Navigating Digital Transformation: The Role of Mentorship in Facilitating Learner Agency

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This paper outlines the design and implementation experience of a mentorship-based teaching approach for a third-year undergraduate Information Systems on Digital Strategy and Transformation. In its first iteration in 2021, the course struggled with a lack of engagement between staff and students, and overwhelmed students at the end of the semester. The mentorship-based teaching approach was trialled in the second iteration of the course to encourage learner agency and improvement in the students' learning journey. Implementation of mentorship-based teaching resulted in a higher overall course satisfaction rate and improved staff-student engagement. The application of the mentorship model has been continually fine-tuned each semester since its implementation in 2021. The experience from this design and implementation serves as a case study to incorporate mentorship into the curriculum to facilitate learner agency. Educators may apply a similar process and framework to design a mentorship-based teaching strategy regardless of discipline.

Keywords: mentorship model, learner agency, student engagement

Introduction

The purpose of this paper is to share the experience and learnings from the application of a mentorship teaching model to facilitate learner agency in a third-year undergraduate Information Systems course about Digital Strategy and Transformation. Digital transformation encompasses a wide range of interdisciplinary areas that may include theoretical topics along with practical applications. It includes discussions on digital innovations and their social, economic and ethical implications in organisations and society (Vial, 2019). Therefore, teaching digital transformation requires a flexible teaching approach, adaptability and liaison with industry, with reference to, literature on the subject matter and the curriculum.

As part of the standard curriculum review of the third-year courses offered towards the Bachelor of Commerce in the Information Systems major, a new course about Digital Strategy and Transformation was proposed at the end of 2020. The design team, which did not include the curriculum review team was faced with the challenge of working with little to no literature on teaching strategies for this course, and understandably so, given the topic's novelty in the Information Systems curriculum worldwide (The Joint ACM/AIS IS2020 Task Force, 2020). The course's first iteration focused on content design, building on the shoulders of giants by adopting a textbook that best aligned with the course prescription (McKeen & Smith, 2019). The student satisfaction at the end of the first iteration was 50% which was below the university threshold of 70%, signifying that the course needed more work. A key piece of feedback and observation from the first iteration was how overwhelmed students felt about the course assessments and flow. The design team recognised that the teaching strategies needed the most work. This resulted in the conception of a mentorship model to gently nudge and guide students in their learning journeys. The following sections provide an overview of the course the mentorship model was implemented in, the university guidelines and pedagogical considerations underpinning the model, and the literature on mentorship and learner agency as a teaching strategy.

A course about Digital Strategy and Transformation in organisations

A key question after the first iteration of the course was: "How can we design a challenging course that is easy to follow and the assessments less overwhelming for the students". The conceptualisation of the course

framework and re-crafting of the course goals took place in the second iteration of the course to address this partly. The course framework was designed based on a literature review (McKeen & Smith, 2019). The course goal was outlined as follows to the students: *This 12-week course aims to expose students to a set of concepts, models, processes, and frameworks to prepare a digital strategy plan for an organisation. The key assessments in the course are designed to prepare students for a technology consultant role working with digital strategies and/or digital transformation. Students learn by evaluating various strategic, process, technological and philosophical dimensions and considerations to analyse the organisation's current situation (AS-IS) and design a digital future (TO-BE), summarised in a transformation roadmap (see Figure 1).*
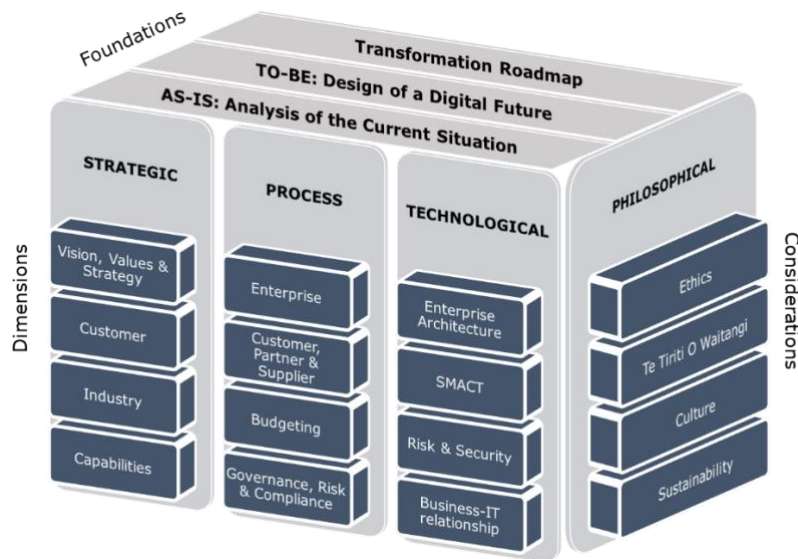

