

## **“We’re a Piece of the Puzzle”: Using Social Validity Theory to Examine Faculty Perceptions of Student Success Collaborative Technology**

Rita Sperry

Texas A&M University-Corpus Christi

Erin Martin

Amarillo College

Erica Jenkins

Prairie View A&M University

Jennifer Tilbury

University of Alaska Fairbanks

### **Abstract**

This study examines faculty perceptions of their respective institutions’ Student Success Collaborative Technology (SSCT) platform at four colleges and universities, using Social Validity Theory as a guiding framework. Faculty widely acknowledge SSCT’s potential to enhance student retention through early alerts and interventions, but they cite significant challenges in usability, engagement, and implementation. Barriers include administrative burdens, lack of integration with existing systems, and inconsistent student responsiveness. Faculty emphasize the importance of streamlined processes, personalized interventions, and improved training and support to enhance the system’s social validity. These findings emphasize the necessity of aligning institutional tools with existing faculty duties and fostering collaboration to maximize the impact of retention initiatives on student success.

**Keywords:** Social Validity Theory, student success collaborative technology, faculty engagement

### **Recommended Citation**

Sperry, R., Martin, E., Jenkins, E., & Tilbury, J. (2025). “We’re a piece of the puzzle”: Using Social Validity Theory to examine faculty perceptions of student success collaborative technology. *Journal of the National Organization for Student Success*, 2(2), 27-44.  
<https://doi.org/10.61617/jnoss.55>

## **Introduction**

### **Context**

While teaching is often considered the primary role of college and university faculty, they are also frequently called upon to contribute to initiatives beyond the classroom that support their institution’s mission and promote student success. Amid ongoing changes in policy, curriculum, and technology, the expectations for faculty surrounding their involvement in student success efforts can sometimes feel unclear, peripheral, or even arbitrary. Not surprisingly, the lack of faculty buy-in or engagement can lead to fragmented or ineffective implementation of student success initiatives, limiting their overall impact. Without clearly defined roles, meaningful support, and intentional collaboration, faculty may struggle to see how their contributions connect to broader institutional goals, ultimately weakening efforts to improve student outcomes.

Our research team consists of faculty and staff at four higher education institutions, including one public two-year institution (Institution A) and three public four-year institutions (Institutions B, C, and D). Tasked with exploring a current issue or trend in higher education, the group identified a problem common among the four institutions: inconsistent faculty engagement in internal retention platforms (here called Student Success Collaborative Technology, or SSCT). Though each institution’s policy language and expectations for faculty use of SSCT vary, each group member reported inconsistent faculty engagement in their respective SSCT interventions.

Our research team focused on faculty perceptions of their own SSCT program – its purpose, its appropriateness for the institution, and faculty’s role in utilizing SSCT toward student success – and how those perceptions might play a role in its ultimate impact. By understanding faculty members’ perceptions of their role in the SSCT interventions on their campus, researchers hope to identify the next steps and points of clarity for continued use of the programs and discuss perceived weaknesses and best practices for integrating faculty users into SSCT. This discussion is essential as colleges and universities continue to adopt SSCT platforms and require engagement across their faculty.

### **Problem Statement**

When faculty hold incomplete or contradictory perceptions of their responsibility regarding their institution’s SSCT intervention, it becomes impossible to accurately collect data and evaluate the platform’s efficacy in connecting students to the resources they need to be successful in college. Lack of SSCT efficacy may lead an institution to switch platforms, causing more spending and creating yet another change to which faculty must adapt. Ineffective training and communication to faculty from departments responsible for SSCT programs can not only create bureaucratic gridlock but also convey that SSCT does not ultimately matter due to its lack of emphasis. Such miscommunications may ultimately impact students and their ability to receive assistance and resources in vulnerable academic and life moments.

### **Research Questions**

Currently, there is no comprehensive resource that identifies which colleges and universities use specific SSCT platforms or how these tools are implemented to support student success. Additionally, little attention has been given to understanding faculty perceptions of

these technologies and their role in using them. This study seeks to begin an important field-level conversation by examining the relationship between faculty and SSCT at four higher education institutions, guided by the following research questions:

- (1) How do faculty describe their role in relation to SSCT?
- (2) What challenges do faculty face when engaging with SSCT?
- (3) What strategies do faculty recommend to facilitate deeper and more effective involvement with SSCT?

## **Literature Review**

Student Success Collaborative Technology (SSCT), particularly in the form of Early Alert Systems (EAS), has emerged as a vital tool for supporting at-risk students in higher education. Hanover Research (2017) notes that the majority of four-year institutions have implemented early alert systems—mainly to identify at-risk students and improve retention—and highlights faculty involvement as crucial to system effectiveness. These systems are designed to flag students who may be struggling and initiate timely interventions from academic advisors, support staff, or other institutional actors.

The extant literature includes several quantitative studies demonstrating that early alert systems are positively associated with successful interventions for at-risk college students. A growing body of research confirms that early alert interventions contribute meaningfully to student success by enabling earlier, more targeted support. For example, Jayaprakash et al. (2014) found that predictive modeling tools embedded in early alert systems allowed institutions to identify at-risk students more accurately and intervene more effectively, improving retention rates. Similarly, Smith et al. (2012) reported that when faculty submitted early progress reports, advising staff were able to initiate outreach earlier in the semester, leading to gains in both GPA and course completion rates. Beyond supporting individual students, these systems also offer institutions insights into broader trends in course performance and engagement.

