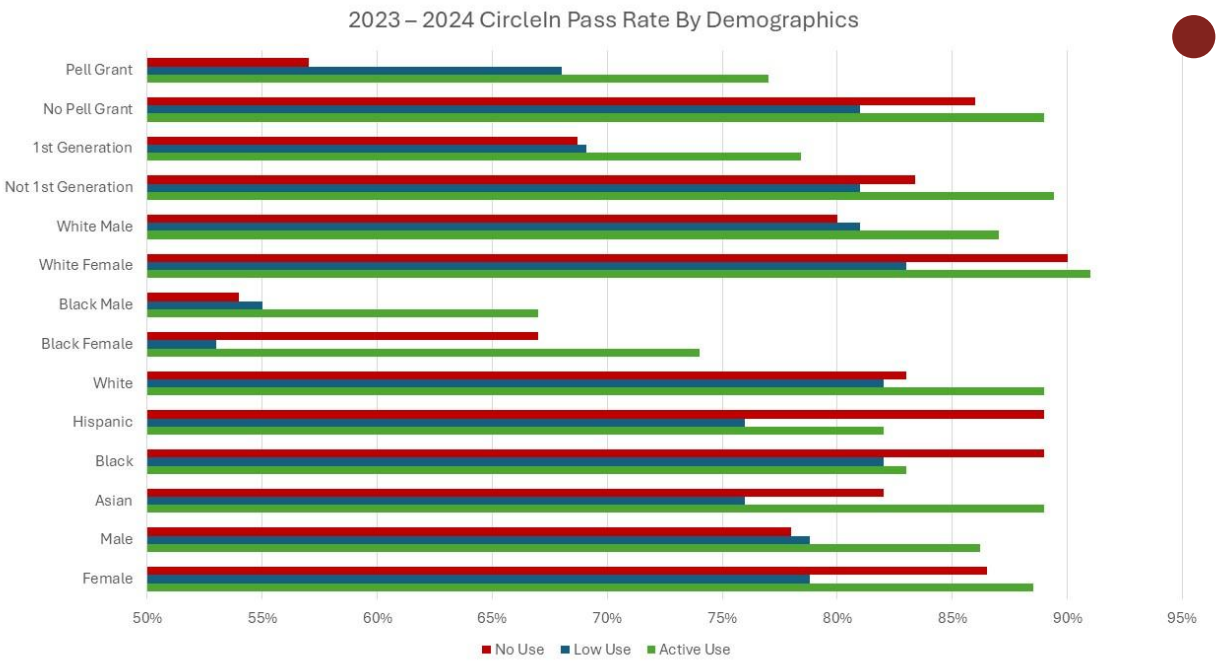


RESULTS

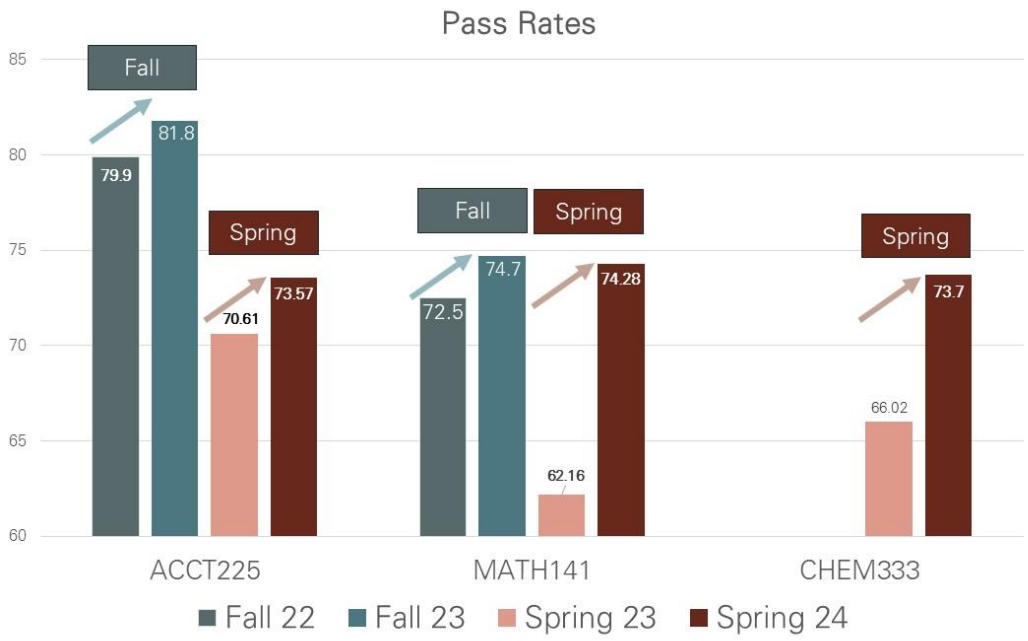
Each semester about 1300 students participated in the pilot with CircleIn. In fall 2023, the engagement rate was 87% and in spring 2024 it was 77%. In addition to DFW rate changes, and ABC pass rates, we looked at the pass rates for specific groups (Pell, first gen, gender, ethnicity) based on usage ---- no usage, low usage, and active usage. Our IR team performed data evaluations including an ANOVA analysis to ensure the reliability of the results in this pilot.

