

ASCILITE 2025

Future-Focused:

Educating in an Era of Continuous Change

The student relationship engagement system: From monitoring to learning

Martin Cooper, Kim Balnaves

Curtin University

Dirk Ifenthaler

Curtin University and University of Mannheim

Developing and maintaining student relationships are crucial in tertiary education because they impact engagement, retention, and learning. The Student Relationship and Engagement System (SRES), developed at the University of Sydney, is a tool that integrates within a legacy learning management system and enables customised communications with students based on criteria such as attendance, assessment performance, and login frequency. This study utilised interviews from $N = 25$ SRES users across Curtin University faculties to explore its effectiveness and challenges, as well as what features could be added to SRES to improve its usefulness. Findings revealed that the initial usage focused routine and efficiency-driven tasks. However, advanced users leveraged the tool for more complex and adaptive uses, particularly in clinical or practical settings. While less experienced users found SRES beneficial primarily in large classes, more experienced users valued it irrespective of class size when linked to assessments and learning. Future enhancements suggested by participants included integrating artificial intelligence for generating communications or criteria automation, indicating potential advancements for SRES's utility.

Keywords: Learning Analytics, Student Relationships, Engagement, Higher Education

Introduction

Universities face growing challenges in maintaining student engagement, especially as online learning becomes more prevalent and students juggle work and personal commitments. Strengthening student-lecturer relationships is a potential key to addressing this issue. Tools like the Student Relationship Engagement System (SRES) offer a promising solution by enabling automated, personalised communication through integration with existing learning management systems. SRES uses data such as attendance and performance to automate tailored messages, fostering a sense of direct lecturer engagement and potentially improving student connection and motivation.

However, effective use of SRES requires more than automation—it demands consistent, meaningful interactions that reflect genuine lecturer investment. Therefore, further research is needed to understand educators' perspectives on its use. This study explores SRES implementation at Curtin University, examining how it supports relationship-building and engagement. It aims to identify benefits, challenges, and opportunities and contributes to a broader question: How can universities use technology to strengthen student-educator connections in increasingly digital learning environments?

Background

In contemporary tertiary education, student disengagement has become increasingly pronounced, particularly post-pandemic (Chirikov et al., 2025). Engagement, characterised by cognitive investment, emotional connection, and behavioural participation in learning activities (Fredricks et al., 2004), is vital for successful academic outcomes. However, the multifaceted nature of engagement poses significant challenges to educators striving to foster this state effectively. Research underscores a critical link between student-teacher relationships and student engagement. A strong relational bond can enhance students' emotional investment

ASCILITE 2025

Future-Focused:

Educating in an Era of Continuous Change

in learning, leading to improved educational outcomes (Thijs & Fleischmann, 2015; Thornberg et al., 2022). Thus, enhancing student-lecturer relationships, i.e., mutual respect, trust, and effective communication, is crucial for increasing engagement.

With the proliferation of learning analytics tools, such as SRES, new possibilities for supporting student engagement and student-lecturer relationships are available (Arthars et al., 2019). Learning analytics involves collecting, analysing, and reporting data about learners and their contexts to support and optimise educational processes (Ifenthaler & Yau, 2020). SRES has shown promise in enhancing student engagement by facilitating tailored interactions based on individual student needs (Arthars et al., 2019; Liu et al., 2015; Vigentini et al., 2017).

Current study and research questions

This paper builds upon previous research findings by exploring how Curtin University is promoting the use of SRES across its faculties. By investigating diverse applications and collecting staff feedback, this study seeks to deepen the understanding of SRES's impact on student engagement. Despite existing insights, a gap remains in understanding the practical implementation challenges and opportunities of SRES within specific institutional contexts. Addressing these gaps can guide future enhancements and broader adoption strategies for similar systems in higher education. The following research questions guided the current study: (RQ1) For what purposes is SRES being used at Curtin University? (RQ2) What challenges do staff face in using SRES? (RQ3) In what situations is SRES most useful? (RQ4) What new features could be added to SRES?