Early alert systems rely heavily on consistent faculty participation to function effectively. Faculty are often the first to observe early signs of academic difficulty, such as poor attendance, disengagement, or low performance (Atif et al., 2020). Their insights are particularly valuable because they reflect both academic and non-academic dimensions of student experience. When faculty engage with SSCT platforms, institutions are better positioned to intervene in ways that improve student outcomes (Delmas & Childs, 2021). Yet, the literature consistently points to low and uneven faculty engagement as a persistent barrier to the success of these systems.

Several studies highlight the challenges faculty face in using early alert platforms. Commonly cited barriers include workload pressures, time constraints, and unclear expectations around when and how to use the system (Atif et al., 2020; Delmas & Childs, 2021). Some faculty express skepticism about the effectiveness of EAS tools or feel inadequately trained to use them. Others report that the alert submission process is cumbersome or that the platforms themselves are unintuitive, particularly when not integrated with commonly used systems like learning management systems (LMS) (EAB, 2024). In some cases, faculty are unsure which types of student behavior merit concern or feel uncertain about the downstream impact of submitting a flag.

Institutions have responded to these concerns by testing a variety of strategies aimed at boosting faculty engagement. EAB (2019, 2024) and Delmas and Childs (2021) describe interventions such as peer-led faculty outreach, personalized reminders, and simplified flagging processes. Colleges like Santa Fe and Champlain have streamlined workflows by automating the detection of at-risk behaviors and sharing actionable insights with faculty (EAB, 2024). These institutions also report gains from setting clear program goals, integrating EAS with LMS platforms, and providing robust professional development. These efforts have shown promise, yet participation levels remain inconsistent, particularly when institutional messaging is unclear or when faculty do not see visible outcomes from their input.

While logistical and technological barriers are well-documented (Atif et al., 2019; Delmas & Childs, 2021), an important gap remains in understanding the underlying faculty beliefs, values, and motivations that shape engagement with SSCT. Most studies to date have focused on structural and procedural issues, with less attention paid to the relational or cultural dimensions of faculty participation. Garcia-Lopez (2023) conducted a qualitative phenomenological study exploring full-time faculty perspectives on early alert interventions at a southeastern U.S. community college, using in-depth interviews and thematic analysis to identify key themes related to faculty engagement, communication, and professional development needs. Garcia-Lopez (2023) recommended that future research include broader faculty samples across multiple institutions and academic disciplines to explore how perspectives on early alert systems may differ by context or teaching field.

This study responds to this gap in research by exploring how faculty perceive their role in using SSCT, particularly across varying institutional contexts. Drawing on Social Validity Theory as a theoretical framework, the research moves beyond surface-level barriers to ask not only *what* prevents faculty from engaging with these tools, but *why*. By investigating faculty attitudes and contextual experiences, the study aims to illuminate the deeper institutional and cultural factors influencing SSCT implementation. In doing so, this study contributes to the growing literature on student success infrastructure by offering actionable insights for improving faculty engagement with early alerts systems.

### **Theoretical Framework**

Social Validity Theory (Wolf, 1978) posits that stakeholders’ judgments regarding the social importance of an intervention fall into three interrelated categories: (1) goals, (2) procedures, and (3) outcomes. Interventions with high social validity are more likely to be adopted, implemented with fidelity, and sustained over time (Carter et al., 2019; Heckaman et al., 2000; McDuffie & Scruggs, 2008; Rademaker et al., 2021). For an intervention to have high social validity, those responsible for its implementation must understand and value its goals, believe that the selected procedures are both acceptable and feasible, and consider its outcomes to be significant (Carter & Wheeler, 2019; Wolf, 1978).

Student success efforts involving faculty members are more likely to be successful than those without (Rhoades, 2012), but these efforts require faculty members to be invested in the intervention beyond simple buy-in (Kisker, 2019). According to Wolf’s (1978) Social Validity Theory, faculty must believe in the goals of the SSCT program, assess the SSCT program’s procedures as both reasonable and pragmatic, and recognize the significance of the SSCT program’s outcomes in order to successfully engage in the intervention.

## Methods

This study was conducted in the form of semi-structured interviews at each of the four institutions represented by the research team. Interviews have been consistently identified as the preferred method for elucidating responses regarding social validity because they often provide richer discussions of complex constructs than surveys (Carter & Wheeler, 2019; Leko, 2014). Hennink and Kaiser (2022) demonstrated that interview studies of groups tend to reach saturation at 9-17 participants. Therefore, based on the number of sites involved and the research timeline, the preferred sample size was determined to be 12 faculty interviewees. Each team member reviewed captured data from their respective institution regarding faculty engagement with SSCT within the past academic year and identified potential faculty members to interview at their institution, with the aim to confirm participants meeting one of the following categories of users:

- Low SSCT user (little to no engagement according to SSCT data and institutional policy)
- Average SSCT user (engages with SSCT regularly in a limited or “bare minimum” capacity according to SSCT data and institutional policy)
- “Champion” SSCT user (engages with SSCT frequently and beyond expectations according to SSCT data and institutional policy)

After IRB approval was received for the study, each research team member solicited participation in the semi-structured interview personally via email or in-person based on the criteria above. The interviews were recorded and transcribed by Zoom. In each interview, only the faculty member and the research team member from the same institution were present. Each interview consisted of the same eight demographic questions and ten interview questions found in Appendix A. Interviewees were given the opportunity to opt out of answering any question they were not comfortable answering. Afterward, interviewees were given their interview transcripts and asked to review them for accuracy.

