



UNIVERSITY OF
South Carolina



Case Study

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

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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

- Carnegie Classification: Research 1
- 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 has helped to increase pass rates (ABC) in key bottleneck courses – it is one of our ongoing efforts to support student success and retention. 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
and Dean of Undergraduate Studies

THE ACADEMIC TEAM



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Executive Vice President and Provost Donna Arnett initiated a Launch Team 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 Launch Team includes representatives from the Student Success Center, Academic 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 Launch Team is multifaceted but focuses on academic excellence for undergraduate students.

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)

USC found itself at a crossroads in addressing academic retention and reducing DFW rates in gateway courses. University leadership recognized that enhancing student success required diverse support strategies, particularly for students enrolled in challenging introductory classes (Hillstock & Havice, 2014). This challenge was further complicated by the university's scale and increasing larger freshmen class sizes. 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. Additionally, the voluntary nature of SI participation can lead to self-selection bias, where more motivated students are more likely to attend, potentially skewing the perceived effectiveness of the program.

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?

THE CIRCLEIN SOLUTION

The University of South Carolina implemented CircleIn's Virtual Peer-led Learning Platform designed to help USC decrease the DFW rates and increase the ABC pass rates, ultimately contributing to strengthening USC's retention.

Virtual peer led learning engages all student populations with peer support and strengthens a sense of belonging across the student body. USC administrators, Student Success Center, Institutional Research (IR), Instructional Technology (IT) and Faculty all 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 for the pilot 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 SIs also used CircleIn as their primary means of student communication. At the end of each semester, statistical analysts from the Office of Institutional Research analyze the impact of CircleIn on grade performance. The ABC and DFW rates for these pilot courses are compared to those from the previous year.

WHY CIRCLEIN?

CircleIn's Virtual Peer-led Learning Platform is designed to help students develop effective study habits and collaborate with peers and educators on problem-solving. It focuses on enhancing skills such as reflection, time management, note-taking, test preparation, and help-seeking, while facilitating text-based communication that aligns with students' preferences. The platform allows educators, including tutors, SI, staff and faculty, to engage with students through group messaging, which has proven to be more effective than traditional email. Available 24/7, CircleIn fosters an interactive community where students can actively support each other's learning and development, creating a strong sense of belonging in various course formats—whether in-person, hybrid, or fully online.

CircleIn provides a flexible, digital learning platform that enables students to collaborate and seek academic support across different times and locations. The app allows students to anonymously share their academic challenges, creating a transparent feedback mechanism that helps professors quickly identify and address learning gaps in their courses. By transforming traditional classroom interactions into a virtual community, CircleIn ensures students can

access peer support and instructor insights seamlessly, regardless of their physical location or study schedule.

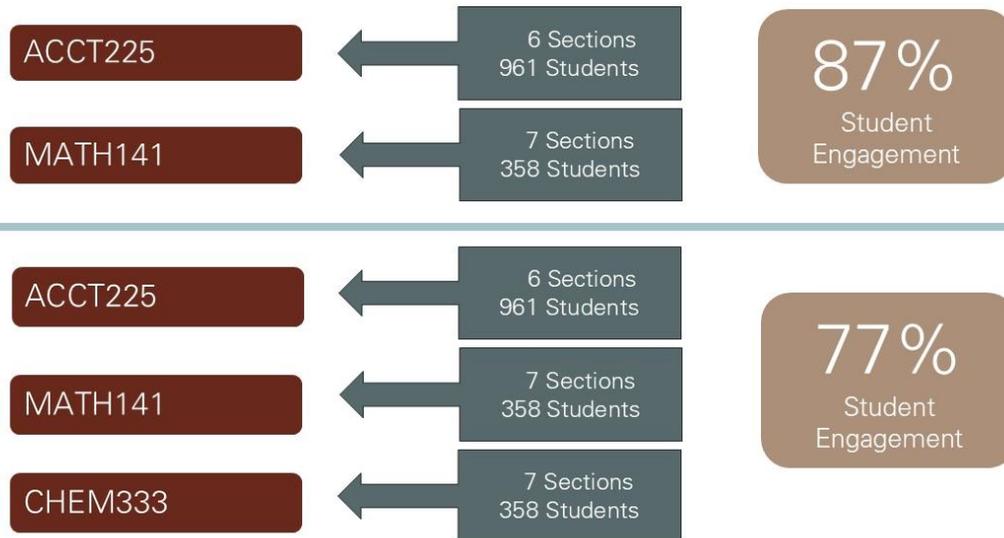
CircleIn also incentivizes engagement through a point system that rewards students for sharing knowledge, tackling challenging problems, and collaborating with classmates, thereby providing both intrinsic and extrinsic motivation for them to contribute to each other's unique learning journeys. For faculty, the platform delivers valuable insights into student study behaviors without adding to their workload, enabling them to identify and address learning gaps effectively.

