Research Report

“Using digital to improve online collaboration at Torrens University”



Course
User Research

TORRENS UNIVERSITY AUSTRALIA

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Executive summary

This research investigates how Torrens University can use digital tools to strengthen its online collaborative learning spaces. A mixed-methods approach combined desk research, four interviews, and a student survey (n=10) to explore best practices, current tool use, and opportunities for improvement. Findings reveal that Microsoft Teams is valued for communication, while MyLearn serves mainly as a repository, leading to fragmentation and confusion. Students desire easier file sharing, real-time co-editing, and streamlined hybrid setups. Recommendations include reducing platform overlap, enhancing features within official tools, and providing training. These steps will improve engagement, equity, and student satisfaction.

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Purpose

Torrens University is Australia's fastest growing university, offering students the flexibility to study where they want, when they, and how they want (Australian Government Department of Education, 2024). While this growth and flexible delivery model creates valuable opportunities, it risks introducing challenges for maintaining a strong sense of support and belonging in online environments. For example, it has been found that online students often report declining academic support, limited peer interaction, and reduced engagement over the course of a term (Peterson, 2023). At the same time, the ability to collaborate effectively online has become a core employability skill in many industries, particularly post COVID (Billing, 2021).

Against this backdrop, the purpose of this research is to investigate how Torrens can use digital tools to strengthen its online collaborative learning spaces. Doing so will not only support student success and peer connection, but also ensure graduates leave with the collaborative skills demanded by modern employers. Crucially, enhancing these spaces will help Torrens sustain its growth trajectory by reinforcing student satisfaction, engagement, and retention - key drivers in maintaining its position as Australia's fastest growing university.

Research objectives

To fulfil the purpose of this report and guide the research conducted, the below objectives have been devised:

Objective 1

Investigate best practices in online and hybrid collaborative learning spaces

- **1.1** What platforms have been identified as effective in other online or hybrid settings?
- **1.2** What specific features or design patterns contribute to improved collaboration and engagements?
- **1.3** What lessons can be drawn from failed or less effective collaborative learning implementations

Objective 2

Explore the current Torrens online collaborative learning spaces

- **2.1** Who is using these platforms?
- **2.2** What online collaborative learning spaces does Torrens currently utilise?
- **2.3** What type of learning activities (e.g group projects, online classes, peer feedback) are supported by these tools?
- **2.4** Are there any common third party tools that students or educators use instead of Torrens' official and supported platforms.
- **2.5** What type of activities do Torrens' students and educators use these tools for?

Objective 3

Identify strengths, friction points, and opportunities to enhance Torrens' online collaborative learning spaces

- **3.1** Are students and educators satisfied with the collaborative learning tools supplied by Torrens?
- **3.2** Where do students and educators see Torrens' collaborative ecosystem succeeding?
- **3.3** What pain points do students and educators face with Torrens' collaborative learning tools?
- **3.4** How do pain points affect students' ability to collaborate effectively?
- **3.5** What standards do students and educators expect in an ideal online collaborative ecosystem?

Methodology (cont.)

To appropriately achieve all research objectives, a a **mixed-methods research approach** was adopted, combining desk research, semi-structured interviews, and a survey. This ensured both qualitative depth and quantitative breadth, enabling a robust understanding of collaborative learning practices at Torrens.

Desk Research



Desk research was conducted to establish “what good looks like” in online and hybrid collaborative learning. Academic sources, case studies, and industry reports were reviewed to **identify best practices, effective strategies, and common pitfalls**. This provided a benchmark to compare Torrens’ current tools against and ensured findings were grounded in wider evidence.

Interviews



Semi-structured interviews were carried out with 4 participants (1 educator and 3 students) to capture qualitative, first-hand accounts of using Torrens’ tools. All 3 students were postgraduates studying in either a hybrid or online format. Conducted online via Microsoft Teams, each session lasted approximately 30-40 minutes and was recorded with informed consent. They were then auto-transcribed, and analysed Dovetail, with themes affinity-mapped in FigJam. This method was chosen to **gain deep insights** into **how** participants use the tools, the **challenges** they face, and where **pain points** arise. This form of research directly addressed Objectives 2 and 3 by exploring the lived experience of collaborative learning at Torrens.

Methodology (cont.)

