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Navigating the Terrain:

Emerging Frontiers in Learning Spaces, Pedagogies, and Technologies

Optimising Student Preparedness through TEL Pedagogies: Actionable Insights for Scalable and Cross-Disciplinary Collaboration

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This paper explores the implementation of Technology-Enhanced Learning (TEL) pedagogies across four schools through scalable and cross-disciplinary collaboration at a Western Australian university. Using innovative support initiatives co-created with staff and students, our resources focus on bridging gaps in essential academic and digital literacies and fostering student agency and self-regulation. Grounded in transition pedagogy and adaptive learning, these initiatives enhance preparedness and inclusivity for a diverse cohort of students. We seek to address the lack of student perspectives on generative AI (GenAI) tools available to date, sharing data that reveals students' lack of confidence in using GenAI for learning and assessments. This paper explores how TEL pedagogies can shape educational practice and provide recommendations to uplift student confidence and readiness for higher education. We also explore how successful co-design strategies can lead to cross-disciplinary collaboration initiatives. These insights will potentially complement our university's whole-of-institution curriculum transformation initiative, emphasising the importance of feedback literacy and self-regulated learning in an evolving educational landscape. Our initiatives promote self-regulated and co-regulated learning, enabling students and staff to collaboratively improve the learning process and outcomes. Finally, this paper discusses the challenges encountered, offering actionable insights for institutions aiming to enhance student preparedness through collaboration.

Keywords: TEL pedagogies, transition pedagogy, co-creation, cross-disciplinary, student partnerships, GenAI, self & co-regulated learning, student agency, feedback literacy, adaptive learning

Introduction

Since being developed in 2019, our suite of co-designed resources has continued to respond to the changing needs of students and staff amid the constant flux and uncertainty of the higher education landscape. This ongoing change meant our support of students needed to be agile to meet their needs. By focusing on academic and digital literacies and developing the generic capabilities of commencing PG students, we have significantly decreased the gap by building their sense of agency and self-regulation skills, enhancing their academic readiness and confidence. This work has been grounded in Technology-Enhanced Learning (TEL) pedagogies such as adaptive learning and transition pedagogy to respond to the changing higher education landscape. The School of Nursing and Midwifery (SNM) at Edith Cowan University (ECU) has Western Australia's largest and most diverse cohort of nursing students. In 2023, 23% of students were international, from over 35 countries, and 64% were mature-age students balancing work with family commitments. 46% of students were the first in their families to attend higher education, and 14% came from regional or remote areas. This diversity has brought unique challenges in academic preparedness and digital literacies, prompting targeted support to enhance student success and retention.

Within this context, the Senior Learning Adviser and Senior Learning Designer from the Centre for Learning and Teaching collaborated with the School to launch initiatives to enhance student engagement and academic skills. Through TEL pedagogies like adaptive learning, we developed modules to strengthen essential academic skills and foundational research knowledge. Additionally, we introduced workshops that offer collaborative learning opportunities co-facilitated by staff and students. Key components of our support were Self-Assessment and Follow-Up Self-Assessment tools for students to evaluate their skills in software use,

information searching, and academic communication at the beginning and end of their first semester. These self-assessments help align students' expectations with their courses' academic and digital literacy demands. These scalable initiatives have since been adapted for undergraduate (UG) courses and extended through cross-disciplinary collaboration to include the Schools of Science, Medical Health Science, and Engineering. This paper explores the implementation and effects of TEL pedagogies, highlighting our cross-disciplinary approach and the influence of emerging technologies like generative artificial intelligence (GenAI). It also uncovers valuable insights into students' perceptions of using GenAI tools to support their studies. This paper offers practical recommendations for higher education institutions striving to improve student preparedness and educational outcomes through collaborative strategies.