Figure 1. Digital Strategy and Transformation Course Framework

The course enrolment ranges between 70 to 120 students each semester, and is delivered via lectures and smaller Team-based Learning (TBL) sessions of ~40 students each. The combination of the *Foundation*, *Dimension(s)* and *Consideration(s)* aspects of the course framework being covered are highlighted using different colours for each lecture and TBL delivery, so students know the learning objective for every session. During the course review and redesign process, the TBL sessions were identified for implementing the mentorship model. They were held in a flat space learning environment where students were seated in groups to encourage collaboration and communication with staff and peers. Next, we discuss the university guidelines and pedagogical considerations that guided the implementation of the mentorship model.

University guidelines and pedagogical considerations

The re-design of the course was inspired by local and global benchmarked teaching guidelines. The University of Auckland (UoA) provides extensive guidelines for teaching strategies. One of the signature pedagogical skills is relational learning, which focuses on the relationship between all participants in the learning experience at all levels and in all modes of teaching and learning (University of Auckland, 2024). This is shared with staff via a "TeachWell" framework. TeachWell also emphasises the importance of using technology in teaching and student engagement for blended learning. These guidelines further echo global benchmarks like SFIA, the global skill and competency framework (Brown, 2020). SFIA guidelines on teaching incorporate methods and techniques that help students develop an understanding of the principles, approaches and practices that underpin a specified topic or knowledge area. These guidelines and pedagogical considerations encouraged us to select learner agency and mentorship as teaching approaches for the course. The next section discusses the theoretical aspects of the mentorship and learner agency teaching strategy.

Mentorship and learner agency as a teaching strategy

Mentorship helps students to collaborate and support the learning environment (Lapon & Buddington, 2024; Law et al., 2020; Palmer et al., 2015). Mentors are involved in guiding students through personalised, one-on-one interactions that encourage deeper understanding and application of course material (Hamilton et al., 2019; Lapon & Buddington, 2024). The teaching team (mentors) works closely with students (mentees) to build a systemic learning process. The teachers mentor by facilitating learning, exploring and networking (Hamilton et al., 2019). On the other hand, learner agency emphasises the active role of students in their own learning process, promoting self-directed learning and critical thinking (Manyukhina & Wyse, 2019; Mercer, 2011; Mick, 2011). Learner agency makes students active seekers of knowledge by instigating critical thinking, reflection, ownership and responsibility (Manyukhina & Wyse, 2019), which helps them build their identity for career development (Palmer et al., 2015)By integrating mentorship with learner agency, educators can inspire students to take ownership of their educational journey, develop problem-solving skills, and become more resilient and adaptive in the face of challenges (Mercer, 2011). Together it creates a dynamic and empowering educational experience that cultivates lifelong learners and proactive, confident individuals. We apply a combination of mentorship and learning agency in teaching digital transformation strategy.

Designing the mentorship model and learner agency

This section outlines the design and integration of the mentorship model, highlighting its key components and the strategies employed to maximise its effectiveness.

Preparing mentors

The mentoring model focuses on five attributes of a mentor: personal attributes, system requirements, pedagogical knowledge, modelling and feedback (Ghosh, 2013; Hudson, 2013; Ploj Virtič et al., 2023). The success of the mentorship model hinges on the careful selection and preparation of mentors. A diverse group of mentors is assembled, comprising PhD students and undergraduate teaching assistants, some of whom are alumni of the course. This balanced composition brings a rich blend of perspectives and experiences to the mentoring process (Hudson, 2013; Kang, 2021). The selection criteria prioritise individuals with strong communication skills, a deep understanding of digital transformation concepts, and a passion for facilitating learning. Mentor training is a crucial step in the preparation process, focusing on understanding course objectives, developing effective mentoring techniques, fostering a collaborative learning environment, providing constructive feedback, and navigating potential challenges in the mentor-mentee relationship (Connolly, 2017; Queiruga-Dios et al., 2023). Additionally, mentors are provided with resources such as continuous support from experienced facilitators and access to a shared knowledge repository on Microsoft (MS) Teams. Weekly knowledge-sharing sessions among mentors ensure consistency in approach and allow for the exchange of best practices.