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Survey



A survey was distributed to approximately to Torrens students via Google Forms to complement and **validate the interview data**. The survey gathered quantitative data on **tool adoption**, **satisfaction**, and **areas for improvement**, enabling themes identified in interviews to be tested at scale. Although originally designed to capture 25 student responses, only 10 students ultimately completed the survey. While this smaller sample reduces the breadth of insights, the data still provided valuable validation of interview themes and highlighted consistent patterns in tool usage and satisfaction. Data was exported and analysed, with insights mapped alongside interview findings in FigJam. This addressed Objectives 2 and 3 by assessing the prevalence of issues and confirming which areas were most impactful.

By integrating evidence from desk research, interviews, and surveys, the research captured a balanced perspective that linked best practices with Torrens-specific insights. While the sample size was modest, it reflected a cross-section of Torrens students and educators. Additionally, triangulation across methods increases confidence in the findings and provides clear evidence to guide actionable recommendations.

Ethical considerations

All research was conducted in line with Torrens University's Ethical Guidance for Students and Academics Involved in Non-Research Activities (Torrens University, 2024). As this activity was completed solely for assessment purposes, formal ethics approval was not required; however, the principles of merit, integrity, justice, beneficence, and respect were applied throughout. Participation was voluntary, with informed consent obtained prior to interviews and survey responses. No personally identifiable information was collected, and participants remained anonymous in all analysis and reporting. Data was securely stored and used only for the purposes of this study. Care was also taken to minimise bias by framing questions neutrally and validating findings across multiple methods.

By following Torrens' ethical guidance, the research ensured participant wellbeing, upheld privacy standards, and maintained the integrity of the findings.

Findings (Desk research)

Finding 1.1 - Active facilitation over ‘talk and deliver’
Collaboration is limited when courses stay teacher-centred or rely on videoconferencing alone. Engagement improves with active facilitation, scaffolds, and student-centred tasks such as group projects or debates. (Konkin et al., 2021) Blending synchronous with asynchronous modes (e.g., HyFlex or playlists) sustains participation (Tan et al., 2022).

Finding 1.2 - Real-time suites work when norms and support exist.

Tools like Google Workspace or Teams/Slack enable co-editing and fast communication, but require shared norms, training, and reliable tech to prevent overload or inequities (Hlazunova et al., 2024, p. 205; Rojabi, 2020).

Finding 1.3 - Whiteboards enhance ideation but risk clutter
Miro’s templates and infinite canvas drive co-creation, but without accessibility and structure boards can cause fatigue or exclusion (Khair Allah, 2023).

Finding 1.4 - Forums lag behind live channels
Static LMS forums rarely support peer co-creation. In contrast, real-time channels (e.g., Slack/Teams) encourage ongoing discussion, peer support, and workplace-relevant skills (Sibia et al., 2023).

Findings (survey)

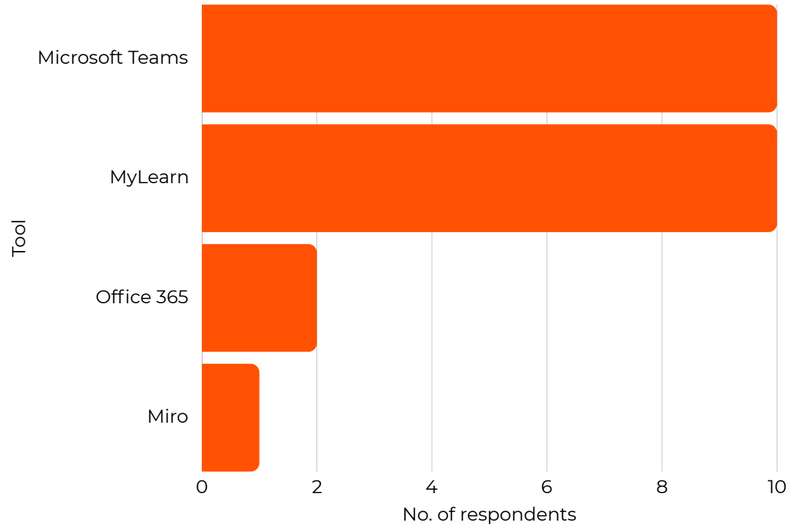
To view the raw survey data, see appendix 1.

Finding 2.1 - Tools used

All respondents (n=10) use Teams and MyLearn. A few also use Office 365 (n=2) and Miro (n=1).

Chart 1

Torrens collaboration tools usage among respondents



Finding 2.2 - What they're used for

Tools are used for online classes (100%), video calls/IM (90%), file sharing (70%), group projects (60%); peer feedback is less common (30%).