Overview of initiatives

The co-designed self-assessments, modules and workshops support the transition of PG students. The self-assessments enable students to independently evaluate their software use, information searching, and academic communication skills, aligning their expectations with the rigorous academic demands they will face. By enabling students to understand essential academic and digital skills and their confidence clearly – and providing staff with insights into students' capabilities – these self-assessments help introduce self-regulated learning and support co-regulation (Ertmer & Newby, 1996). Co-designed with academic and professional staff, the modules build essential academic and research skills from basic research methodologies to advanced analytical techniques. The workshops offer just-in-time, collaborative learning experiences that reinforce the theoretical knowledge gained in the modules through practical application and help build student-staff relationships to enhance belongingness and learning (Levett-Jones et al., 2009; Ahn & Davis, 2020). In mid-2021, we piloted the survey with PG students in workshops and identified common themes in their responses. We consulted with SNM PG academic staff, the Director of PG, the Associate Dean of Teaching and Learning, and professional staff, including the Library. The questions were developed using principles of question construction to ensure that individuals in our sample could complete the survey and understand the questions (Cresswell, 2015). They reviewed and completed the survey, provided feedback, and we refined the questions based on their input (Cresswell, 2015). Finally, we applied for ethics approval at the end of 2021. More recently, in 2024, these initiatives expanded into UG courses and, for Semester 2, three additional Schools: Science, Medical Health Sciences and Engineering. Together, these initiatives demonstrate our commitment to boosting academic skills and preparing students for successful careers, using cross-disciplinary collaboration and innovative educational tools to meet diverse learning needs.

Table 1
Self-assessment responses as at end of Semester 1, 2024

	Student Responses	
Tool	Pre-Semester	Post-Semester
UG Skills Self-Assessment	461	32
PG Skills Self-Assessment	199	13
Total	660	45

In total, 660 responses were received for the pre-semester self-assessment and 45 for the post-semester self-assessment (Table 1). Although pre-semester engagement was strong, post-semester participation was notably weaker. Despite this limitation, the high pre-semester response rate has benefited students and staff in identifying student capabilities. In Semester 2, 2024, we expanded the self-assessments to three additional schools: Science (n = 23), Medical Health Sciences (n = 17), and Engineering (n = 7). Since the self-assessments were introduced in July 2024, the response rates are currently low. However, the preliminary findings are consistent with those observed in the SNM, such as overconfidence in academic integrity and lack of understanding of using GenAI tools for learning and assessments. We eagerly anticipate analysing the complete results later in 2024 for deeper insights into these initiatives' effectiveness.

Literature review

Transition pedagogy offers a holistic approach to the first-year experience, which we have adapted for PG education. It emphasises tailored support systems that address the needs of students transitioning into higher education (Kift et al., 2010). We have created flexible, on-demand resources for students balancing professional and personal commitments. Extending transition pedagogy's holistic support to PG students has been crucial. Flexible scheduling of workshops and online resources ensures that these support systems effectively address diverse learning needs (Kift et al., 2010). Strengthening partnerships between academic and professional staff ensures coordinated student support, aligning with institutional goals (Kift et al., 2010). Regular student-staff co-creation helps refine the self-assessment and modules, fostering ongoing collaboration and communication (Dollinger & Lodge, 2019). First-year students' experiences in Australian universities are well-documented, but issues faced by students transitioning from TAFE are less understood (O'Shea et al., 2012; Barber & Netherton, 2018). The literature highlights a lack of research on Enrolled Nurse-Registered Nurse (EN-RN) transition and indicates that small-scale studies show students' needs regarding preparedness and support are not being met (Joyce-McCoach et al., 2023; Wall et al., 2018; Wall et al., 2020).

Personalised adaptive learning, a pedagogical approach that utilises smart learning environments, dynamically adjusts teaching strategies based on real-time monitoring of learners' individual characteristics, performance, and development (Peng et al., 2019). This method connects data and intelligent technologies to create individualised learning experiences, enhancing engagement and effectiveness. Adaptive learning technologies actively monitor learning performance data, providing adaptive support or instruction tailored to the learner's needs (Lodge et al., 2023). Recognising the limitations of 'one size fits all' approaches, this method fosters the dynamic creation of pedagogically robust adaptive learning experiences that cater to diverse learner needs, thereby enhancing learning efficiency and effectiveness (Apoki et al., 2022).

Cross-disciplinary interaction is crucial for developing knowledge and skills needed to participate in sociocultural practices (Fruchter & Alfen, 2007). Understanding its practical implications helps institutions design effective courses that prepare students for professional environments requiring cross-disciplinary collaboration and communication (Fruchter & Alfen, 2007). Cross-disciplinary collaboration enriches learning, fosters innovative problem-solving, and cultivates creativity, critical thinking, and adaptability (Sandhu et al., 2015). Its scalable nature allows for continuous feedback-based curriculum improvement, ensuring lasting relevance and impact. This collaboration equips students to address emerging public health issues and adapt to evolving healthcare landscapes, highlighting its importance in enhancing student learning outcomes and preparing them for contemporary professional fields (Sandhu et al., 2015).