FALL 2023

No matter the group category, ethnicity, gender, Pell grant status, or generation status, the active users of CircleIn had a much higher pass rate than the other two groups, indicating that actively using CircleIn contributed to higher grades and more students passing classes across the board.

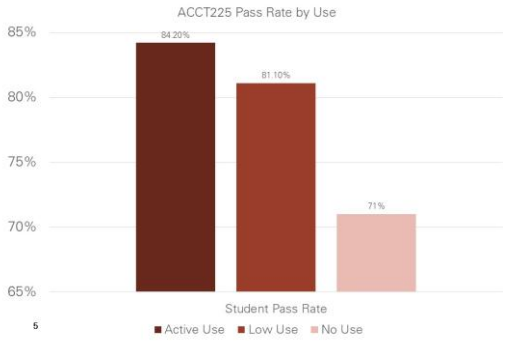


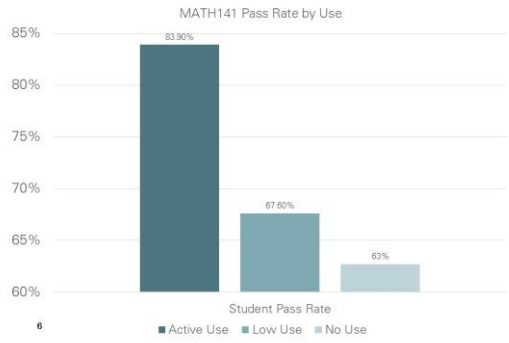
The overall pass rates of both ACCT 225 and MATH 141 improved. The pass rate of ACCT 225 in fall 2022 was 79.9% compared to 81.8% in fall 2023. The pass rate of MATH-141 in fall 2022 was 72.5% and increased to 74.7% in fall 2023.



Additionally, our evaluation data showed that active users and low users of CircleIn passed these courses at a higher rate than non users. USC's Office of Institutional Research ran an ANOVA analysis to compare the final grade for accounting and math across high use, low use, and no use.

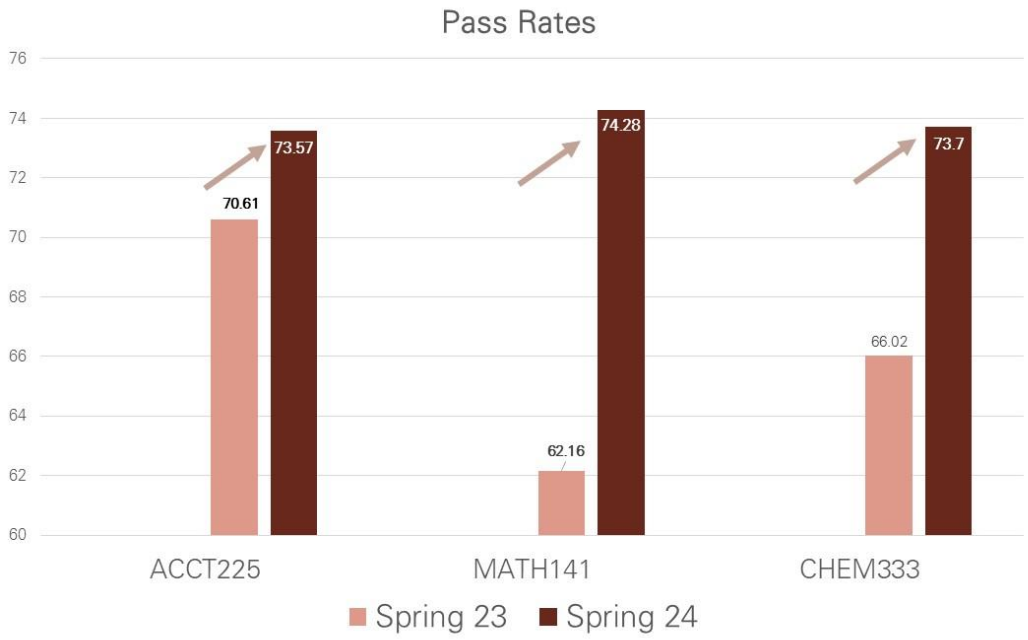
If students participated in CircleIn (regardless of how frequently they used the tool), they earned an A, B, or C more often than those students that chose not to use CircleIn. For both courses, there was also a correlation between greater use of the application and a higher pass rate and conversely a lower likelihood of failing. A wider improvement in pass rates was notable in MATH 141 when compared to ACCT 225. This could be attributed to the difficulty differences in the material.