Method

Participants, context and design

This qualitative interview study used a convenience sample with participants recruited initially from Curtin University SRES Microsoft Teams communication channel. The criterion was that the participants were currently active in the chat area of the channel. This resulted in 15 initial interviews. A further ten individuals were recruited randomly from a list of SRES users provided to the researchers via SRES Support Staff making N=25. The interviews were approximately 30 minutes in length. Additionally, an effort was made to get a spread of users from across the faculties at Curtin University, with participants from the School of Education, Medical School, Population Health, Accounting, and Allied Health. Ethics approval was obtained for this research from the Human Research Ethics Committee at Curtin University.

Instrument design: Interview guide

An interview guide was developed to be implemented in a semi-structured one-on-one interview format. To address the research questions above, the interview guide covered the following areas: (a) Demographics: age, faculty, years of experience, and educational qualification. (b) Participant's view of teaching and learning. (c) Student engagement questions: How does the participant build student relationships? (d) Decision to use SRES: Why did the participant choose SRES? What units was it implemented in? (e) SRES onboarding: Describe the process, how much time was needed, and ongoing support required? (f) SRES use case: How was SRES used, benefits, challenges, and impact? (g) Future applications: What other data-driven systems or improvements to SRES would you like to see?

Data analysis

Interviews were recorded and initially transcribed using OtterAI (<https://otter.ai>). The transcriptions were verified before initial coding by the lead author to develop a codebook. All interviews were coded using deductive and inductive content analysis. After discussion and updates with the research team, the finalised codebook guided the recoding of all interviews (see Table 1 for examples).

Table 1

ASCILITE 2025

Future-Focused:

Educating in an Era of Continuous Change

Exemplary codes for data analysis of interviews

Target area	Codes	Examples
Perspective on teaching	Pedagogical approach	Constructivist, hands on, hands off, facilitator, flipped, active learning
	Teaching challenge	Large units, online, offline, multiple tutors, workload
	Value (Teach)	Clear communication, concise information, consistent contact, flexibility
Student teacher relationship	Approach	Build, engage, students contribute, one-on-one, SRES, Padlet, discussion boards, discussion, social media
	Tools	Trust, consistent delivery, equity, approachability, inclusivity, compassionate communication, learning processes, safety, friendliness, collegial, rapport, supportive
	Value (Rel)	
SRES use case	Reason	Personalise, engage, assessment, feedback, disengage
	Target	First years
	Scale	Single unit, large unit, small unit, course wide, first year
SRES benefits	Collect data (for lecturer)	Engagement, disengagement, insights
	Provide data (for student)	Feedback, assessment, personalised communication
	Impact	Engagement, retention, communication, support
SRES challenges	Issue	Complexity, support, errors, integration, misunderstanding, message crafting, data management
SRES future	Use again?	Yes, no
	Use again why?	No: small units, Yes: large units, No: too complex, No: set up complexity. No: see no value, Yes: personalised communication Yes: data insights, No: LMS should provide these tools, No: Integration with other systems, No: Lack of user friendliness
	Improvements	AI integration, access to student performance data, user-friendliness, integration. visualisation, AI, dashboard

Results and discussion

Demographics and background

Participants ages ranged from 40 to 61 years, including various academic roles across several schools. Despite diverse backgrounds, they shared a constructivist approach, emphasising inclusive, compassionate teaching focused on active learning. Described teacher-student relationships were collegial, supportive, and built on trust and rapport. Particularly in health sciences, students were viewed as colleagues. The findings highlighted a unified desire among staff to foster strong student relationships for enhanced engagement and success (Thijs & Fleischmann, 2015).

