

# ASCILITE 2025

## Future-Focused:

*Educating in an Era of Continuous Change*

### Effective and sustainable: A case study in applying design thinking to course improvement in an online law program

**Simone Daniells**

Flinders University

Design thinking (DT) has variously been described as a mindset, a process and a toolkit for approaching problem-solving. Online education is increasing in prevalence, particularly among mature-age student cohorts. This paper presents a case study in which design thinking methodology was used for the purposes of course improvement and curriculum renewal in an online postgraduate law course. DT tools such as empathy interviews, customer journey maps and personas were used in the initial phases of the project. The tools offered benefits in conducting rapid thematic and cluster analysis to better define problems extant in the program and inform the prioritisation of a sustained program of iterative improvements.

#### *Implications for practice or policy:*

DT tools offer an effective and sustainable method to:

- Identify, define and prioritise improvement opportunities in existing higher education programs within institutional resourcing constraints;
- Embed student collaboration and co-creation in designing improvements to student experience in online education; and
- Address attrition risk factors through adaptable and responsive methods that privilege student voice.

*Keywords:* design thinking, online education, attrition, student-centric, case study, student voice, journey maps

### Introduction

In recent years, online learning has gained significant prominence in mainstream higher education (Stone, 2022). The author was based in an Australian University offering a fully online postgraduate law degree, the Juris Doctor (the Program). The Program is an externally accredited course providing a pathway toward legal practice. The student cohort is diverse, with most students aged over 30 years of age and approximately 22% of students based in a regional or remote location. Most students exhibit the 'attrition risk factor trifecta' being mostly in the 'mature' age bracket and studying both part-time and online (George et al., 2021). In 2023, the author was tasked with identifying priorities for improvement in the Program and implementing those improvements rapidly. In selecting an appropriate methodology for this task, the author drew from a background as a practitioner trained in DT and engaged in teaching DT to undergraduate law students, to select a toolset that would allow for better understanding of context and to prioritise initiatives that best offered high impact potential from a quality and student experience perspective within institutional and resource constraints.

### Context from the literature

The growing scale and inherent challenges associated with online learning present the higher education sector with critical issues for appraisal and resolution (Greenhow et al., 2022; Stone & O'Shea, 2019, p. 58). This is no less so in the delivery of legal education through an online modality, including in the areas of attrition and student isolation, with previous studies finding that online learners were 2.5 times more likely to withdraw from their studies than their face-to-face counterparts (George et al., 2021, p. 112).

# ASCILITE 2025

## Future-Focused:

*Educating in an Era of Continuous Change*

Further and in addition, previous studies have found that law students are subject to specific vulnerabilities, potentially exacerbating challenges in retention (George et al., 2021, p. 114). The origin and development of design thinking is well documented and has been variously described as a mindset, a process and a toolkit for approaching problem-solving (Leifer & Steinert, 2011). DT's utility and potential in the education sector has been increasingly recognised in pedagogy (Luka, 2020), instructional design (Ní Shé et al., 2021) and professional learning for academics (Ulbrick & Pechenkina, 2024). Despite this, organisational characteristics pose challenges in realising the transformative potential of DT in a higher education setting (Penta, 2019). The work described in this paper is a contextualised implementation of pragmatic processes to enact change, an example of 'bottom-up process' (Adachi et al., 2022). In this way, it connects to the work described by Bugden & Mok (2023).

### Implementation of the design thinking tools

Design thinking methodology is often summarised by reference to five stages within a non-linear process: empathise, define, ideate, prototype and test (Ní Shé et al., 2021, p. 34). The author extended an open invitation to all enrolled students to share their lived experiences of the program.

### Interview and Thematic Analysis

Over the course of two months, the author undertook a period of deep consultation with approximately 15% (n=16) of both new and continuing students. An online whiteboard tool, Miro (miro.com) was used to record key attributes, quotes, themes and highlights from those interviews using the 'From User Interviews to Research Insights' template accessible through Miro (see Figure 1). This format allowed for flexibility and openness in interviewing style (critical to the empathise phase in DT) and the rapid transcription and analysis of key themes emerging from each interview.

