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Future-Focused:

Educating in an Era of Continuous Change

Digital capabilities: Digital navigators in an era of continuous change

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The proliferation of digital tools and technology in the 21st Century university offers students flexibility in how and when they study, access to a range of scholarly resources, and tools to aid study and life as a student (Haleem et al., 2022). However, flexibility and the choice of technologies can create complex challenges to navigate. Access to multiple contradictory digital tools to aid study can create too much choice, which requires adaptability, resilience and persistence to successfully navigate (Lahey, 2024).

Students' use of digital technologies to facilitate learning is a process of individual and distributed agency (Matusov et al., 2015) and there is a correlation between higher education success and students' ability to adopt strategies to leverage the benefits of digital technology (Bond et al, 2018). But how do students acquire knowledge to become skilled digital navigators and thrive in rapid technological and societal changes? Digital capabilities needed for student success are unclear as research has focused on generic digital skills (Starkey, 2019) while strategic skills for learning in higher education are poorly defined (Sánchez-Caballé et al., 2020), particularly with AI and large learning models re-negotiating the student-technology dyad.

This poster presents the findings of research that aimed to identify strategic digital capabilities that enable students to navigate course content. To explore this topic we used an interpretivist, qualitative paradigm to answer the question of how high-achieving undergraduate students' access, curate, collate, synthesise, and use digital course content and tools for learning.

We recruited 25 students from one University in New Zealand from deans lists or who self-identified as high achieving. Participants were from a range of subjects, Arts, Commerce, Law and Design, and data were gathered through interviews, focus groups and talanoa for Pasifika students. Ethical approval was granted by the University's Human Ethics Committee.

Participants shared strategies and provided insights which highlighted how successful students navigated digital course material in complex systems and changing landscapes. For example, digital tools such as Google Docs, OneNote and Notion allow for structure, creativity and quick searchability, and tools like Glean useful to generate transcriptions. ChatGPT was used as a conversational partner in lieu of peers "to bounce off ideas", where the LLM was interrogated, challenged and disagreed with, to affirm their reflective practice.

This poster presents a visual representation of how high-achieving undergraduate students navigate a plethora of digital tools (including AI) across four capability categories identified in the research:

1. To create social connections
2. To manage information
3. To navigate the university systems
4. To organise their learning.

The findings can be used as a framework to empower future students to develop digital capabilities to navigate their undergraduate courses. These capabilities foster adaptability and persistence and support strong learning communities in both physical and virtual spaces.

Key words: strategic digital skills; higher education; digital tools; digital navigators

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