Uses of SRES (RQ1)

The analysis revealed distinct patterns in SRES utilisation at Curtin University, reflecting varying motivations across faculty experience levels. Less experienced educators (10 or fewer years) primarily employed SRES for routine and efficiency-driven tasks like attendance tracking and check-ins. Efficiency-driven tasks were particularly seen in situations with large classes (Vigentini et al., 2017). In contrast, seasoned staff (more than 10 years) engaged with more complex functions such as assessment management and adaptive learning strategies based on student feedback (Arthars et al., 2019). Both groups underscored SRES's role in workload reduction but differed in their integration depth. More experienced educators required advanced support for

ASCILITE 2025

Future-Focused:

Educating in an Era of Continuous Change

implementing sophisticated applications of the tool. A critical juncture identified was the initial adoption phase; participants frequently discontinued use during this period, citing inefficacy or preference for alternative systems. Successful long-term integration hinged on effective navigation through early-stage usage. Once staff moved beyond basic functions like attendance monitoring to leverage SRES for advanced tasks—such as assessment and feedback-driven learning—the tool's utility was more evident and sustained. These findings suggest the necessity of tailored support strategies during initial implementation, particularly in large classes or among less experienced educators, to enhance adoption and maximise SRES's potential benefits (Blackmon & Moore, 2020).

Challenges of Using SRES (RQ2)

The participants highlighted several challenges with using the SRES system. This included setup complexity, integration with other systems, and a lack of user friendliness. Opinions about the SRES onboarding process were varied, and this was likely due to participants experiencing different phases of the SRES rollout; early adopters reported better support, while more recent users felt a lack of personalised assistance and felt the need to rely on documentation. However, some staff highly praised the responsiveness of the SRES support team, again indicating a diversity of experience in this regard. There was a consensus that it would be better if the SRES tools were integrated into the learning management system, with a few interviewees recommending the inclusion of a dashboard-like system to enhance usability (Liu et al., 2015). Overall, these insights reveal a need for improved integration, a more user-friendly design, and more consistent support for SRES adopters. The findings regarding more consistent support are particularly critical given that users are more likely to abandon SRES use early on in their experience.

Benefits of SRES (RQ3)

There was a wide range of views about SRES held by the participants, with approximately 8 (30%) respondents being positive about SRES, 5 (20%) mixed and 12 (50%) negative. However, given that many of the negative views came from those who discontinued SRES use, it is interesting to examine the benefits that the system's enthusiastic users claim. Among these benefits were improved engagement through personalised communications, efficiency in managing large student cohorts, and the ability to generate data insights (Bergdahl et al., 2024). Given the approaches to teaching reported in the demographics section above, it appears that SRES is a good fit with the general approach to teaching and learning at Curtin University. One of the ardent supporters of SRES stated:

“My workload would escalate and there would be more errors, and then students would be more frustrated ... I'm just so pleased that Curtin invested in it, and I can see, especially when we get new staff on board, we've got increasing use of SRES in school, and people are starting to explore all sorts of features in it. And there's some very clever things happening.”
(Participant 3)

Interestingly, despite the proportion of participants classified as having an overall negative view, there were still 15 (60%) participants who were planning to use SRES in the future. This contradictory feedback may in part be due to the situation particular educators were in at the time of data collection not matching the perceived benefits of SRES.

Future improvements to SRES (RQ4)

The most commonly suggested improvements recommended by the interviewees were better integration with other systems, more user-friendly features, more automated processes, visual dashboards for data insights and the integration of AI to help with understanding the data as well as building the filters for sending out personalised communications (Arthars et al., 2019; Chirikov et al., 2025).

ASCILITE 2025

Future-Focused:

Educating in an Era of Continuous Change

Conclusion

Overall, SRES is highly valued by some Curtin staff for its efficiency and flexibility and its ability to impact student relationships and engagement (Gong et al., 2018). Experienced users are moving beyond simple monitoring to more advanced applications around assessment and even adaptive learning. However, other users have dropped out after a single attempt at using SRES, mostly due to either believing it was ineffective in terms of improving engagement or due to the initial complexity of the system. This highlights the need for ongoing personalised support and training if this tool is to become more broadly implemented (Bergdahl et al., 2024; Thornberg et al., 2022). This attrition rather may also be ameliorated through a more user-friendly interface, a dashboard for data insights, and AI integration.

In situating this study within the broader research landscape, it is essential to recognize that the findings contribute significantly to the field of learning analytics by elucidating the factors that influence both engagement and attrition in technology-enhanced learning environments (Arthars et al., 2019; Blackmon et al., 2020). Additionally, these insights enhance our understanding of technology adoption challenges and strategies in educational contexts (Ifenthaler & Gibson, 2020), echoing broader discussions on the necessity for user-centred design and continuous support mechanisms in fostering successful implementation of digital tools in academia (Bergdahl et al., 2024).