## Setting and Subjects

This study was conducted at four public institutions across the United States, each with its own approach to student support. While all institutions implement an SSCT intervention using a designated software platform, the specific strategies and structures vary. Additionally, expectations for faculty engagement differ across institutions, influencing how the intervention is integrated into academic and student success efforts.

Institution A, a community college in the southwestern United States, enrolls approximately 10,000–11,000 students annually across multiple campuses. Institution A faculty are required to use Watermark to track class attendance. Institution A also utilizes a Mandatory Tutoring policy in which a student whose overall course grade falls below 75% must visit the Academic Success Center associated with their subject. In compliance with this policy, faculty must create a task in Watermark explaining what the student should work on during their session. The faculty member must also assign a due date for the tutoring session to be complete. Other functions of Watermark, which faculty are highly encouraged to use, primarily involve alerting Institution A employees within and outside the student’s success network to assist students with

any academic or non-academic issues— including success coaches, disability services, advisors, financial aid, counseling, legal aid, tutoring, and the Advocacy and Resource Center.

Institution B, a historically Black university (HBCU) in the southern United States, serves around 9,000–10,000 students and offers undergraduate, graduate, and professional programs as part of the state's public university system. Institution B uses EAB Navigate as its early alert and retention platform. Faculty have the opportunity to submit ad-hoc alerts on students in their courses at any time of the semester. The alert reasons range from frequent absences to missing homework and assignments. Faculty can go into EAB Navigate and submit one or multiple alerts on students, provide additional comments on the student’s situation, and then the alert is assigned to the student’s academic advisor. As of right now, early alert submission is not a required task for faculty, and only a small number have attended training sessions. Additionally, faculty are requested to complete progress reports on a select population of students during the fifth week of the semester. Progress reports are requested on at-risk students, including those on academic probation, suspension appeals, and student-athletes. Faculty can then identify if these students are passing their class or at risk of failing while providing additional comments and identifying an alert reason for follow-up. Once the progress report is submitted, the assigned academic advisor for each student receives a notification and can then proceed with follow-up communication.

Institution C, a Hispanic-Serving Institution (HSI) along the Gulf Coast, enrolls 10,000–12,000 students each year and provides a range of undergraduate, graduate, and doctoral programs. Institution C faculty who teach lower-division classes (and select upper-division courses with historically high DFW rates) are expected to complete progress reports in the Starfish platform after the fifth week of classes for each of their sections. On the progress report, faculty can raise warning flags related to attendance or performance concerns, which are then distributed to academic advisors, athletic scholastic coordinators, and academic success coaches to review and follow up on. Faculty can also assign kudos for students who have had a strong start to the semester. Faculty can raise these and other warning flags any time throughout the semester, but the only required engagement in Starfish is the Fifth Week Progress Report.

Finally, Institution D, a public university in the northeastern United States, serves approximately 6,000–7,000 students, including many Indigenous and rural learners, and offers undergraduate, graduate, and doctoral programs. Institution D utilizes EAB Navigate as its early alert and retention platform to support student success. The early alert period takes place during the first few weeks of each semester and lasts for two weeks. During this time period, faculty receive emailed instructions for submitting alerts and a link to the platform. Additionally, faculty can submit ad-hoc alerts for students at any point throughout the semester. Alert reasons include issues such as not logging into online classes, frequent absences, or missing assignments. Faculty can log into EAB Navigate to submit one or multiple alerts and provide comments on the student’s situation, and the alert is then routed to the student’s assigned academic advisor. Currently, early alert submission is not mandatory for faculty, and only a limited number have participated in optional training sessions. While faculty are not required to submit progress reports, doing so is strongly encouraged. Once a progress report is submitted, the student’s assigned academic advisor receives a notification. At Institution D, both staff and faculty serve as advisors within the university’s decentralized advising structure.

A total of 12 faculty members participated in this study, three apiece from each of the four institution sites. Six participants were female, and six participants were male. Four

participants (33.3%) were White, three participants (25.0%) were Black, two (16.7%) were Hispanic, two (16.7%) were Asian, and one (8.3%) identified as Arab American. Length of service at the institution ranged from as few as three years to as many as 47 years, with an average of 22.3 years at the institution. Faculty represented a variety of disciplines, including five (41.7%) from Math, three (25.0%) from English/Communication, two (16.7%) from Political Science, and one each from Accounting (8.3%) and First-Year Seminar (8.3%). All faculty were currently teaching undergraduate courses that were primarily lower-division. Eight of the 12 participants (66.7%) were teaching face-to-face courses, while the remaining four participants (33.3%) were teaching both online and face-to-face courses. On average, participants had a teaching load of 4.42 courses, with a mode of 5 courses. Appendix B contains the complete demographic profile of the 12 participants.

