Design Thinking: Putting academics at the heart of Professional Learning

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In today's increasingly competitive Higher Education (HE) market, academic jobs are more precarious than ever. The way academics do their day-to-day job is under increasing scrutiny, with their outputs measured through the rigid lens of performativity and financial profit. Professional Learning (PL) is an institutional approach aimed towards achieving and sustaining high quality teaching and innovation among academic staff. The significance of PL to developing academics' skills and fostering their professional identity has been confirmed by peer reviewed research. However, how to design and deliver PL that is meaningful to academic workforce, while empowering academics and supporting them in finding solutions to their teaching and learning problems, remains up for debate. This paper offers a conceptual way forward; arguing for a complete re-think of the predominant way of doing PL in universities in favour of placing Design Thinking (DT) at the heart of the matter. Grounded within a robust theoretical approach and scaffolded with a practical toolkit, DT can enable a nurturing environment to engage and empower academics, building their confidence and equipping them with a methodology for problem solving into the future.

Keywords: design thinking, professional learning, academic innovation, academic agency, institutional change, higher education

The shadow of academic life

In many ways, it has never been more challenging to be an academic than it is today. Driven by the need for efficiencies and competition in the Higher Education (HE) sector, academics experience increasingly challenging workload, decreased job security, while having to maintain a greater focus on research outputs where one needs to 'publish or perish', turning university life into a 'race against time' (Bozalek, 2021; Collett et al., 2018; Eriksen & Visentin, 2023; Van Dalen & Henkens, 2012). All of this unfolds in the context of ever-increasing casualisation of teaching and general commercialisation of HE. What constitutes performance for an academic is driven by a number of factors that are prone to change and uncertainty: strategic direction of the institution, discipline-based specifics, addressing student needs and retaining their high satisfaction, while also addressing demands of research-funding bodies and dealing with ever-present technological changes (Brew et al., 2018; Eriksen & Visentin, 2023). Increasingly, charting a successful career in academia is now largely shaped by forces out of academics' control, contributing to increased stress-related illness (Craig et al., 2014) and disengagement with the academic establishment (Turcotte & Holmes, 2024). This has also predicated the rise of the 'slow professor' (or slow academia) movement to resist the increased expectations to meet the pace of change (Berg & Seeber, 2016), which is largely driven by the need for humanisation, agency and control through the subversion of time as a form of resistance (Harland, 2016). Designing and delivering a meaningful and effective Professional Learning (PL) to academics in this complex context has been an increasingly difficult task.

'What works' - a declining monopoly

Workplace changes invariably manifest in tasks which shift the nature of work - and universities are no exception. Largely driven by technological advancement, universities are faced with continuous change. Professional Development (PD) is often used as a vehicle for supporting academics to navigate changes in technology, pedagogy, and meeting the needs of diverse learners (to name a few). Yet, it is completely

unsurprising that actively engaging academics in PD is variable and unsystematic (King, 2022) as well as complex and challenging. Employees in HE settings have reported feeling 'voluntold' to complete PD, which they neither chose to participate in nor see the relevance of in their work (Attebury, 2018; Casis-Woidyla, 2020), and often academics are no exception. Most universities strive to deliver a student-centred approach to learning and teaching, yet often this does not adequately translate to the professional learner who is often overworked, stressed, and underpaid. The requirement to be compliant in top-down PD has even been likened to the sensations of violence, where participants feel violated through their lack of agency, decreased empowerment and control over their learning experience (reference de-identified). While PD is based on extrinsic motivations and goals, whereas Professional Learning (PL) focuses on intrinsic motivations, centring on educators themselves (King, 2022) And more empowering them to develop their teaching and learning craft (Moulton et al., 2010). This represents a shift away from the view that there is a monopoly on 'what works' in PL, to putting practitioners and the problems that they want to solve in their own teaching at the centre of continuous improvement (Yurkofsky et al., 2020). Making this distinction is important in navigating the future of supporting academics to engage in meaningful and purposeful learning experiences that make them feel empowered, not oppressed.

Embracing Design Thinking for academic innovation

Using the methodology of design in curriculum development is nothing new. With roots in military training contexts (Allen, 2006), ADDIE (analyse, design, develop, implement and evaluate) first emerged in higher education in the form of systematic instructional design models in 1975 at Florida State University in 1975 (Branson, 1975). This was further evolved by Dick and Carey across four additions of The Systematic Design of Instruction from 1978-1966, significantly influencing instructional design methodology by using ten steps, emphasising the importance of instructional design goals (Chyung, 2008; Dick, 1996; Myers, 1978). Due to its generic framework and ease of use in varied educational settings, ADDIE has been considered fundamental to developing educational programs, such as e-learning materials, curriculum development, instructional and course design (Abernathy, 2019; Liu & Fan, 2023; Peterson, 2003).). Despite being the go-to model for educational designers, the ADDIE model has been criticised for being bureaucratic, linear and hierarchical, limiting opportunity for changes beyond the design phase, potentially stifling creativity and slowing down design and development (Branch & Kopcha, 2014; Marinak & Gambrell, 2010; Spatioti et al., 2022)Focusing on consultation with stakeholders during the early analysis phase primarily, ADDIE enables well-constructed designs that may not meet the needs of users (Glynn & Tolsma, 2014) such as educational solutions that don't meet the needs of students (Smith & Ragan, 2004). Given consensus in the merits of a design-based approach to education solution design, as well as the known limitations of existing approaches, there has been an increased focus on Design Thinking in educational settings.

