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Reframing: Solving complex problems with learning design

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This paper presents a case study of the development of two fully online undergraduate programs, which reframes course development from a complicated problem requiring linear solutions to a complex problem demanding collaborative, adaptive practices. As Australian universities face increasing demand for online education, traditional linear and transactional approaches fail to navigate the interconnected challenges of pedagogy, technology, quality expectations, and commercial realities. Drawing on design thinking and systems thinking, the authors propose a framework centred on six working principles: establishing clear scope through shared value and language, adopting team-focused collaboration, maintaining human-centred processes, embracing continuous iteration, utilising appropriate collaboration tools, and working across organisational layers. Practical innovations, including visual Course Maps, program workshops, a custom Smart Storyboard authoring tool, and a shared vocabulary of learning types and patterns, shifted focus from delivering minimum viable products to creating maximum value through meaningful collaboration and sustainable practices. The framework offers universities a replicable approach for developing high-quality online courses through design-led practices that acknowledge complexity while building institutional capacity and fostering educational innovation.

Keywords: learning design, course development, design thinking, collaborative design, complex problem-solving, online learning, higher education, case study

This paper aims to capture the experiences and lessons learnt that we believe can inform future course development practices that typify a 'collaborative future'. We argue that situating course development in the complex problem space requires a different approach, and how design-led practices best deal with working in this environment. Through a reframing of the problem, our framework is based on working principles that seek to ensure processes, programs, projects, and people are set up for success through collaboration and the sharing of skills, knowledge, and experience, thereby delivering maximum value.

The environment

The Australian Universities Accord Final Report (Australian Government, 2024) describes a long-term plan for Australia's higher education system. It sets an ambitious tertiary attainment target of 80% by 2050, along with parity of access for underrepresented groups. The sector is also rapidly adapting to technological change, as well as student participation and study options. Between 2018 and 2023, the number of Australian higher education students studying either externally (fully online) or in multi-modal formats (partially online, partially on-campus) went from 28% to 43%. (Australian Government Department of Education, 2024) These changes and ambitions have increased the demand for universities to develop programs and courses that target online study.

One of the critical issues that universities face in meeting this demand is the requirement for course development. Not only is there a need to balance the technical, pedagogical, and content knowledge requirements (Koehler et al., 2013) to develop engaging learning experiences, but there are also quality expectations from students (Tomlinson et al., 2023) and accrediting and professional bodies (Universities Australia, 2021) in a marketised environment (Branch & Christiansen, 2021). In addition to this are the commercial realities of a modern university, which necessitate balancing the costs, timelines, deadlines and service guarantees required for program development. These systemic conditions intersect with those of the staff involved in the development work. These tend to be a mix of academic and professional staff who have different levels of workload allocations, expectations about the work and come into the process with a mix of skills, experiences and knowledge in course development practices. Experienced educators often lack experience in course development, despite their extensive experience in other areas of learning and teaching. It's this milieu of interconnected circumstances and relationships that we can see the course development process as existing in a complex environment.

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Poli (2017) emphasises that decision-makers often mistake complex problems for complicated ones, leading to ineffective or even counterproductive solutions. They describe how complicated problems can be broken down into distinct, identifiable causes that allow for piece-by-piece solutions with predictable, proportionate outcomes and permanent fixes through direct control of the system. Complex problems, however, arise from interconnected networks of causes that cannot be separated, requiring whole-system approaches where small changes can have unpredictable effects and solutions involve ongoing management and adaptation rather than permanent control.

While complicated problems are difficult to understand or deal with due to their intricacy or convoluted nature, they have a clear solution once the individual components are understood and managed. Alternatively, the multiple interconnected elements of a complex problem mean they don't have a straightforward solution, and instead rely on emergent practices (Gough, 2012), adaptive responses that evolve through interaction with the system over time, that seek to provide a best-fit solution that can be adapted to changing circumstances. This requires a shift in approaches that seeks to embed systems thinking, seeing processes as loops (Stroh, 2015) rather than linear and embracing circularity and feedback as a way of informing practice.