### Analysis

This study used thematic analysis to examine faculty interviews through the lens of Social Validity Theory. To begin, each researcher uploaded their transcripts into ChatGPT 4.0 to generate preliminary codes and themes, using prompts aligned with the research questions and the three dimensions of social validity: goals, procedures, and outcomes. This initial analysis drew on methods similar to the chunking model described by Yang et al. (2024), which supports structured and efficient thematic processing. AI-generated summaries were used to create site-level overviews and identify early patterns across the dataset. The researchers refined the final code structure, integrating insights from both AI assistance and researcher expertise to ensure a rigorous and contextually grounded analysis. These finalized themes were then used to organize and interpret the findings.

Researchers first used the prompt “Identify the themes of the following interview” for each interview and collected the themes for three interviews at their institution in a single document. Once all institutional interview themes were identified, an overall thematic analysis across the four institutions was compiled with two prompts: first, “Take the attached four documents and create a summary and a detailed thematic analysis that incorporates all of them. Remove any names. Use SSCT in place of words like “early alert system” or “Starfish” or “Nanook Navigator” or “EAB,” and second, “Take the previously attached documents and create a thematic analysis that incorporates social validity as the theoretical framework.” Research team members then carefully reviewed the analysis for consistency.

In addition to AI-assisted analysis, the research team conducted independent manual coding to ensure thorough engagement with the data. Each team member closely reviewed their interview transcripts, systematically identifying categories, themes, and representative codes with attention to institutional context and interpretive nuance. This process included categorizing recurring patterns and selecting illustrative quotes to support each theme. The resulting coded themes table offered a comprehensive view of faculty perspectives on early alert systems and was used to validate and refine the themes generated by ChatGPT. Themes from AI- and researcher-generated analyses were then compared to assess alignment, enabling the calculation of interrater reliability (IRR), a measure of consistency across coders or analytic methods, which reached 90% agreement on major themes. The use of IRR in this study follows recommendations by Morgan (2023), who emphasizes IRR as a valuable strategy for enhancing transparency, consistency, and analytic rigor in qualitative research involving multiple coders or methods. Morgan (2023) also highlights the utility of ChatGPT in identifying concrete, descriptive themes,

while noting its limitations in detecting more interpretive nuances, emphasizing the importance of combining AI tools with **human-led qualitative analysis**.

## Findings

The analysis of interviews conducted with faculty regarding their use of the Student Success Collaborative Technology (SSCT) highlights critical insights into its alignment with the principles of Social Validity Theory (Wolf, 1978), particularly the perceived importance of its goals, the acceptability and feasibility of its procedures, and the significance of its outcomes. Upon review of the Zoom interviews conducted with faculty with various levels of engagement with SSCT initiatives on their campuses, six major themes emerged: (1) effectiveness of SSCT for supporting student success, (2) challenges in engagement and implementation, (3) lack of system integration, (4) student engagement and outcomes, (5) need for training and support, and (6) faculty feedback and system refinement.

### Effectiveness of SSCT for Supporting Student Success

Faculty generally recognize the social importance of SSCT’s goal to identify and support at-risk students. One faculty member reported, “I think the platform itself, if used correctly, can help us with persistence and retention of our students.” Alerts related to attendance, missed assignments, and engagement gaps are particularly valued by faculty as tools for early intervention, especially in online and introductory courses where faculty-student interactions may be limited. When asked about how the SSCT aligns with the goals of the institution, another participant responded that “theoretically it should fit because that’s one of the ways we try to reach out to students [so] they will not feel that they are invisible” and a third confirmed that the SSCT initiative “absolutely” aligns as part of the “wraparound services needed to keep our students on pace.”

However, while the system is perceived as theoretically impactful, there is variability in how faculty prioritize their engagement with SSCT. In the words of one faculty participant:

I think my responsibility should be to take an active role in entering early alert warnings, but the reality is that I generally play a passive role, meaning I only do [it] when I’m prompted to do so by the system.

Another participant also recognized a disconnect between the goals of the SSCT initiative and their own efforts:

But I mean, I think it's important....I think it's important for the students to get that wake-up call. So, I mean, it's on the top of the list. I think it's important for students to get. It's just sometimes, you know, we're overwhelmed with other responsibilities.

When asked about how their colleagues perceived the importance of the SSCT intervention on their campus, most faculty members admitted that they did not often discuss it with colleagues. One participant noted, “It’s not a typical conversation that comes up in the English department,” while another shared that “I don’t really talk to many folks about it much.” For those who did have conversations with colleagues about the system, the perceptions were generally not favorable. As one participant stated, “I don’t think many of them take it very



seriously,” and another admitted that “I mean, there might be one or two people who use it, you know, kind of independently, but overall, it’s not something that the college uses.”

### **Challenges in Engagement and Implementation**

According to faculty, their engagement with SSCT is inconsistent, with many using it minimally due to usability challenges. Faculty describe the process of submitting alerts as overly complex or time-intensive, reducing the feasibility of regular use. One faculty member reported that their SSCT was “not user-friendly” and “involved too many clicks,” while another shared, “I don’t know if I’m doing this right.” A third faculty member expressed concerns about the SSCT system being “burdensome to use for big classes,” where tracking individual students is time-intensive, while a fourth expressed concerns about the deadline for required early reporting taking place during “super super busy” time in the semester. One faculty member described her uncertainty with navigating the system as follows:

I remember just spending some time trying to figure out where I did it, and getting into it. And even now, if you said, ‘Show me how you...,’ I’d be like, I don’t [know]. I mean it would take me a while, because I would have to figure it out, and then I’d be really upset about the picture that it has of me. It would take me a minute to figure that out.