The image shows a Miro board template for interview analysis. It includes sections for Interviewee details, Highlights (Biggest surprises, pains, delights), and a table for Question and Answer notes.

Question:	Answers:

Figure 1. Interview analysis template used for student interviews

The interview records were then coded utilising Miro's coloured tags and sticky note functions to conduct a thematic and cluster analysis of emerging areas identified as 'unmet needs', 'pain points', 'drivers' and 'delights' by students (see Figure 2).

# ASCILITE 2025

## Future-Focused: Educating in an Era of Continuous Change

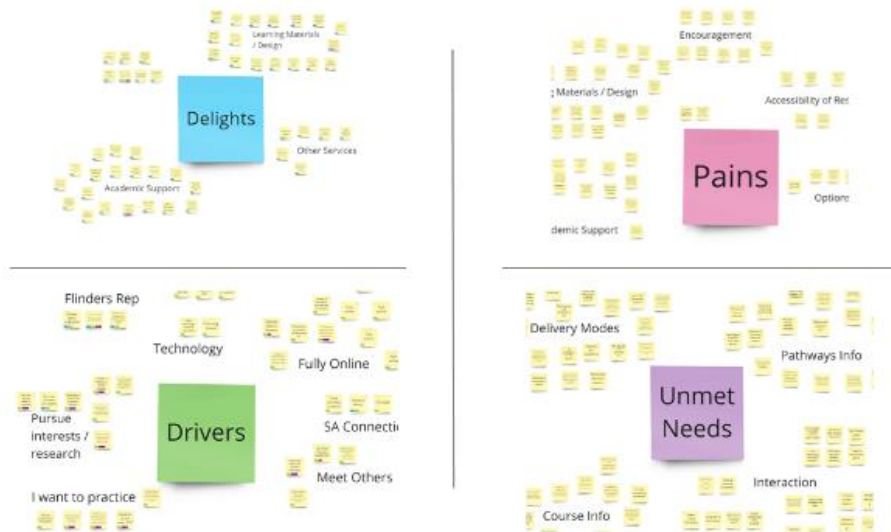


Figure 2. Thematic analysis from empathy interviews

The main benefit the author derived from using these interview and thematic analysis tools was the speed with which extensive qualitative data could be synthesised to generate a visual ‘heat map’ of themes, and more readily define clear problem statements. The author found, however, that in a complex environment such as a higher education institution, this was not enough. There was a need to better understand how and when pain points and unmet needs were arising in the student journey.

### Journey Mapping

For this aspect, the author adapted a well-known DT tool, journey mapping, to create a student journey map through which key stages in the student’s journey could be defined, together with institutional touchpoints, student emotions and experiences at each stage and opportunities for improvement (See Figure 3).