Co-creation is crucial for developing relevant educational resources and experiences students embrace (Dollinger & Lodge, 2019). This strategy involves students and staff in the design process, ensuring outputs align with student needs and expectations and enhancing uptake and effectiveness (Daza et al., 2021). Fostering self-regulation and agency is essential for developing resilient and independent lifelong learners (Ertmer & Newby, 1996). Co-regulation is integral, involving the joint influence of learners' self-regulation processes and the learning environment's regulatory sources, including teaching structures, teacher interventions, peer interactions, and instructional materials (Allal, 2016). By building self-regulatory capacity through thoughtful pedagogic interventions, students develop the ability to improve current tasks and gain the metacognitive and dispositional qualities needed to manage their learning in new situations (Panadero et al., 2019). Co-creating scalable approaches and strategies is crucial in promoting agency and empowering students to succeed in their studies (Daza et al., 2021). These collaborations draw on the expertise of students, as well as academic and professional staff, to co-design resources to support students (Daza et al., 2021).

The recent integration of AI in education has sparked significant interest, particularly in understanding how these technologies can enhance learning experiences. Kelly et al. (2023) highlight a critical gap in current research regarding the lack of student perspectives on AI tools. This gap limits the ability to draw concrete conclusions about how students will engage with AI in practice. AI has the potential to empower both teachers

and students by promoting differentiated and personalised learning (Wang & Cheng, 2022). This personalised approach can cater to individual learning needs, thereby enhancing the overall educational experience. Wang and Cheng (2022) further discuss how the proliferation of AI in society is altering the knowledge, skills, and values that students need to acquire. As AI becomes more ubiquitous, contemporary students must be adept at using these technologies creatively and ethically to solve real-world problems. This necessitates familiarity with AI and the ability to apply it effectively in various contexts.

Self-directed learning facilitated by AI benefits motivated and skilled learners, Firat (2023) notes, highlighting the need for digital literacy. Although AI facilitates self-directed learning, foundational digital skills are essential for students to use AI tools effectively. Lodge et al. (2023) examine AI and human interaction in learning, focusing on co-regulation. When AI identifies a learner's difficulty in self-regulating, it can assist by demonstrating monitoring and control techniques. This support helps develop essential self-regulation skills, as regulation primarily rests with the learner. Transitioning regulatory control from AI back to humans is crucial for effective co-regulation. Lodge et al. (2023) assert that learners must possess high self-regulation skills to work effectively with GenAI. This involves monitoring their learning objectives, critically evaluating AI responses, and adjusting their learning strategies. Given that AI-generated information may not always be reliable or accurate, learners must think critically, maintain control, and avoid becoming overly dependent on AI. By developing these skills, students can effectively utilise AI to meet their learning goals while critically assessing AI outputs and ensuring the technology does not excessively influence them.

Methodology

The ECU Human Research Ethics approved this study, "Enhancing the PG Student Experience and Outcomes" (2021-02657-MALDON). Our primary research question is: What are students' perceived skills and barriers in terms of their academic and digital literacies prior to commencing postgraduate nursing and midwifery studies? Students were invited to use self-assessments to evaluate their proficiency and confidence in essential literacies to support their studies. Pre- and post-semester self-assessments were administered using Qualtrics survey software. They included Likert-scale and open-ended questions covering software, basic computer skills, information searching, academic skills, academic integrity, and using GenAI tools. The self-assessments were emailed to all new PG students enrolled in the SNM courses at the beginning of semesters 1 and 2 in 2023. An email with a link inviting them to complete the follow-up self-assessment was distributed to the respondents at the end of the semester. The research team analysed the data using a descriptive quantitative design and Braun & Clarke's (2021) thematic analysis to understand student preparedness better and develop targeted resources and support. A non-student-facing team member de-identified and coded the responses. The research team explored the results to identify key themes and trends. In Semester 2, 2023, an ethics amendment included questions about GenAI tools, focusing on ethical use (Kelly et al., 2023). Ethics approval was expanded to explore the transition of enrolled nurses (EN) from TAFE to university in 2024. In Semester 2, 2024, the study was extended to the Schools of Engineering, Science, and Medical and Health Sciences, with minor updates to the self-assessments following consultation with the Schools.