References

- Arthars, N., Dollinger, M., Vigentini, L., Liu, D. Y., Kondo, E., & King, D. M. (2019). Empowering teachers to personalize learning support. In D. Ifenthaler, D.-K. Mah, & J. Y.-K. Yau (Eds.), *Utilizing learning analytics to support study success* (pp. 223–248). Springer. https://doi.org/10.1007/978-3-319-64792-0_13
- Bergdahl, N., Bond, M., Sjöberg, J., Dougherty, M., & Oxley, E. (2024). Unpacking student engagement in higher education learning analytics: a systematic review. *International Journal of Educational Technology in Higher Education*, 21, 63. <https://doi.org/10.1186/s41239-024-00493-y>
- Blackmon, S. J., & Moore, R. L. (2020). A framework to support interdisciplinary engagement with learning analytics. In D. Ifenthaler & D. C. Gibson (Eds.), *Adoption of data analytics in higher education learning and teaching* (pp. 39–52). Springer.
- Chirikov, I., Douglass, J. A., & Thomson, G. (2025). *The Multi-Engagement Model: Understanding Diverse Pathways to Student Success at Research Universities* (A Report of the Student Experience in the Research University (SERU) Project. Center for Studies in Higher Education, Issue. <https://escholarship.org/uc/item/3c27q1kd>
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109. <https://doi.org/10.3102/00346543074001059>
- Gong, L., Liu, Y., & Zhao, W. (2018). *Using learning analytics to promote student engagement and achievement in blended learning: an empirical study* International Conference on E-Education, E-Business and E-Technology,
- Ifenthaler, D., & Gibson, D. C. (Eds.). (2020). *Adoption of data analytics in higher education learning and teaching*. Springer. <https://doi.org/10.1007/978-3-030-47392-1>
- Ifenthaler, D., & Yau, J. Y.-K. (2020). Utilising learning analytics to support study success in higher education: a systematic review. *Educational Technology Research and Development*, 68(4), 1961–1990. <https://doi.org/10.1007/s11423-020-09788-z>
- Liu, D. Y., Froissard, J., Richards, D., & Atif, A. (2015). *An enhanced learning analytics plugin for Moodle: student engagement and personalized intervention* ASCILITE,
- Thijs, J., & Fleischmann, F. (2015). Student–teacher relationships and achievement goal orientations: Examining student perceptions in an ethnically diverse sample. *Learning and Individual Differences*, 42, 53–63. <https://doi.org/10.1016/j.lindif.2015.08.014>
- Thornberg, R., Forsberg, C., Hammar Chiriac, E., & Bjereld, Y. (2022). Teacher–student relationship quality and student engagement: A sequential explanatory mixed-methods study. *Research Papers in Education*, 37(6), 840–859. <https://doi.org/10.1080/02671522.2020.1864772>

ASCILITE 2025

Future-Focused:

Educating in an Era of Continuous Change

Vigentini, L., Kondo, E., Samnick, K., Liu, D., King, D., & Bridgeman, A. (2017). *Recipes for institutional adoption of a teacher-driven learning analytics tool: Case studies from three Australian universities* ASCILITE 2017, Toowoomba, QLD, Australia.

Cooper, M., Balnaves, K. & Ifenthaler, D. (2025). The student relationship engagement system: From monitoring to learning. In S. Barker, S. Kelly, R. McInnes & S. Dinmore (Eds.), *Future-focused: Educating in an era of continuous change*. Proceedings ASCILITE 2025. Adelaide (pp. 326-331). <https://doi.org/10.65106/apubs.2025.2670>

Note: All published papers are refereed, having undergone a double-blind peer-review process. The author(s) assign a Creative Commons by attribution license enabling others to distribute, remix, tweak, and build upon their work, even commercially, as long as credit is given to the author(s) for the original creation.

© Cooper, M., Balnaves, K. & Ifenthaler, D. 2025