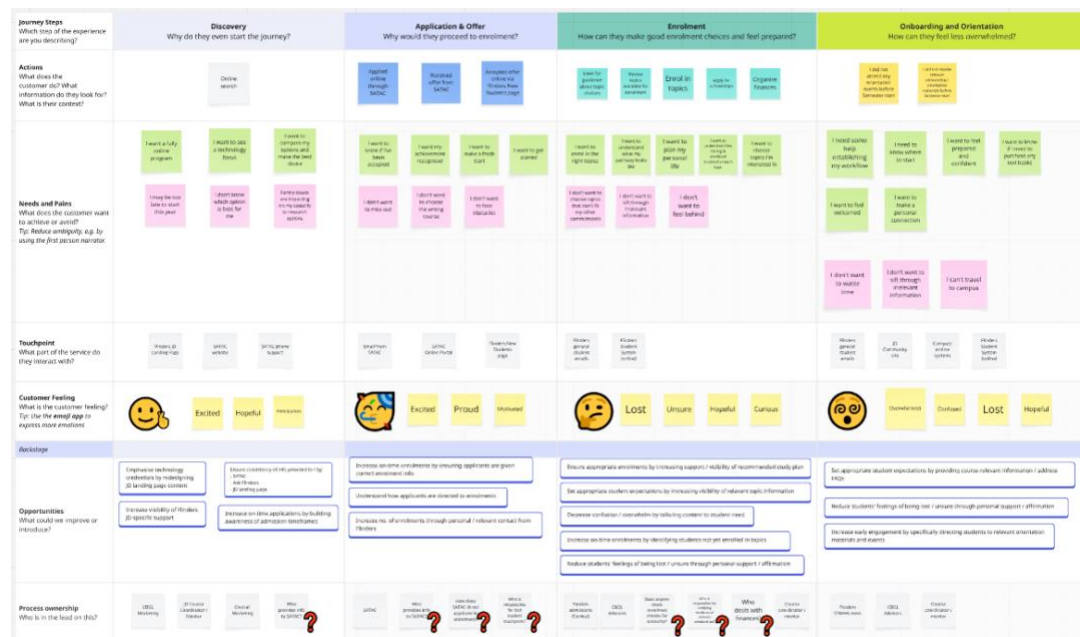


Figure 3. Excerpt from student journey map

# ASCILITE 2025

## Future-Focused:

*Educating in an Era of Continuous Change*

### Persona Development

Recognising that not all students experience the same journey, and that each student has unique attributes and external factors impacting their educational journey, the author then documented three distinct student 'personas' (another DT tool) that emerged from the interviews. Viewing the journey map through the lens of these unique personas brought the analysis back to a place of greater empathy, depth and insight. For example, viewing the journey map through the lens of one persona "H" revealed the need for early availability of study tools and resources to enable students that had never studied online before to upskill ahead of course commencement. On the other hand, persona "J" revealed the need for ongoing study planning and course structure advice at the conclusion of each study period to allow for proactive management of competing work and care commitments.

### From empathy to problem definition

The early and rapid deployment of DT tools proved extremely valuable in connecting with the human experience of students in the Program. This enabled clear problem definition and prioritisation of areas with highest impact. A cogent example of how the combination of interview analysis, journey mapping and persona development translated into a clear problem statement was in the area of 'connection to the profession'. By empathising with the student voice, the author developed the following problem statement: 'As a postgraduate law student studying fully online, I want more opportunities to interact with the legal profession so that I don't feel so isolated'. This 'problem statement' could then be built on with a series of open 'how might we' questions: 'How might we build community in a cohort based off-campus?', 'How might we facilitate meaningful connections between our students and the legal profession?' 'How might we create opportunities for connection in an asynchronous online environment?' These questions formed a useful basis for other phases of the DT process (ideate, prototype and testing) and allowed the Program team to develop responsive initiatives including a practitioner interview series allowing for both synchronous and asynchronous student connection with the legal profession and a valuable opportunity for legitimate peripheral participation (Lave and Wenger, 1991). This initiative alone has yielded strong positive student feedback with potential connection to improved course retention.

### Discussion and Conclusion

This same methodology of translating qualitative data from the empathise phase, through to clear problem definition and application of the other phases of the DT process (ideate, prototype and testing) has been used across many other dimensions of the Program. It has proved a useful vector for rapidly and practically improving course quality and student experience in alignment with the University-wide Student Success and Retention Strategy. This case study provides an example of how DT tools offer viable and practical methods for implementing course improvement initiatives in a higher education setting, despite institutional and resourcing constraints. This is especially pertinent for programs with a postgraduate, online student population given the tendency for attention and resourcing in the sector to be primarily directed toward undergraduate, on-campus student populations (Stone & O'Shea, 2019, p. 57) and the persistence of the "'out of sight, out of mind' phenomenon" impacting the quality online education delivery (Stone, 2017; Stone & O'Shea, 2019). DT's emphasis on empathy allowed for deep connection to student voice, particularly in circumstances where the student cohort featured distinct challenges in terms of attrition risk factors. In this regard, DT presents a useful strategy to address the question posed by George et al. (2021, p. 114) in how best to foster and support connectedness in an online learning environment.