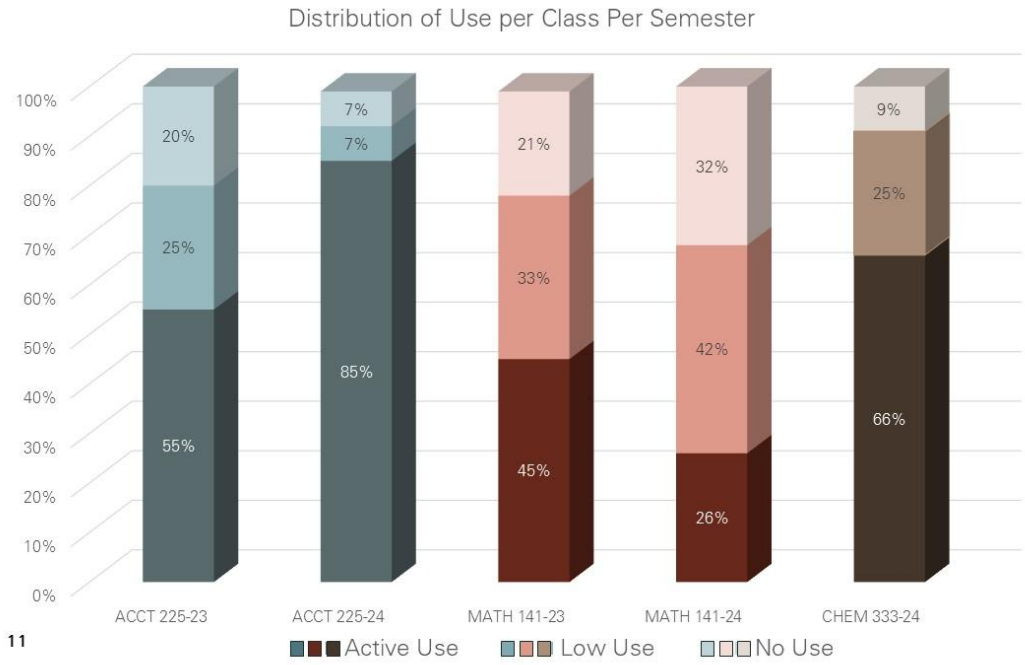
SPRING 2024

During the Spring 2024 semester, USC added CHEM 333 to the Pilot. The final grades of ACCT 225, MATH 141, and CHEM 333 all improved during the Spring 2024 semester as well. The pass rate of ACCT 225 in spring 2023 was 70.61% and increased to 73.57% in spring 2024. The pass rate of MATH 141 in spring 2023 was 62.16% and increased to 74.28% in spring 2024. The pass rate of CHEM 333 was 66.02% in the spring 2023 and increased to 73.7% in the spring 2024.



USC's Office of Institutional Research performed an ANOVA analysis to compare the final grade for accounting and math across high use, low use, and no use. A comprehensive analysis of CircleIn usage across multiple courses and semesters at the University of South Carolina revealed varying impacts on student performance. In CHEM 333 and ACCT 225, active users of CircleIn consistently achieved better final grades compared to low users and non-users, with low users also outperforming non-users. This trend suggests a positive correlation between platform engagement and academic success in these courses.

However, the spring 2024 data for MATH 141 showed no significant differences in pass rates amongst the three user groups, contrasting with the Fall 2023 results where increased CircleIn participation correlated with higher grades. In reviewing this further, it was noted that 43% of MATH 141 students were active users in Fall of 2023 compared to 26% in Spring 2024.