CircleIn ensures that students from various backgrounds—whether they come from under-resourced school districts, have jobs, family responsibilities, commute, or live in different locations—can find reassurance in knowing they are not alone when facing academic challenges. Instead of feeling isolated, they can connect with a community of peers who are ready to support them in their studies and help them develop better habits through collaboration on the CircleIn platform.

For institutions seeking to enhance student success in high-failure courses and improve retention and timely graduation rates, CircleIn's Virtual Peer-Led Learning Platform serves as a crucial resource. By promoting peer-led learning, a high impact practice, CircleIn enables students to overcome academic challenges and engage more deeply with their coursework. This platform fosters a collaborative digital community where students can connect and study together at any time, breaking down barriers to participation and ensuring that all learners have access to support. Ultimately, CircleIn helps institutions create a more inclusive and supportive learning environment, leading to measurable improvements in course completion rates and overall student performance.

COURSES IN THIS STUDY

USC 2023-2024 Pilot

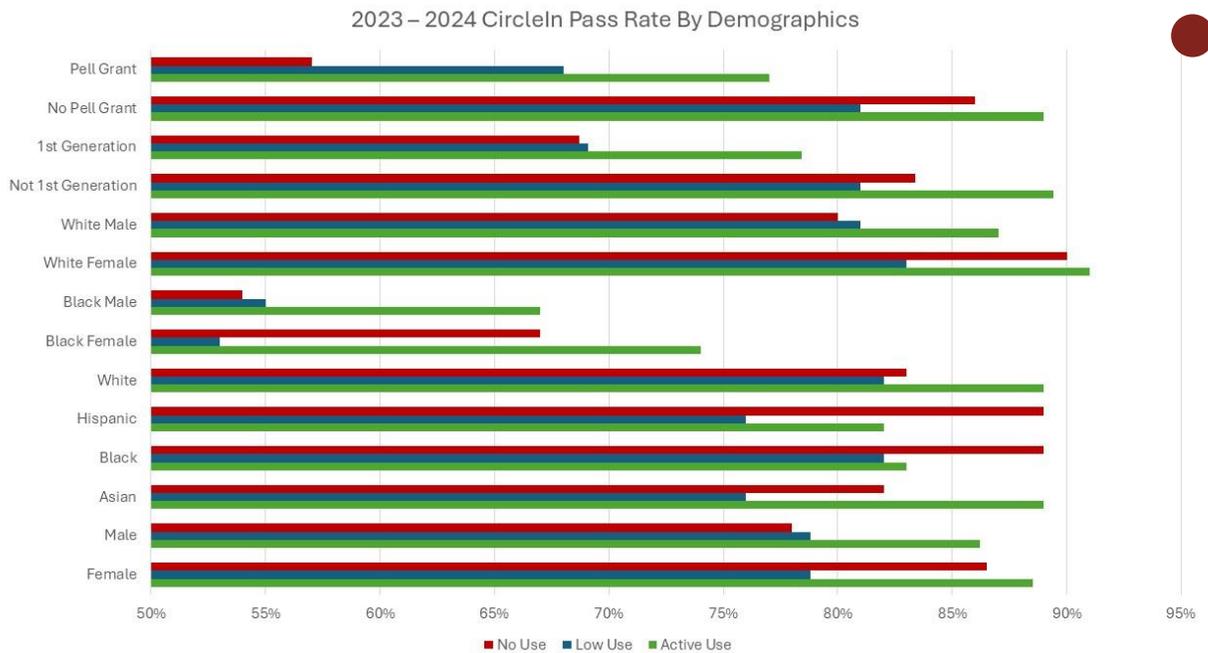


RESULTS

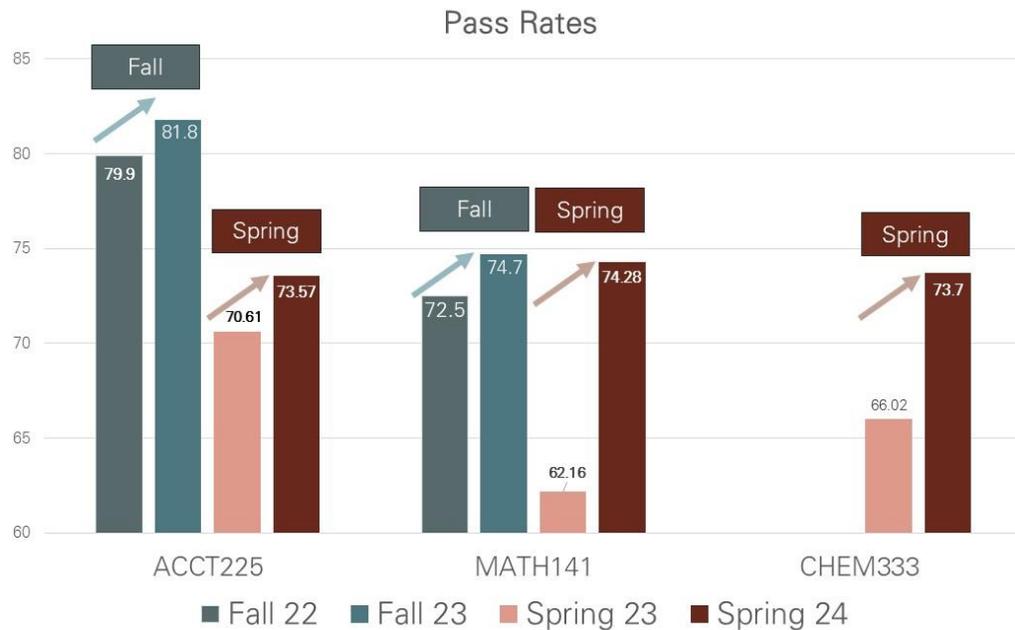
About 1300 students participated in the pilot with CircleIn each semester. In fall 2023, the engagement rate was 87% and in spring 2024 it was 77%. In addition to DFW rate changes, and ABC pass rates, we looked at the pass rates for specific groups (Pell, first gen, gender, ethnicity) based on usage ---- no usage, low usage, and active usage. Our Institutional Research team performed data analyses 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.

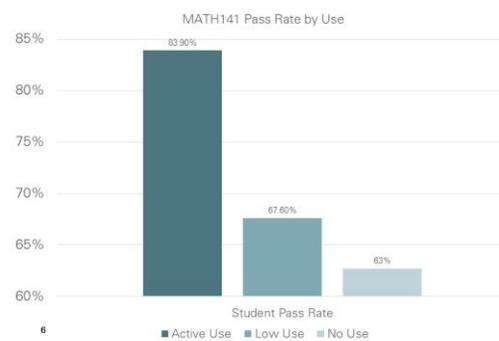
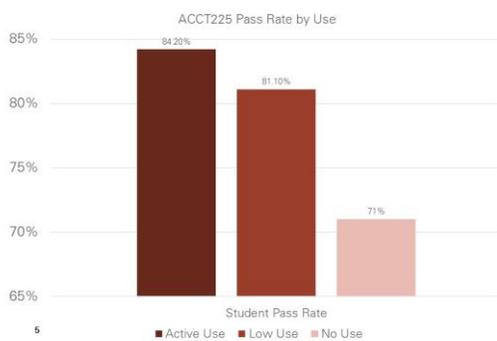


The overall pass rates of both ACCT 225 and MATH 141 improved. The pass rate of ACCT 225 in fall 2022 was 79.9% compared to 81.8% in fall 2023. The pass rate of MATH-141 in fall 2022 was 72.5% and increased to 74.7% in fall 2023.