Findings

The study revealed critical insights into the academic and digital literacies of students (Table 2). Both PG and UG students experienced notable gains in digital literacy skills, particularly PG students, with a significant increase in confidence using Microsoft Word, Excel, and PowerPoint. Information literacy improved for both groups, with UG showing a considerable increase in finding journal articles using databases. In terms of academic skills there were mixed outcomes, with PG students improving in critical thinking and analysis, while UG students declining. In terms of academic integrity, PG students showed growth in confidence, particularly

in avoiding plagiarism and academic misconduct, however this conflicts with misconduct case data. UG students' confidence slightly decreased, indicating the need for additional support in this area.

Table 2
Pre and post self-assessment confidence

Category	Cohort	Skill/Technology	Pre (%)	Post (%)	Change (%)
Digital Literacy Skills	PG	Microsoft Word, Excel, and PowerPoint	52.07	75.00	+22.93
	UG	Microsoft Word, Excel, PowerPoint	75.65	68.18	-7.47
	PG	Turnitin Originality and Similarity Check	39.17	62.50	+23.33
	UG	Turnitin Originality and Similarity Check	60.87	68.18	+7.31
Information Literacy	PG	Finding journal articles using health databases	29.75	62.50	+32.75
	UG	Finding Journal Articles using Databases	15.69	54.55	+38.86
Academic Skills	PG	Critical thinking and analysis	22.50	50.00	+27.50
	UG	Critical Thinking and Analysis	52.17	36.36	-15.81
Academic Integrity	PG	Avoiding plagiarism and academic misconduct	37.82	75.00	+37.18
	UG	Avoiding Plagiarism and Academic Misconduct	60.87	59.09	-1.78

Confidence in using GenAI is low across both groups, with 32% of UG and minimal PG engagement reported, indicating a need for further support and training in this emerging area. In a period of rapidly advancing technology, the amendment to explore perceptions of GenAI tools has revealed a cautious but growing interest in their use, with students recognising the potential benefits and need for ethical considerations.

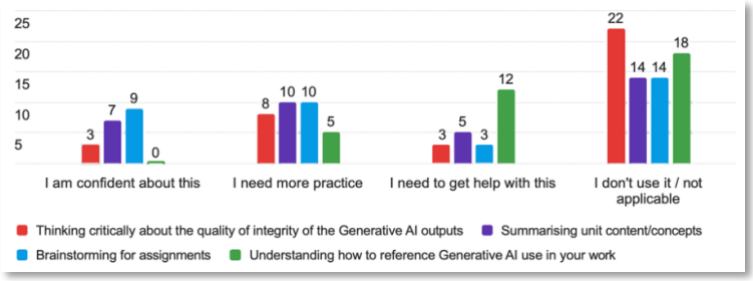

Figure 1. PG students' level of confidence in using GenAI to assist their learning.

Figure 1 shows that while some students are confident in using GenAI for tasks like brainstorming and summarising, many require more practice or help, particularly in understanding the quality of AI outputs.

Figure 2. PG students' level of confidence in using GenAI to help them prepare for their assessments.

Figure 2 highlights a similar trend in using GenAI for assessment preparation, with students needing more practice in planning, note-taking, paraphrasing, and summarising. The cautious but growing interest in GenAI tools underscores their potential benefits and the need for ethical considerations.

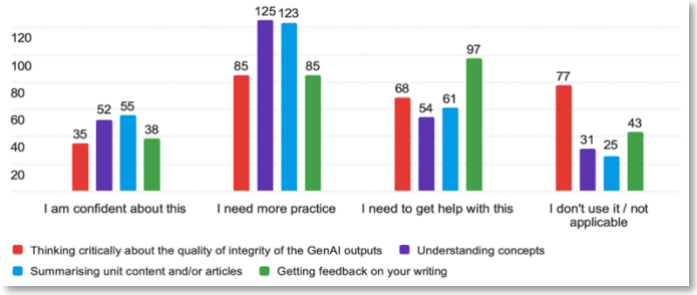

Figure 3. UG students' level of confidence in using GenAI to assist their learning.

Figure 3 shows that while some students are confident in using GenAI for tasks such as understanding concepts and summarising unit content or articles, many require additional practice or assistance, particularly in evaluating the quality and integrity of the GenAI outputs.

Figure 4. UG students' level of confidence in using GenAI to help them prepare for their assessments.