Some faculty are concerned about early alerts as adding to the workload of advisors and, therefore, express hesitation to issue them. One faculty member explained, “I found out subsequently, especially with the non-student athlete, that [the alert] goes to our college’s advisors. I didn’t want to add to their plate.” Similarly, another faculty member noted, “What it means is it adds work to our departmental advisors, and you were all grown up enough, responsible enough to deal with those who aren’t engaging in your class.” These comments highlight a concern among some faculty about the impact of alerts on the capacity of advising staff.

### **Lack of System Integration**

Faculty frequently described the SSCT initiative as being a duplication of their efforts, citing lack of integration with commonly used LMS tools like Canvas. As one participant noted, “Where do all faculty go? They always go into Canvas. Make it so it’s very easy for them to get to. You got to make it so that they don’t have to always be like, ‘Where do I do that?’” and another added, “I felt like I did the same thing twice. Put it on Canvas so we don’t have to go do it like this.” The general sentiment was that not having the SSCT platform integrated with the LMS made it more challenging for faculty to engage consistently.

Some faculty members also cited concerns about the fact that they would prefer to reach out to students directly, especially in smaller classes, rather than using the SSCT system or that the options provided to them for early alerts or warnings do not account for the range of struggles their students face. One long-term faculty member reported:

I feel like the alerts don’t quite pinpoint some of the issues. There’s definitely the one where it’s like they haven’t logged in or they [have] low grades on work and things like that, which is fine. But sometimes it’s not always that. After teaching a course so many times over and over, you just start to notice things about how certain behaviors will impact later things. I could have a student who has turned in every assignment in that first

couple of weeks, who has attended every class and who has even done pretty decently on all of those, but the student is spending like three hours on one of those. That's a red flag for me, because most of [the early assignments] are prerequisite stuff and most of the students are maybe spending half an hour. And so there's not really a way to indicate something like that, right?

### **Student Engagement and Outcomes**

Nearly every faculty member recognized that the SSCT had played a positive role in the success of students on their campus. Some were not able to name particular cases in which the SSCT intervention made an impact, only that there “were a few where it caught their attention” or that “I’ve had people say they really appreciated getting their kudos,” while others recalled specific examples. One faculty member shared a recent success story:

In Spring II, I had a business student in my class having some difficulties in his personal life, not able to make things happen, and I was able to use Watermark to review his track record and get some context on his situation. I was also able to communicate with his success coach, who had a better idea of what was going on and was able to reach out for those issues. The student was able to stay in the class, get everything done... it wasn’t easy, but I think having Watermark and having their track record and seeing their previous alerts and being able to see where they’re coming from, it gave me a better picture of what they were coming in with and how I could help them.

Faculty in our study expressed an appreciation of the intent to support students through the SSCT, but they observed limited effectiveness due to inconsistent student responsiveness to the alerts themselves or subsequent outreach by staff. According to participants, some students, such as athletes, respond to alerts because of eligibility requirements, but others often disregard them. One participant noted that the advisors on her campus “sen[d] an email or call them, and no response,” while another shared that “maybe a quarter of the students respond” to subsequent outreach attempts and that “when I do get something that the case has been closed almost every time it’s that we reached out to the student and they never responded.”

Contributing to this concern is that, while faculty may receive notifications when a case is closed, they are not privy to details regarding case outcomes other than generalizations. As one faculty member expressed, “I feel like there’s this assumption there’s going to be a third party that is also handling this, but really there isn’t. It’s like a shadowy third party.” Another faculty member admitted his ignorance of the impact of his efforts engaging in the SSCT intervention on student success, noting:

This is the question that is hard to answer. I’m sure it has, but I don’t have any examples, because I don’t really get to see. Are there students for whom I submitted an early alert that then went on to succeed? That’s not data that I look at in my free time. But I’m sure if I did, I would have some success stories, but I wouldn’t know the details of those stories without talking to those students. And so that is the one thing as faculty. We don’t always get to see that side of it.

Faculty shared their uncertainty regarding the impact of the SSCT intervention on student success. One faculty member reflected, “I think there is a consensus with the majority of the people in our department that says, yes, I’m doing these, but I don’t know how helpful they are.”

Another added, “I think the back end needs to be more robust in some way, and there needs to be more communication of who these people are and what we’re doing because you don’t want it to be just a crazy institutional box-checking event.” This sentiment highlights how the system’s implementation impacts its perceived effectiveness by faculty.

### **Need for Training and Support**

Initial training for SSCT implementation varied across interview participants. Some of the faculty members revealed that they had received little to no training using the SSCT platform, with one participant stating, “I remember just spending time trying to figure out where I did it, and getting into it” and another adding, “I don’t recall actually attending like a workshop or anything.” Other faculty members shared that they had participated in individual or group workshops at their institution or reviewed the provided documentation. One faculty member stated that they had “read through PDFs” but “didn’t watch the videos” provided, while a second “sat down” with the Director of Retention at their institution to “onboard” in addition to participating in a campus conference session.