### Reference list

Adachi, C., O'Donnell, M. & Elliott, J. (2022). *Co-creating a digital learning innovation framework through design thinking approaches*. [Full Paper]. 2022 ASCILITE Conference, Sydney, Australia  
<https://doi.org/10.14742/apubs.2022.140>

# ASCILITE 2025

## Future-Focused:

*Educating in an Era of Continuous Change*

- Brenner W., Uebernickel F., & Abrell T. (2016). Design thinking as mindset, process, and toolbox. In W. Brenner & F. Uebernickel (Eds.), *Design thinking for innovation* (1st ed., pp. 3–21). Springer  
[https://doi.org/10.1007/978-3-319-26100-3\\_1](https://doi.org/10.1007/978-3-319-26100-3_1)
- Bugden, L. & Mok, A. (2023). *A journey through course development: The design process for a new early childhood education course*. [Concise Paper]. 2023 ASCILITE Conference, Christchurch, New Zealand  
<https://doi.org/10.14742/apubs.2023.553>
- George, A.-J., McEwan, A., & Tarr, J.-A. (2021). Accountability in educational dialogue on attrition rates: Understanding external attrition factors and isolation in online law school. *Australasian Journal of Educational Technology*, 37(1), 111–132. <https://doi.org/10.14742/ajet.6175>
- Greenhow, C., Graham, C. R., & Koehler, M. J. (2022). Foundations of online learning: Challenges and opportunities. *Educational Psychologist*, 57(3), 131–147 <https://doi.org/10.1080/00461520.2022.2090364>
- Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge University Press
- Leifer, L. J., & Steinert, M. (2011). Dancing with ambiguity: Causality behavior, design thinking, and triple-loop-learning. *Information, Knowledge, Systems Management*, 10(1–4), 151–173. <https://doi.org/10.3233/IKS-2012-0191>
- Luka, I. (2020). Design Thinking in Pedagogy. *Journal of Education Culture and Society*, 5(2), 63–74. <https://doi.org/10.15503/iecs20142.63.74>
- Ní Shé, C., Farrell, O., Brunton, J., & Costello, E. (2021). Integrating design thinking into instructional design: The #OpenTeach case study. *Australasian Journal of Educational Technology*, 38(1), 33–52. <https://doi.org/10.14742/ajet.6667>
- Penta, J.M. (2019). *Designing student-centric solutions through collaboration: Exploring the experiences of higher education administrators leading cross-functional projects and initiatives* [Doctoral dissertation, Northeastern University]. Digital Repository Service. <https://doi.org/10.17760/D20316541>
- Stone, C. (2023). From the margins to the mainstream: The online learning rethink and its implications for enhancing student equity. *Australasian Journal of Educational Technology*, 38(6), 139–149. <https://doi.org/10.14742/ajet.8136>
- Stone, C., & O'Shea, S. (2019). Older, online and first: Recommendations for retention and success. *Australasian Journal of Educational Technology*, 35(1), 57–69. <https://doi.org/10.14742/ajet.3913>
- Ulbrick, R., & Pechenkina, E. (2024). *Design Thinking: Putting academics at the heart of Professional Learning* [Concise Paper]. ASCILITE 2024 Conference, Melbourne, Australia. <https://doi.org/10.14742/apubs.2024.1086>
- Zeivots, S., Vallis, C., Raffaele, C., & Luca, E.J. (2021). Approaching design thinking online: Critical reflections in higher education. *Issues in Educational Research*, 31(4), 1351–1366. <https://doi.org/10.3316/informit.327040243960244>

Daniells, S. (2025). Effective and sustainable: A case study in applying design thinking to course improvement in an online law program. In Barker, S., Kelly, S., McInnes, R. & Dinmore, S. (Eds.), *Future Focussed. Educating in an era of continuous change*. Proceedings ASCILITE 2025. Adelaide (pp. 551–555). <https://doi.org/10.65106/apubs.2025.2656>

Note: All published papers are refereed, having undergone a double-blind peer-review process. The author(s) assign a Creative Commons by attribution license enabling others to distribute, remix, tweak, and build upon their work, even commercially, as long as credit is given to the author(s) for the original creation.