Figure 4 shows UG students' confidence in using GenAI for assessment preparation. While some are confident in brainstorming, planning, and understanding rubrics, many need more practice, especially in writing and referencing. Additionally, many students do not use or find GenAI tools applicable.

Positive impact on student learning

Since 2019, our co-designed resources have adapted to the evolving needs of students and staff in the dynamic higher education landscape. Our agile approach to support has focused on enhancing academic and digital literacy, building agency and self-regulation skills in PG students, and significantly improving their academic readiness and confidence. As a result, key metrics have continuously improved over the past four to five years. The long-term trend in student retention for SNM PG students has been positive, increasing from 66% in 2018 to 78% in 2023 (Figure 5). PG coursework completion rates have also seen a notable improvement, rising from 46% in 2018 to 62% in 2022, significantly outperforming the ECU average (Figure 6).

Figure 5. Long term trend in student retention rates

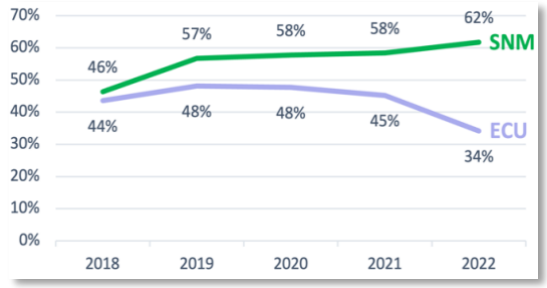

Figure 6. Long term trend in PG coursework 2-year completion

The fail rate in SNM has halved from 6% in 2018 to 3% in 2023, significantly outperforming the ECU average over the same period (Figure 7). SNM success rates have also shown a positive trend, improving from 94% in 2018 to 97% in 2023 (Figure 8). Moreover, the long-term trend in the rate of HFUs in SNM has shown a steady and significant decrease. From a high of 13% in Semester 1, 2018, and 11% in Semester 2, 2018, HFUs have steadily reduced to 3% in Semester 1, 2023, and 0% in Semester 2, 2023.

According to the *Good Universities Guide 2024*, SNM PG students rated their experience five stars. 84% expressed satisfaction with the learning resources and 80.7% with skills development (critical thinking, problem-solving, written and verbal communication). Students found the resources helpful beyond the commencement of their studies. Since 2020, new students have praised the support as *'very helpful, especially for someone who hasn't studied for a few years and speaks English as a second language'* and *'a valuable resource ... I'm still using PRISM* [modules] *as I type–my go-to survivor aid'.* Similarly, students who completed the self-assessment noted it helped identify strengths and areas for development in their digital and academic skills, fostering self-awareness and highlighting weaknesses.

Discussion

*Figure 7***.** Long term trend in student fail rates

Figure 8. Long term trend in PG student success rates

The findings from the PG and UG self-assessments highlight key themes in the successful implementation of TEL pedagogies. Critical insights into students' academic and digital literacies show strong confidence in basic computer skills among UG (82%) and PG (88%) students and in using software like Microsoft Word, Excel, and PowerPoint. However, confidence drops with specialised tools like PebblePad (36% UG, 38% PG) and advanced information searches (46% UG, 38% PG). Academic skills confidence is moderate, with only 36% of UG and 38% of PG students confident in writing academic paragraphs. While most feel confident in avoiding plagiarism, ongoing misconduct cases suggest a gap between perceived and actual practices. Confidence in using GenAI is low, with only 32% of UG students and minimal PG engagement, indicating the need for more support and training. The cautious yet growing interest in GenAI tools also highlights the importance of ethical considerations as technology integration advances. As our institution advances its curriculum transformation, these findings provide actionable insights into the effective deployment of TEL initiatives to optimise student preparedness across diverse educational contexts.

Our application of transition pedagogy has involved integrating fundamental principles such as engagement, diversity, and support into the modules and the workshop series, ensuring that these resources help students navigate the complexities of PG studies from the outset (Kift et al., 2010). Initiatives such as self-assessments and workshops emphasise engagement, diversity, and support tailored to the specific needs of each cohort. For instance, the self-assessment helps identify and address gaps in digital literacy and academic skills, providing tailored support to bridge these gaps (Barber & Netherton, 2018). Monthly meetings between academic staff, professional staff, and student representatives ensure that support strategies are practical and responsive to student needs (Kift et al., 2010). By applying transition pedagogy principles at critical transition points, including entry into PG programs, transition from TAFE to university, and integration of new technologies like GenAI, we provide targeted interventions to address specific challenges and support

successful transitions. This approach ensures that students receive the necessary support and resources to successfully navigate the challenges of their first year in higher education (Kift et al., 2010).