Faculty identified a strong need for ongoing training and support to enhance their confidence and competence in using SSCT. One faculty member suggested, “I think that I could use some training about whether or not I’m supposed to be proactive with the system and how to do that,” while another suggested the use of badges to incentivize faculty participation in training on his campus. Structured workshops, department-specific training sessions, and access to designated support staff were all suggested by faculty as opportunities to increase faculty engagement with the SSCT interventions.

### **Faculty Feedback and System Refinement**

Overall, the faculty interviewed believe their insights are essential for aligning the system with their day-to-day workflows and improving its usability. Faculty members expressed a strong desire for meaningful involvement in decisions regarding the future of these platforms: “We’re a piece of the puzzle, so I think we should have lots of input.” When asked about what type of role faculty should play in future developments or enhancements, one faculty member stated:

Major role. You want faculty to use it. You have to have faculty who will want to use it and think that it's actually going to be used, and their considerations are taken into the decision-making process and give feedback. And so we say, ‘Oh, this system looks okay.’ Then we actually try using it. And we see that. ‘Oh, my gosh! It's this 3 click nightmare per student scrolling through page after page after page. No, no, this system's not going to work. Let's keep searching to find something works a little better.’

According to faculty participants, sharing data on student outcomes—such as improvements in performance or retention following alerts—with faculty could also lead to increased engagement. One faculty member suggested the need for more data sharing: “Looking at some of that data and being able to see how those numbers come out would be helpful to some of those people who are just like, ‘We get no feedback on it.’”

Faculty members emphasized the importance of integrating faculty perspectives, suggesting that if there are ever discussions about changing or upgrading the system, faculty

should be actively consulted to ensure the chosen solutions align with instructional and student support needs. In the words of one participant:

It is necessary. Every single faculty member, adjunct or full-time, should give some feedback and suggestions for future development of the platform. I don’t know this for sure, but I would say that we probably use it the most out of anyone on campus on a day-to-day basis.

## **Discussion**

This study was designed to explore faculty perspectives on the implementation of SSCT systems aimed at supporting student success. Using Social Validity Theory (Carter & Wheeler, 2007; Wolf, 1978) as a framework, faculty responses were analyzed through the lens of perceived goals, procedures, and outcomes. Participants represented four campuses with varying levels of engagement in SSCT interventions. The findings reveal both consistent and divergent perspectives across institutions, highlighting the complexity of faculty participation and the systemic barriers to effective implementation.

The findings affirm earlier research suggesting that faculty engagement is central to the success of early alert systems and related SSCT platforms (Atif et al., 2020; Delmas & Childs, 2021). Consistent with Atif et al. (2020), faculty cited logistical barriers such as unclear expectations, lack of time, and inconsistent follow-up as primary reasons for limited engagement. However, our findings also add nuance by illustrating the emotional and cultural dissonance faculty experience when these tools are perceived as externally imposed or misaligned with their professional values.

## **Goals**

Faculty generally recognized the social importance of SSCT goals, particularly around identifying and supporting at-risk students. Nevertheless, the intervention does not typically rank high among their priorities, primarily due to workload expectations and limited departmental recognition of its value. These findings align with existing literature citing time constraints and lack of institutional reinforcement as common barriers to faculty participation (Delmas & Childs, 2021). Faculty perceptions reveal a disconnect between the goals of SSCT interventions and the broader academic culture in which they are embedded.

## **Procedures**

Faculty in our study highlighted challenges related to the appropriateness and feasibility of SSCT procedures. While some found the technology user-friendly, many described the platforms as cumbersome, duplicative, and time-intensive, particularly for large classes. This finding aligns with concerns identified by Atif et al. (2020). Additionally, the implementation of SSCT varied dramatically across and within institutions, complicating faculty efforts to integrate the tools into their daily workflows. Faculty also reported inadequate training and a lack of opportunities for feedback, consistent with findings from EAB (2024). Participants suggested that increasing faculty input into the design and refinement of SSCT procedures, along with continuous training, could address many of these usability concerns. These observations reinforce the claim by Delmas and Childs (2021) that alignment between system processes and

faculty workflow is essential, but our study extends this by adding a social validity dimension: even a well-integrated tool will fall short if faculty do not perceive its use as meaningful or effective.

## **Outcomes**

Perceptions of SSCT outcomes were mixed. While faculty expressed hope that SSCT interventions could benefit students, they often questioned the effectiveness of these systems in practice. Several participants noted that students were unaware they had been flagged or referred, leading to skepticism about the system's impact. Faculty emphasized that without timely and meaningful follow-up from advisors or support staff, the potential benefits of SSCT are unlikely to be realized. This finding aligns with Wolf's (1978) assertion that socially valid interventions must produce observable, valued outcomes for end users. The gap between faculty intent and perceived student experience highlights the need for stronger institutional coordination and accountability.

By framing our findings through Social Validity Theory, we underscore that successful SSCT implementation is not simply a matter of technology usability or procedural compliance. It also requires cultural and relational alignment between institutional expectations and faculty values. This study expands the literature from a focus on systems design to one of systems legitimacy as experienced by end-users. Considerable work remains to fully engage faculty as partners in SSCT initiatives, but doing so is essential to realizing the full potential of these tools for advancing student success.