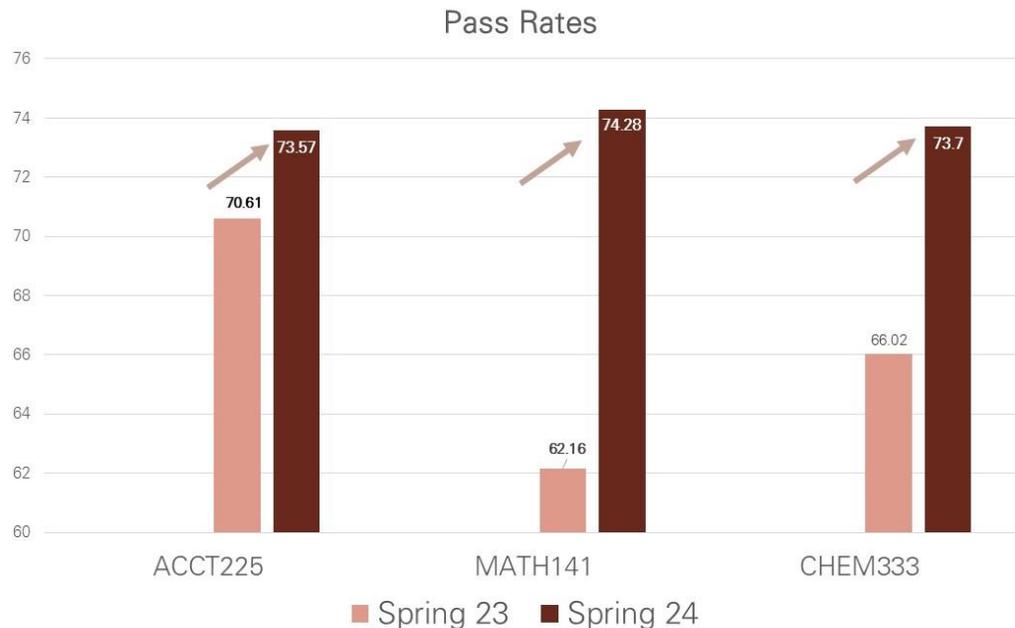
Additionally, our evaluation data showed that active users and low users of CircleIn passed these courses at a higher rate than non-users. USC’s Office of Institutional Research ran an ANOVA analysis to compare the final grades for accounting and math across high use, low use, and no use.

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 discrepancy could be attributed to the difficulty level of the material.