Our scaling and cross-disciplinary collaboration began within the PG framework in SNM. The successful initial deployment drew interest from UG programs, which identified a similar need for self-assessment among UG students. With support from the Associate Dean of Teaching and Learning, we expanded the self-assessment to include UG students. Initially targeting commencing students, we realised that mid-program ENs missed transition support. To address this, we extended the self-assessment's reach to include ENs, ensuring all students receive tailored support. The success of this initiative in SNM led to its adoption across other disciplines. Schools such as Science, Engineering, and Medical and Health Sciences adapted the self-assessment to meet their diverse needs. For example, in the School of Science, we added content on scientific writing and data analysis, which is crucial for their students' success. These adjustments made the self-assessment relevant and beneficial across different academic contexts. The positive feedback and recognition of these initiatives have been overwhelming. Colleagues across ECU eagerly anticipate improvements in student preparedness and engagement inspired by the success in SNM. These initiatives have gained traction within the university and received accolades at national and international conferences, highlighting their significant impact and broad applicability (Fruchter & Alfen, 2007; Sandhu et al., 2015).

Co-regulation involved regular workshops and feedback sessions with students, informing the development of the PG self-assessment and customisation of the modules. Our initiatives encourage students to assess their learning needs, promoting self-awareness of their academic and digital literacy skills. This empowers them to take charge of their learning journey, identify areas for improvement, and proactively seek resources. Guided by the principles of the pedagogy of kindness, we aimed to foster a more caring and supportive culture where students feel empowered to co-regulate their learning (Rawle, 2021). Believing in students involves viewing them as collaborators and recognising that they have valuable contributions to make to their learning and assessment (Rawle, 2021). By incorporating elements that enhance self-regulation, such as goal setting and reflective activities within the modules, we help students develop the skills necessary to navigate their academic and professional careers successfully (Panadero et al., 2019).

The literature highlights a lack of student perspectives on AI tools, and our data shows that students lack confidence in using GenAI for learning and assessments. We explore GenAI's role in shaping educational practice and offer recommendations. This aligns with our research objectives, particularly in enhancing the student experience through targeted support and self-assessments. Kelly et al. (2023) emphasise incorporating student perspectives to understand AI's influence on engagement. Our research captures student feedback on academic and digital literacy through tools like the self-assessment, aiming to improve engagement and success. Wang and Cheng (2022) highlight AI's potential for personalised learning, aligning with our efforts to provide individual support. Our initiatives, including modules and workshops, cater to diverse learning needs. Firat (2023) discusses AI-facilitated self-directed learning, emphasising digital literacy—a key focus of our self-assessment. Identifying students' digital skills gaps enables us to provide targeted interventions for effective AI tool usage. Lodge et al. (2023) explore co-regulation, which is relevant to our approach. By using AI to monitor and support learning, we help students develop self-regulation skills, fostering self-awareness and independence. As discussed by Lodge et al., the transition from AI to human-regulated learning mirrors our approach of gradually shifting learning responsibility from structured support to self-regulation. This ensures students develop critical thinking and adaptability, using AI tools effectively without overreliance. Our research aims to empower students to achieve their learning goals while remaining critical and independent thinkers.

Limitations and future directions

Despite promising outcomes, our research has limitations. The reliance on self-reported data in pre- and post-assessments may introduce response bias, potentially skewing accuracy. Voluntary participation may lead to a non-representative sample, as more motivated students will likely engage. Despite improvements in student