## **Limitations**

The primary purpose of this study was to understand faculty perceptions of their role and the efficacy of student success collaborative technologies. While the findings of this study help fill the gap in the limited research, there are limitations of this study that need to be addressed. The first major limitation is that the study was conducted at the researchers' institutions due to the limited timeframe provided to the research group. Three of the four researchers are located in the same southern state. While there were some variances in the demographics of the institutions (two-year v. four-year, PWI v. HBCU), the study's results cannot be generalized for all institutions. The second limitation was the study sample size. Due to the short window to interview participants, convenience sampling was utilized to find twelve participants, three from each institution, which resulted in a small sample size. While measures were taken to recruit participants from various demographics, disciplines, and tenure lengths, the small sample size does not represent all faculty.

## **Implications for Practice and Recommendations for Future Research**

The first implication for practice is the usability and system integration of SSCT. Since faculty play a critical role in student success initiatives (Atif et al., 2020; Delmas & Childs, 2021), their perceptions of SSCT initiatives are crucial to their effectiveness. Faculty have stated that they will not use technology if it is not easy to use or if they cannot access it when doing their daily duties. Future research should explore the integration of SSCT with commonly used

faculty platforms like Canvas. Studies could examine how the integration of SSCT within daily workflows could increase ease of use and, therefore, faculty adoption and system engagement.

The second implication for practice is the further need for faculty training and support. Research could focus on the impact of different training environments, such as department-specific sessions, workshops, online modules, or peer-to-peer sessions, on faculty engagement and usage. Faculty have speculated that faculty engagement would increase if there were better reward structures or certifications to include in their CVs or annual evaluation packets. Greater collaboration and communication with faculty throughout the intervention's design, implementation, and assessment stages could significantly enhance the social validity of the selected SSCT intervention.

A third implication for practice is the use of social validity in educational tools. According to Wolf (1978), interventions are judged for social validity by constituents based on the overlapping dimensions of goals, procedures, and outcomes. Interventions with low social validity are less likely to be adopted, implemented, and sustained over time (Carter et al., 2019). Further research could explore the concept of social validity by exploring how different stakeholders, such as faculty, students, and advisors, influence the adoption and impact of SSCT interventions. The findings of this study suggest that while faculty members appreciate the intended goals of SSCT interventions, they identify significant challenges with both the procedures and perceived outcomes.

As colleges and universities continue to invest in retention platforms, addressing these areas will be essential to maximizing the impact of SSCT on student success. Broader, multi-institutional studies are needed to further examine these dynamics and develop evidence-based strategies for improving faculty participation, satisfaction, and long-term engagement with SSCT platforms.

## Conclusion

In gathering perceptions around SSCT from the 12 faculty participants across four institutions, this study reveals the complexity of engaging college and university faculty in student success initiatives on top of their current workload. The findings of this exercise emphasize the need for institutions to prioritize clear communication, streamlined systems, and collaborative development processes to enhance the social validity of new and ongoing SSCT programs. Future research should expand on this work by exploring these dynamics across a broader range of institutions and developing evidence-based strategies for increasing faculty participation and satisfaction with SSCT platforms. As colleges and universities continue to invest in retention platforms, addressing these areas will be essential to maximizing the impact of these tools on student success.

## References

- Atif, A., Richards, D., Liu, D., & Bilgin, A. (2020). Perceived benefits and barriers of a prototype early alert system to detect engagement and support ‘at-risk’ students: The teacher perspective. *Computers & Education*, 156, 103954. <https://doi.org/10.1016/j.compedu.2020.103954>
- Carter, E. W., Steinbrenner, J. R. D., & Hall, L. J. (2019). Exploring feasibility and fit: Peer-mediated interventions for high school students with autism spectrum disorders. *School Psychology Review*, 48(2), 157–169. <https://doi.org/10.17105/SPR-2017-0112.V48-2>
- Carter, S. L., & Wheeler, J. J. (2019). *The social validity manual*. Academic Press.
- Delmas, P. M., & Childs, T. N. (2021). Increasing faculty engagement in the early alert process. *Innovations in Education and Teaching International*, 58(3), 283–293. <https://doi.org/10.1080/14703297.2020.1740102>
- EAB. (2019, February 19). 3 Reasons Why Your Early-Alert Program is Falling Short. <https://eab.com/resources/blog/student-success-blog/3-reasons-why-your-early-alert-program-is-falling-short/>
- EAB. (2024). *How to encourage earlier faculty interventions*. <https://eab.com/resources/research-report/how-to-encourage-earlier-faculty-interventions/>
- Garcia-Lopez, A. (2023). *An exploration of college faculty perspectives on early alert interventions* [Doctoral dissertation, University of Dayton]. University of Dayton eCommons. [https://ecommons.udayton.edu/graduate\\_theses/7378/](https://ecommons.udayton.edu/graduate_theses/7378/)
- Hanover Research. (2017). *Early alert systems in higher education*. Hanover Research. <https://www.hanoverresearch.com/wp-content/uploads/2017/08/Early-Alert-Systems-in-Higher-Education.pdf>
- Heckaman, K., Conroy, M., Fox, J., & Chait, A. (2000). Functional assessment-based intervention research on students with or at risk for emotional and behavioral disorders in school settings. *Behavioral Disorders*, 25(3), 196–210. <https://doi.org/10.1177/019874290002500307>
- Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Social Science & Medicine*, 292, <https://doi.org/10.1016/j.socscimed.2021.114523>
- Jayaprakash, S. M., Moody, E. W., Lauría, E. J., Regan, J. R., & Baron, J. D. (2014). Early alert of academically at-risk students: An open source analytics initiative. *Journal of Learning Analytics*, 1(1), 6–47. <https://doi.org/10.18608/jla.2014.11.3>
- Kisker, C. B. (2019). *Enabling faculty-led student success efforts at community colleges*. American Council on Education. <https://www.acenet.edu/Documents/Enabling-Faculty-Led-Student-Success-Efforts.pdf>
- Leko, M. M. (2014). The value of qualitative methods in social validity research. *Remedial and Special Education*, 35(5), 275–286. <https://doi.org/10.1177/0741932514524002>