Design Thinking (DT) is a human-centered approach that focuses on problem definition and solution ideation as a methodology for innovation. The Innovative Design Thinking discourse emerged at Stanford University with creation of the design consulting firm IDEO, led by Tim brown and Roger Martin (Brown & Katz, 2011; Brown & Martin, 2016; Elwood et al., 2016; Martin, 2009). While the frameworks that underpin DT methodology vary, they tend to be a similar in that they follow a four or five stage process, accompanied with tools for implementation (de Villiers, 2022; Liedtka & Ogilvie, 2011).. Addressing some of the criticisms of other design-based approaches, DT is considered more cyclical, with a deeper focus on problem definition using abductive reasoning that aims to bridge the gap between problem and solution by drawing inferences based on the experiences of those whom the solution will benefit throughout the design process (Svihla, 2017). It is most useful in supporting those who don't come from a design background, to think like designers and 'learn' innovation (Brown & Katz, 2011; Meinel & Krohn, 2022; Wrigley & Straker, 2017). With problem-solving at its heart, DT is about unleashing creativity by developing insights using practical processes (such as Empathy Mapping), along with with ubiquity of the tools (post-it notes and whiteboards) to bring new ideas to realisation (Liedtka & Ogilvie, 2011) . Utilising the benefits of design-based approaches to educational solution design, DT enables academics to keep in mind the real people who benefit from the solution (their students) by continually revisiting the 'why' of doing this and 'for whom'at each phase of the innovation process (Staniec

& Pilawa, 2020). The methodology of DT is widely known, creating meta-language for innovation which has accelerated collaborative real-world problem solving across industries, including technology, service industries and education (Behrendorff et al., 2011; Brown & Martin, 2016; Gloppen, 2009).

With a foundation in design and architecture disciplines, DT has increasingly been used in educational settings. The literature provides examples of the usefulness of DT in two main ways. First as the *content of* professional learning such as using DT as a pedagogical model for real-world problem solving and innovation with students (Luka, 2014, 2019; Waity et al., 2023; Wrigley & Straker, 2017) . For example, educators may learn how to use DT as a teaching resource with students, helping them to define the problem they want to solve and facilitating collaborative ideation sessions with their peers. Secondly, DT can be used to guide the process *for* professional learning, whereby educators engage in the phases of DT to chart educational solution design for academic development (Blundell, 2022) such as new pedagogical approaches, technologies or assessment types to meet the needs of students.

Problem-solving at the centre of a new PL model

Figure 1.0 Design Thinking process for academics embedding digital literacy
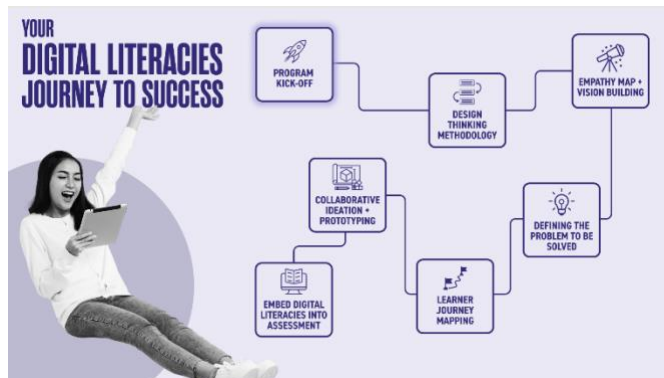
While there has been an increase in the use of DT for educator PL in K-12 school settings (Blundell, 2022), research into what this can look like in HE settings has been limited, despite DT being a potential remedy to some of the common challenges that universities face (namely, those driven by technological advancements) (Elliott & Lodge, 2017) such as renewing assessment in the context of Generative Artificial Intelligence (GenAI). The need for concurrently embracing the new technology, while ensuring academic integrity is complex - but is often left to academics to navigate with little support. Using DT as a process, academics can define the specific problem that they want to solve, acting as a mechanism for inspiration, sharing perspectives and provocations (Gottlieb et al., 2017), empathising with the needs of students and engaging in ideation processes for possible solutions (Brown & Katz, 2011). Utilising practical a practical toolkit that DT affords, such as creating student journey maps, ideating and prototyping solutions enables academics to chart their own innovative solutions to assessment redesign and the learning and teaching challenges they face more broadly.

Conclusions

While DT offers a promising approach to engage academics in a new form of PL, it is not without its limitations. As with applying any framework for innovation, a lot can be lost in translation when bringing the gap between theory and praxis. While promoting academics' agency, a level of uncertainty remains about the content and quality of the learning innovation artefacts of the process. Engaging academics in DT does place them at the heart of their own learning and teaching experiences, however the framework and design skills that accompany it may not suit everyone. Asserting the successes of this type of PL also runs the risk of marginalising academics, especially if they are brought into the process not being fully willing or convinced of its purpose. In short, replacing the *content* with the *process* for 'what works' does not immediately solve the problem of academic disempowerment and resultant resistance to change. Focusing on creating shared experiences that is centred on visualising problem-solving at each stage of the process makes it a powerful mechanism for collaboration and feedback amongst academics. This nurturing environment ensures greater

engagement and empowerment, building a confidence to drive the outcomes of their own PL and being equipped with a methodology for problem solving into the future.

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