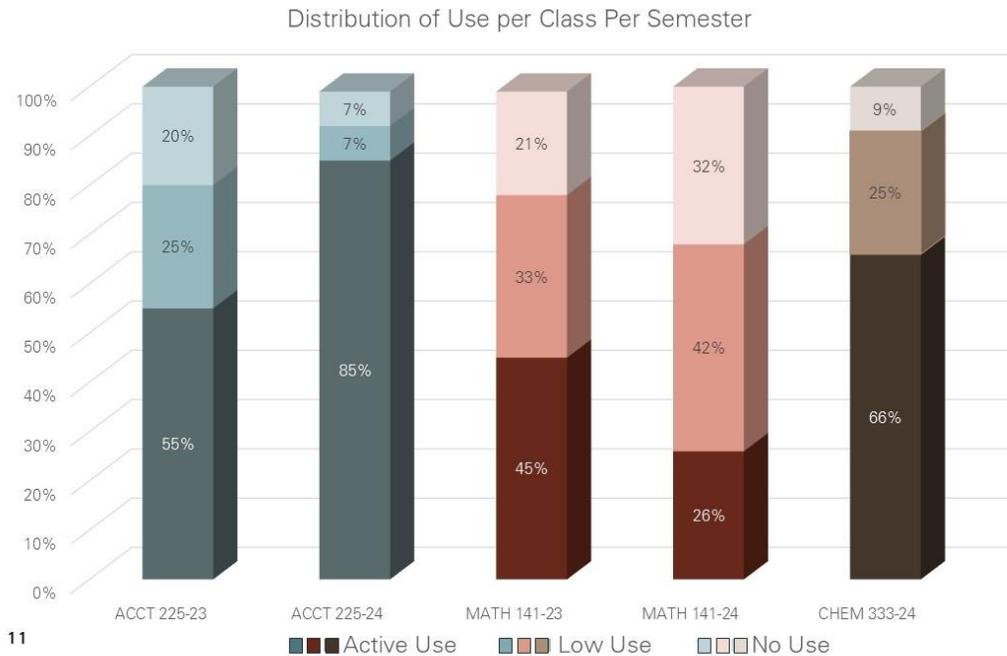
SPRING 2024

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 USC 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.



We attribute the reduction in engagement to several key factors. First, some professors did not actively promote the use of CircleIn, which likely limited student participation. Second, one Supplemental Instructor (SI) missed training and later established a GroupMe for class communication, rather than encouraging use of CircleIn. Third, the focused nature of the pilot meant that only a small number of students could participate in CircleIn for MATH 141. It is worth noting that most students had access to CircleIn for just one course, which may have led them to rely on other apps for their remaining classes. This pilot results underscore the importance of support from faculty and SI in encouraging student engagement with CircleIn, especially as students are becoming acclimated to the platform. Ideally, providing students with consistent access to CircleIn across multiple courses could enhance their familiarity and integration with the tool.

In both ACCT 225 and CHEM 333 most students actively used CircleIn. The positive outcomes in these courses versus MATH 141 in spring 2024 could be attributed to 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 DFW 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 student participation in CircleIn for CHEM 333 reduced DFW rates. Furthermore, the analysis indicated challenges faced by first-generation students, particularly in CHEM 333. These findings align with previous research by Mao, Yang, & Wang (2021), which identified academic performance as the most critical factor affecting first-generation students' graduation rates. Interventions, such as CircleIn, that enhance academic support and foster a sense of belonging can help to mitigate these challenges and improve graduation outcomes. Institutions should consider ideas on how to support first-generation students effectively.

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 virtual peer led learning, 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 SI 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.

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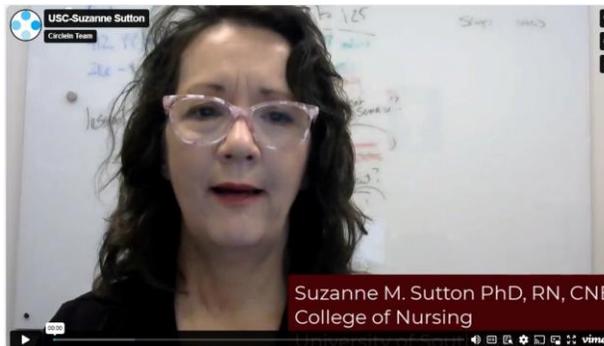
Lomicka, L. (2024). *“How the University of South Carolina used CircleIn to Help Boost Student Success in Gateway Courses, Increase Pass Rates and Improve Retention”* [White paper]. The University of South Carolina. Available at: <https://www.circleinapp.com/research>

TESTIMONIALS

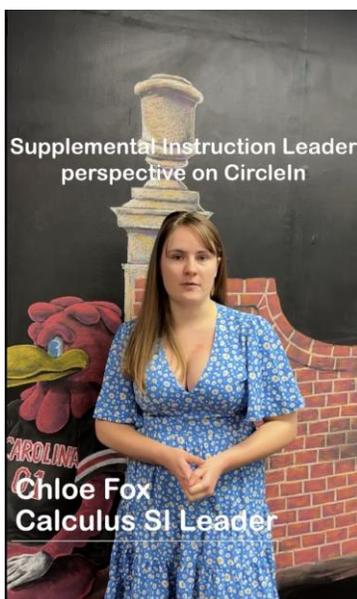
Marketing Student shares her experience with CircleIn.



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



Supplemental Instructor highlights her experience with CircleIn.





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