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We believe this reduction is due to a few factors. (1) Professors stopped encouraging students to use CircleIn. (2) One SI missed training and it was discovered later in the semester that she had set up a GroupMe for her class and did not use CircleIn. With less institutional reinforcement, a smaller number of students took advantage of CircleIn in the MATH 141. It may be worth noting that in this pilot, students mostly had access to CircleIn for 1 course and possibly used other apps for their remaining courses. This makes it even more important for professors and supplemental instructors to encourage their students to use CircleIn during a pilot, because students aren't yet acclimated to CircleIn. It would be better for students to have access to all of their courses on CircleIn to get maximum use of the full community experience.

In both ACCT 225 and CHEM 333 the large majority of students were actively using CircleIn. The positive outcomes in these courses versus MATH 141 in Spring 2024 could be attributed achieving a critical mass in participation. We believe this points to strength in numbers, as more of the class collaborates, the entire class improves.

Besides the ANOVA analysis conducted in Spring of 2024, linear regression was also employed to determine whether participating in CircleIn had a positive effect on reducing DWF rates in each of the three courses. In addition to CircleIn participation, were there any other variables that had either a positive or negative

impact on students' final grades? The dependent variable for the linear regression was students' final grades for each course separately, while the independent variables varied based on the courses. Although six common variables were shared across the models for each of the three courses, each model also included unique independent variables specific to its respective course.

The analytic results of the linear regression highlighted that participating in CircleIn of CHEM 333 reduced DWF rates. However, the analysis also indicated challenges faced by first-generation students, particularly in CHEM 333.

CONCLUSION

In conclusion, the partnership between the University of South Carolina and CircleIn has proven to be a successful initiative that enhances student engagement and academic success. By providing a virtual peer support community, CircleIn not only enhances existing supplemental instruction services but also fosters a sense of belonging among students. The engagement rates and positive impact on pass rates across key courses demonstrate the effectiveness of CircleIn's collaborative approach. As students actively engage with the platform, they experience improved academic performance, which is crucial for retention and graduation rates (DeAngelo, 2014).

The findings from the pilot program underscore the importance of an institution providing and reinforcing the adoption of accessible, peer-led support systems in today's educational landscape. These positive results underscore the importance of continuous assessment and adaptability in educational support strategies, as the effectiveness of tools like CircleIn may vary across different courses, semesters, and student populations. While we acknowledge that CircleIn is just one of many academic supports being used at USC in efforts to reduce DFW rates, academic outcomes have improved, particularly with active use as opposed to low or no use. Across both semesters, findings indicated that students who used both CircleIn and Supplemental Instruction had higher grades than those who did not pair these supports. By addressing the diverse needs of students and offering tools that facilitate collaboration, CircleIn empowers learners to overcome challenges and thrive academically. As USC continues to analyze and refine this initiative, it sets a precedent for other institutions seeking innovative solutions to enhance student success and retention in an increasingly complex educational environment.

REFERENCES

References

DeAngelo, L. (2014). Programs and practices that retain students from the first to second year: Results from a national study. New Directions for Institutional Research, 2013(160), 53-75.

McDaniel, C., Lewis, B., Trimble, M., & Ward, J. D. (2023). Front Matter. In The Texas Student Success Program Inventory: How Public Undergraduate Institutions Are Supporting Student Success Across the State of Texas (p. [i]-1).

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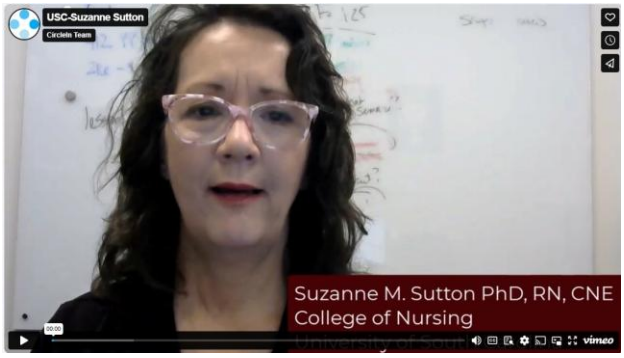
TESTIMONIALS

Marketing Student shares her experience with CircleIn.

Dr. Suzanne M. Sutton PhD, RN, CNE shares her experience with CircleIn.



Supplemental Instructor highlights her experience with CircleIn.

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