Chart 2

Learning activities with Torrens tools



Findings (survey)

Finding 2.3 - Issues

Issue frequency is below 3/5 across categories. Main pain points: missing features, missed notifications, finding files. Impact is split “a little” (50%) vs “moderate” (50%).

Chart 3.1

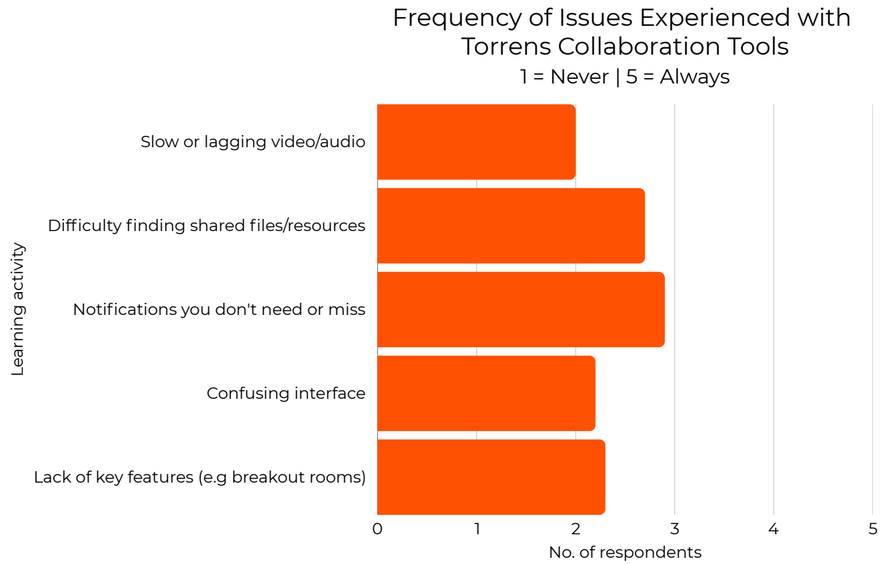
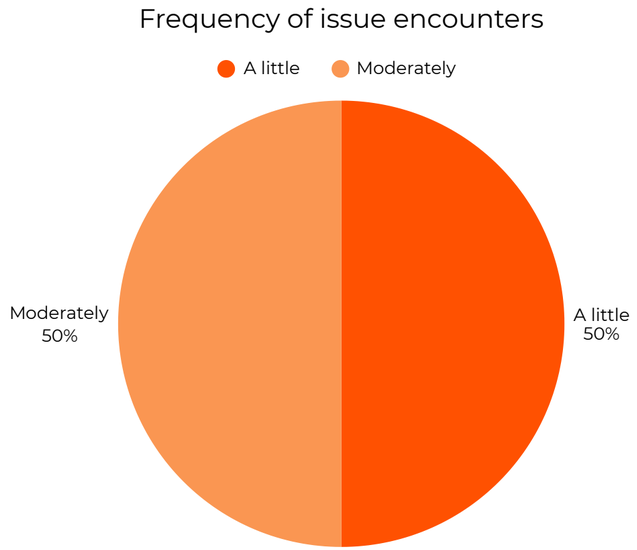


Chart 3.2

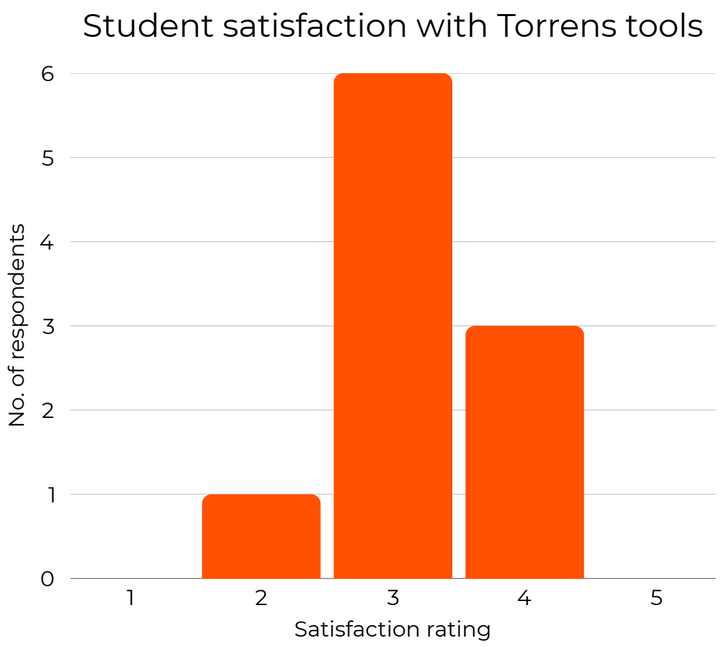


Findings (survey)