- McDuffie, K. A., & Scruggs, T. E. (2008). The contributions of qualitative research to discussions of evidence-based practice in special education. *Intervention in School and Clinic, 44*(2), 91–97. <https://doi.org/10.1177/1053451208321564>
- Morgan, D. L. (2023). Exploring the use of artificial intelligence for qualitative data analysis: The case of ChatGPT. *International Journal of Qualitative Methods, 22*, <https://doi.org/10.1177/16094069231211248>
- Rademaker, F., de Boer, A., Kupers, E., & Minnaert, A. (2021). It also takes teachers to tango: Using social validity assessment to refine an intervention design. *International Journal of Educational Research, 107*. <https://doi.org/10.1016/j.ijer.2021.101749>
- Rhoades, G. (2012). *Faculty engagement to enhance student attainment*. American Council on Education. <https://www.acenet.edu/Documents/Faculty-Engagement-to-Enhance-Student-Attainment--Rhoades.pdf>
- Smith, F., Lange, S., & Huston, D. (2012). Early warning systems: Saving students who are struggling. *Journal of College Student Retention: Research, Theory & Practice, 14*(1), 105–123. <https://doi.org/10.2190/CS.14.1.g>
- Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis, 11*(2), 203–214. <https://doi.org/10.1901/jaba.1978.11-203>
- Yang, Y., Alba, C., Wang, C., Wang, X., Anderson, J., & An, R. (2024). GPT models can perform thematic analysis in public health studies, akin to qualitative researchers. *Journal of Social Computing, 5*(4), 293–312. <https://doi.org/10.23919/JSC.2024.0024>



## **Appendix A: Interview Protocol**

### **SSCT Platforms**

Institution A: Watermark

Institution B: Navigate

Institution C: Starfish

Institution D: Navigate

### **Demographic Questions**

1. How long have you taught at the institution?
2. What is your faculty rank (adjunct, tenured/tenure-track, professional/non-tenured track, graduate assistant, other)?
3. Gender?
4. Race/Ethnicity?
5. Discipline/Department?
6. What is your teaching load this semester?
7. What is your primary teaching mode this semester (face-to-face, online, hybrid)?
8. What level are most of your courses this semester (lower division, upper division, graduate)?

### **Interview Questions**

1. What is your understanding of the purpose and goals of <SSCT>? How do you think the program aligns with our institution's overall goals for student success and retention?
2. How would you describe your responsibility as a faculty member for engaging with <SSCT>?
3. Have you received any training or professional development related to using <SSCT> effectively?
4. How do you prioritize your use of <SSCT> among your other responsibilities?
5. How would you describe your colleagues’ perception of the importance of the program within your department?
6. Can you describe the types of behaviors or academic indicators that prompt you to submit an alert for a student in <SSCT>?
7. How do you communicate with students after submitting an alert in <SSCT> to ensure they understand the feedback and support available to them?
8. In your opinion, how effective is <SSCT> in supporting student success? Can you share an example of how you have seen <SSCT> positively impact a student's academic progress or overall success?
9. What challenges or barriers, if any, have you encountered when using <SSCT>? What suggestions do you have for improving faculty engagement with <SSCT>?
10. What role do you think faculty feedback should play in shaping the future development or enhancements of <SSCT>?

### Appendix B: Participant Demographics

Participant (Institution)	Level	Rank	Years	Gender	Race/Ethnicity	Discipline	Course Load (Modality)
1 (Inst. A)	Low	Instructor	6	M	White	English	7 (F2F)
2 (Inst. A)	Average	Instructor	3	M	Black	English	6 (F2F)
3 (Inst. A)	Champion	Full Professor	36	F	White	Math	2 (F2F)
4 (Inst. B)	Average	Lecturer III	25	M	Black	Languages and Communication	5 (F2F)
5 (Inst. B)	Low	Professor	21	M	Arab American	Political Science	2 (F2F and online)
6 (Inst. B)	Champion	Lecturer I	4	F	Asian	Math	6 (F2F)
7 (Inst. C)	Average	Professor	29	M	Hispanic	Political Science	2 (F2F)
8 (Inst. C)	Low	Instructor	7	F	Asian	Math	5 (F2F and Online)
9 (Inst. C)	Champion	Assistant Professional Professor	10	F	Hispanic	First-Year Seminar	6 (F2F)
10 (Inst. D)	Champion	Assistant Professor	3	M	White	Math	4 (F2F and Online)
11 (Inst. D)	Champion	Associate Professor	26	F	Black	Math	5 (F2F and Online)
12 (Inst. D)	Low	Assistant Professor	15	F	White	Accounting	3 (F2F)



This work is licensed under [Creative Commons BY-SA 4.0](https://creativecommons.org/licenses/by-sa/4.0/)