preparedness and confidence, isolating our interventions' impact from other factors like motivation and prior experience is challenging and affects generalisability. Initial staff resistance suggests a need for more training to demonstrate the value of these innovations. Additionally, there is a gap in the literature on scalable cross-disciplinary teaching approaches. The integration and effectiveness of GenAI tools are still in the early exploration stages, lacking longitudinal data to assess their long-term impact on student learning. Further validation is needed to ensure scalability across different disciplines, each with unique needs and challenges. Measuring improvement in academic and digital literacy skills is complex; self-assessments may not fully capture competencies or real-world applications. Future research should include more direct measures of student engagement and skill application. The dynamics of cross-disciplinary collaboration require more exploration, depending on institutional support and resource availability. Lastly, low student engagement in post-semester self-assessments highlights the need for more comprehensive data collection. Our resources have positively impacted retention, completion rates, and student satisfaction, improving academic and digital literacy among PG students. We aim to enhance self-regulation skills through structured peer-to-peer feedback and mentoring programs, which are essential for programmatic assessment and lifelong learning. Additionally, we will refine our support models and adapt to future educational demands, using data analytics for personalised support. As GenAI transforms education, we will explore its potential to enhance learning outcomes while maintaining academic integrity. Based on our experiences, we propose five strategies to effectively scale and enhance educational initiatives and foster cross-disciplinary collaboration.

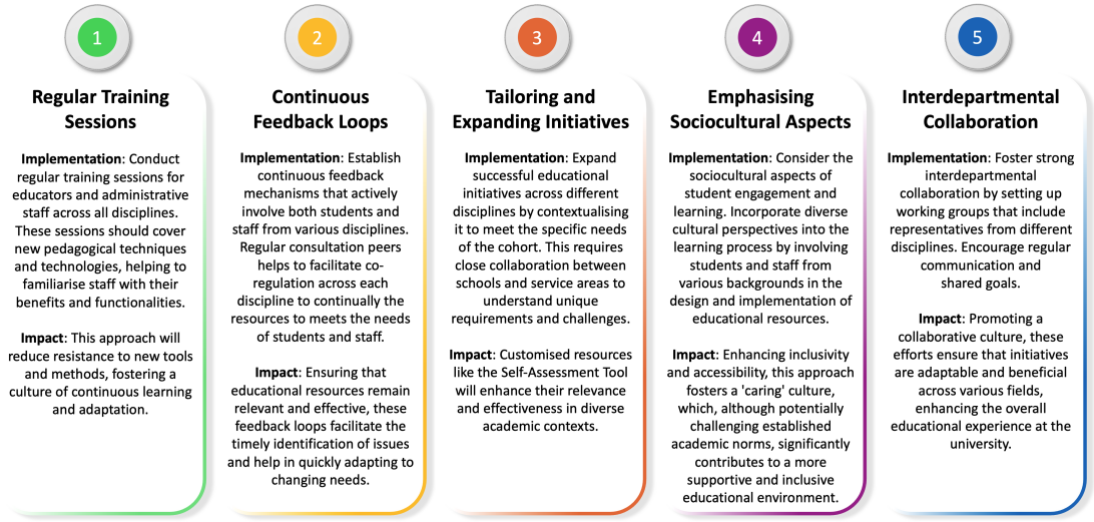

Figure 9: Five strategies to effectively scale and enhance educational initiatives while promoting cross-disciplinary collaboration.

Integrating these strategies can effectively promote cross-disciplinary collaboration while scaling educational initiatives. The strategies will allow staff to better facilitate the integration of AI technologies into courses, enhancing students' confidence and capabilities in using these technologies. This holistic approach ensures that educational resources are relevant, effective, inclusive, and adaptable to the diverse needs of the university community.

Conclusion

These initiatives, now tested over multiple disciplines, underscore the strength of tailored, theory-based strategies and co-creation in enhancing students' transition into university. By refining these initiatives, we aim to expand our impact and contribute to the evolution of higher education. Our work not only improves our students' academic journey but also offers practical strategies for educators globally. Our research shows significant advancements in student preparedness through TEL pedagogies. Self-assessments revealed

increased confidence in key digital and academic skills; however, some areas require further support. The collaborative design and implementation of these tools, involving academic staff, professional staff, and students, ensured the resources were relevant and tailored to student needs, receiving positive feedback. Additionally, the findings highlighted mixed perceptions and ethical concerns regarding GenAI tools like ChatGPT. Some students felt confident using these tools for grammar checking and paraphrasing tasks, while others needed more explicit guidelines and training. This insight informs our efforts to integrate AI tools responsibly into the curriculum. The research demonstrates the value of TEL pedagogies and collaborative efforts in enhancing student preparedness, fostering self-regulation, and promoting agency. By identifying areas for improvement and leveraging continuous feedback, we ensure our support programs are scalable and adaptable across disciplines, fostering an inclusive learning environment that equips students with essential skills for their academic journey.

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