Finding 2.4 - Satisfaction

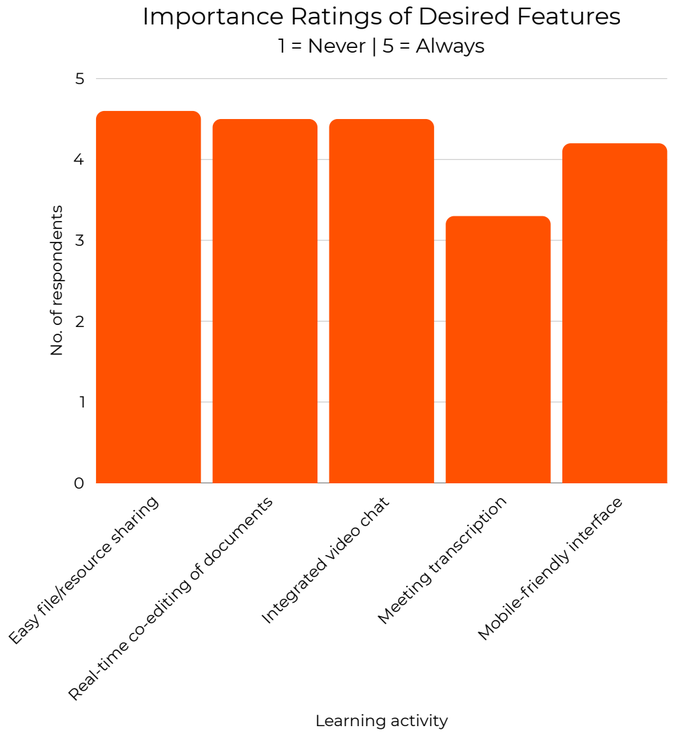
Overall satisfaction averages 3.2/5 — adequate/neutral experience.

Chart 4



Finding 2.5 - Desired features

Most valued: easy file sharing, real-time co-editing, integrated video, mobile-friendly UI. Transcription is lower priority.



Findings (survey)

Finding 2.6 - Why non-Torrens tools?

8/10 also use non-Torrens tools (esp. Miro). Reasons: missing features, familiarity from other courses, peer preference, and perceived speed/reliability.

Chart 6.1

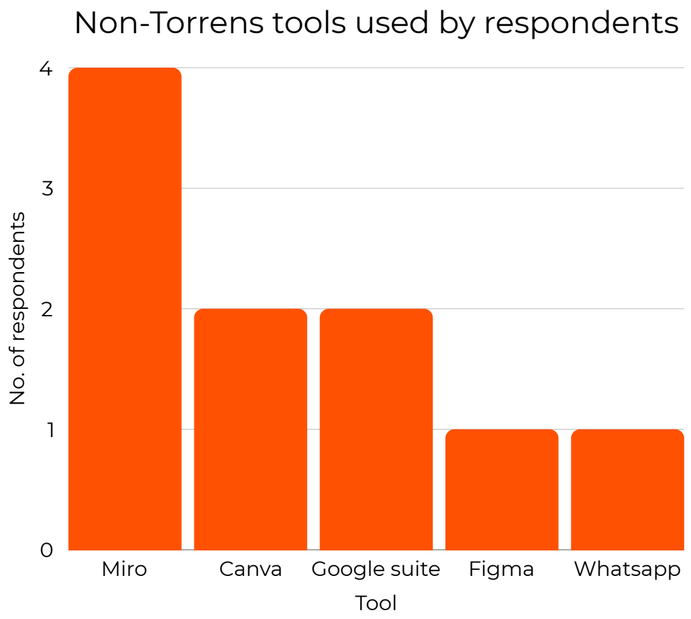
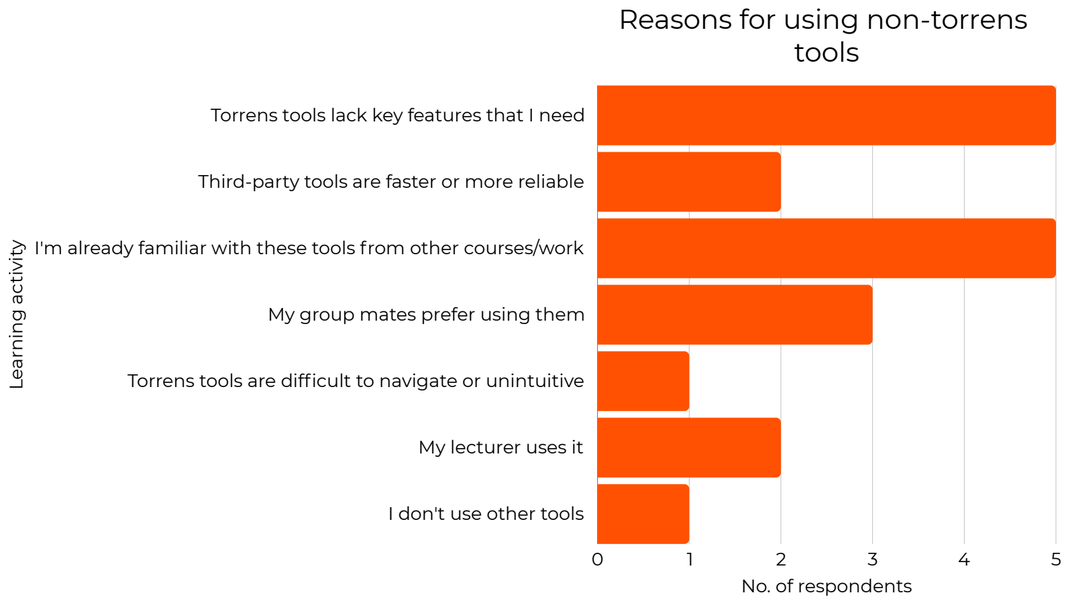