Integration of mentorship in the course

The mentorship model is primarily integrated into the TBL component of the course, which complements the weekly 2-hour lecture. Each mentor is assigned approximately four teams, allowing personalised attention and guidance. The course is structured around a large group assignment that requires students to develop a digital strategy plan for an organisation. This assignment is strategically broken down into manageable components: TBL Deliverables (Weeks 1-5), where students submit weekly deliverables focusing on specific aspects of the digital strategy plan; an Infographic (Week 8), where students create a visual representation of their strategy; a Presentation (Week 9), where teams present their infographics to facilitators, simulating a C-suite presentation; and the Final Digital Strategy Plan (Week 10), where students submit a comprehensive report. This structure enables students to build their understanding and skills progressively, with consistent mentor support throughout the process.

The mentorship model emphasises both in-person and digital interactions. Weekly TBL sessions allow mentors to guide students through assignment tasks related to that week's lecture content, provide examples, and allow time for group work. A dedicated MS Teams environment facilitates ongoing collaboration and communication, with each student group having a dedicated channel. This integration encourages practice

with digital collaboration tools commonly used in the industry. Students submit their weekly deliverables on Canvas and MS Teams, allowing for efficient marking and feedback delivery. Mentors provide written feedback on MS Teams submissions, followed by in-person discussions during the next TBL session. This iterative process allows students to refine their work based on mentor input. Over the past years, the mentorship program has evolved significantly, as illustrated in Table 1 below.

Table 1
Details of the Mentorship Program (2021-2023)

Year	Number of groups	Number of mentors	PhD candidate mentors	Undergraduate mentors	Modality	Total mentorship hours
2023	43	9	4	5	In-person	1341
2022	33	5	2	3	Hybrid	595
2021	26	4	2	2	Online	392

Key success factors and challenges

The model is designed to promote learner agency by allowing students to choose their organisation within assigned industries, encouraging independent problem-solving while providing guidance, offering optional tasks in TBL deliverables (giving students control over their workload and depth of engagement), and facilitating peer learning through team-based activities (Ghosh, 2013). Several factors contribute to the success of this mentorship model, including mentor-mentee growth, where the model allows for mutual learning with mentors often gaining insights from students' perspectives; alignment with course content, ensured through regular coordination to reinforce lecture material; and consistent feedback through the structured feedback process, helping students continuously improve their work (Hudson, 2013; Law et al., 2020). However, the model is not without its challenges. Managing the workload for mentors, ensuring consistency across different mentor-mentee groups, and balancing guidance with allowing student autonomy are ongoing considerations (Jones & Smith, 2022). Despite these challenges, this mentorship model represents a comprehensive approach to facilitating learner agency in the context of digital transformation education. By providing structured support, encouraging collaborative learning, and fostering independence, the model effectively prepares students for the dynamic challenges of the digital business environment.

Conclusion

This paper has outlined the successful application of a mentorship model for learner agency (Mick, 2011) in a third-year undergraduate Information Systems course. The course has grown from strength to strength since its inception. The student satisfaction rate has been in the 90% - 100% range since adopting the mentorship model, and encouraging learner agency (Manyukhina & Wyse, 2019), which is endorsed in the end-of-semester feedback provided by students, observations by course staff, as well as through feedback from other senior staff in the department. The course alumni are further invited to give back to the course by sharing their experiences and top tips on managing their learning with new cohorts each semester. Continual improvements are made to the course each semester, including experimentation with different TBL sizes and mentor-student ratios. Overall, this experience of designing and implementing this mentorship model and incorporating learner agency offers an effective teaching strategy and model for other novel, practice-oriented courses.

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