Chart 6.2



Findings (interviews)

To view the raw interview transcripts, see appendix 2.

Finding 3.1 - Teams vs MyLearn

Teams is the operational hub for communication and collaboration. MyLearn is treated as a repository rather than a live collaboration space and sometimes has loading issues.

Finding 3.2 - Notifications

Notifications have previously been duplicated across MyLearn and Teams. It appears they have now been consolidated in Teams, creating a single source of truth for them.

Finding 3.3 - Live collaboration

Collaboration is mostly synchronous via Teams, asynchronous conventions (e.g MyLearn discussion boards and Teams channels) are under-utilised.

Finding 3.4 - Whiteboarding

Miro is the preferred whiteboard tool but is not officially supported by Torrens. Teams offers this functionality but is not as efficient.

Finding 3.5 - Hybrid room setups

Educators struggle with hybrid classes due to friction with tedious room setup (e.g microphone and webcam) and a disconnect between the in person and online students.

Insights & themes

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Objective 1 - Investigate best practices in online and hybrid collaborative learning spaces

1.1 What platforms have been identified as effective in other online or hybrid settings?

Across higher-ed cases, platforms found effective included tools like:

- **Microsoft Teams** & **Slack** for spontaneos and live discussion, especially when used consistently and students/educators have been trained (Hlazunova et al., 2024, p. 219)
- **Miro** for visual synchronous/asynchronous co-creation (Khair Allah, 2023)
- **Google Workspace** & **Office 365** for real-time co-editing with integrated scheduling;

Videoconferencing alone (e.g Teams meetings) was reported as insufficient to sustain collaboration without interactive workflows (Konkin et al., 2021)

1.2 What specific features or design patterns contribute to improved collaboration and engagements?

From the literature, features and design patterns that improved collaboration included:

- **Real-time co-editing & presence** support faster iteration (google workspace doc)
- **Student centred activities** with high interaction (e.g group projects) drive collaboration (Konkin et al., 2021)
- **Active facilitation & scaffolding** are required - tools don't self organise, educators and students do (Tan et al., 2022)
- **Consistent use of platforms** prevents cognitive overload when switiching between subjects/courses (Hlazunova et al., 2024, p. 205)

1.3 What lessons can be drawn from failed or less effective collaborative learning implementations

The literature cautioned against the following patterns:

- **Teacher centred models** without interactivity and structure limit collaboration (Konkin et al., 2021)
- **Cluttered whiteboards** cause fatigue and exclusion (Khair Allah, 2023)
- **LMS-style Q&A forums** produce minimal peer collaboration and connection (Sibia et al., 2023)

Insights & themes

Objective 2 - Explore the current Torrens online collaborative learning spaces

2.1 **Who is using these platforms?**

Both students and educators are using these platforms at Torrens

2.2 **What online collaborative learning spaces does Torrens currently utilise?**

2.3 **What type of learning activities are support by these tools?**

Torrens university currently utilises the following:

- **Microsoft Teams:** the default hub used for things like online/hybrid classes, notifications/announcements, real time communication
- **MyLearn:** used as a repository for resources and submissions, sometimes used for its discussion forum
- **Office 365 workspace:** occasionally used for live collaboration and file-sharing, with features like a white boarding tool available

2.4 **Are there any common third party tools that students or educators use instead of Torrens' official and supported platforms.**

2.5 **What type of activities do Torrens' students and educators use these tools for?**

The third party tools that students commonly use are:

- **Miro:** a digital whiteboard platform that allows real-time collaboration and brainstorming
- **Canva:** used for live collaboration and document creation
- **Google workspace:** occasionally used for live collaboration and file-sharing, in place of Office 365
- **WhatsApp**: occasionally used in place of Microsoft Teams, especially to get in touch quickly with others

Insights & themes

Objective 3 - Identify strengths, friction points, and opportunities to enhance Torrens' online collaborative learning spaces

3.1 **Are students and educators satisfied with the collaborative learning tools supplied by Torrens?**

- From a sample of (n = 10) students surveyed, their average satisfaction with the collaboration tools provided by Torrens was 3.2/5
- Generally, its was found that students could achieve what they needed to with the tools provided

3.2 **Where do students and educators see Torrens' collaborative ecosystem succeeding?**

- Microsoft Teams was valued for its instant messaging and ability to facilitate live collaboration
- To a lesser extent, Office 365 tools (e.g Microsoft Word, Onedrive) were valued for their facilitation of live co-editing and file sharing of documents

3.3 **What pain points do students and educators face with Torrens' collaborative learning tools?**

- The fragmentation between MyLearn and Teams often led to confusion and frustration from students, especially with the ability to view notifications and post discussions being available in both platforms
- Students often struggled finding shared files and resources, with survey respondences averaging 2.7/5
- Teams whiteboard was considered weaker than external alternatives like Miro
- Hybrid room setups cause a disconnect between in person and online students
- Setting up hybrid classrooms is found to be a tedious task

3.4 **How do pain points affect students' ability to collaborate effectively?**

- 50% of survey respondents (n = 10) felt issues moderately impacted their collaboration
- Fragmentation across platforms like MyLearn and Teams forced students to juggle different spaces for communicatio
- Tools were sometimes perceived as weaker in the Torrens ecosystem than compared to others (e.g Microsoft whiteboard vs Miro)
- Missed notifications and file disorganisation slowed coordination

Insights & themes

Objective 3 - Identify strengths, friction points, and opportunities to enhance Torrens' online collaborative learning spaces

3.5 **What standards do students and educators expect in an ideal online collaborative ecosystem?**

- From the survey results, most students rated the following above a 4/5 in terms of importance
  - Easy file/resource sharing
  - Real-time co-editing of documents
  - Integrated video chat
  - Mobile-friendly interface
- Meeting transcription was rated less important at ~3/5
- Less fragmentation amongst difference tools and clear roles for each
- Educators also desire a streamlined hybrid setting that allows for increased collaboration in class/online

Recommendations

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Recommendation 1 - Expand the research base to strengthen validity

Future research should involve a larger survey sample, additional interviews, and the inclusion of support staff and administrators. This would ensure more representative insights and address systemic issues beyond the classroom.

Recommendation 2 - Reduce platform fragmentation by clarifying roles

Platform fragmentation creates confusion and duplication. Torrens should define the role of each tool and communicate these consistently across courses: MyLearn as a repository for resources and submissions, Teams as the hub for communication and live classes, and Office 365 for co-editing and content creation.

Recommendation 3 - Establish consistency and provide training

Students reported inconsistencies across courses in tool usage. Institution-wide guidelines, coupled with onboarding and training for both educators and students, would improve collaboration norms and ensure all users can engage effectively.

Recommendation 4 - Improve hybrid classroom support

Hybrid setups are often tedious and inequitable. Torrens should invest in better hardware (e.g., integrated microphones, auto-tracking cameras) and provide technical support to reduce educator workload and improve equity for remote students.

Recommendations

Recommendation 5 - Enhance collaborative features within the official ecosystem

Students value real-time co-editing, easy file sharing, and integrated video. Torrens should improve these features within Teams and Office 365, or officially integrate tools like Miro, to reduce reliance on external platforms.

Recommendation 6 - Streamline the file organisation and notification systems

Clearer file-naming conventions, folder templates, and consolidated notifications will address pain points around lost resources and missed announcements, supporting smoother collaboration.

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