When examined, traditional course development strategies are framed as addressing complicated problems, breaking each component of the process down into discrete elements that would be engaged with along a linear timeframe. This was witnessed when the university partnered with an external Online Program Management (OPM) provider (Wijeratne & Ogilvie, 2024) and a conventional logic for course development was followed, where 'academic + templates and learning design support = a course developed on time'. Every course, regardless of its discipline or scope, followed a fixed structure and linear workflow was siloed and transactional, with work being passed between roles instead of being collaborative, and it utilised a template-first approach intended to manage risks and milestones. This overly simplified approach failed to address the complexity of the environment. Although it appeared efficient and well-meaning on paper, in practice, it produced uneven results, poor academic experiences, missed deadlines, and inconsistent course quality. The process wasn't able to, evolve, adapt and improve because it wasn't created with complexity in mind.

The opportunity

When senior leadership decided to bring development in-house for a range of new programs, it created an opportunity to rethink the existing paradigm and ways of working. The central task was to build the university's internal capacity for online course development, which required not only the delivery of course artefacts but also the creation of sustainable processes, frameworks, and team practices. This was an opportunity to take the lessons learnt from the OPM engagement and develop a new way of working, one based on working in the complex space. The project was structured to deliver two fully online undergraduate programs that would be studied asynchronously over a 12-week trimester. Students would be provided with an hour of face-to-face time with teaching staff each week to facilitate discussion, answer questions, explore assessments and create opportunities for formative feedback and evaluation. A timetable was developed to ensure that development kept pace with students' study, and 36 courses were developed over nine development cycles of 16 weeks. A learning design team was established to work across the project and work with staff from two faculties to develop the courses.

Methodology

This paper presents a retrospective case study examining the authors' professional practice as the learning design team responsible for developing two fully online undergraduate programs at the University of Adelaide. As practitioner-researchers reflecting on our own work, a case study (Yin, 2017) allowed us to draw on multiple data sources, including team retrospectives, project artifacts, documentation, and collective reflection sessions conducted throughout and after the project's completion. We analysed only internal project artefacts and team retrospectives; no student or staff performance data or identifiable information were collected or analysed, and no human subject research was conducted.

Our positionality as both the designers and researchers of this initiative provides intimate knowledge of the processes and challenges encountered, while also presenting limitations in terms of potential bias and selective memory. While the focus of this paper is the perspectives of the learning designer, as a team we

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collaborated with other media, developers and project management professionals throughout the project. The case study method allows for deep exploration of context-specific innovations while identifying transferable principles for other institutions facing similar challenges based on the authors' own professional practice and institutional processes.

Reframing course development

As a team of learning designers we consider ourselves a profession that encompasses educational, pedagogical, and design expertise. Our engagement with building capacity for course development versus just developing a set number of courses reflects Dorst's (2011) notion of frame creation. Frames are the "creation of a (novel) standpoint from which a problematic situation can be tackled", including a 'what' and a 'how' to create specific 'value'. This is demonstrated in Figure 1. Frame creation is one key design competency in a "broad and complex repertoire of design practices", which warrants attention and has interesting contributions to 'organisational problem solving'. Part of sophisticated professional problem-solving is the appropriate identification and redefinition of the problem or the problem space itself.

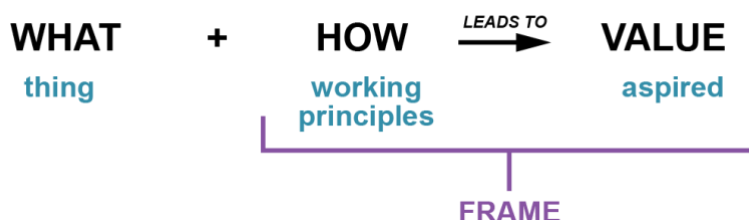


Figure 1: Dorst's design thinking and framing concept.

The central paradox we were working with was: how can universities consistently develop high-quality, flexible online courses in an environment that is not just complicated but *complex*? Meaning, one characterised by competing requirements, shifting timelines, evolving expectations and a diverse range of stakeholders. A shift in approach was required, from delivering outputs to creating value and from working in silos to working in collaboration.

In our case, the existing course development frame was narrow, focusing solely on the output of course development as content production. Value in this case was defined by output volume – how many courses could be delivered within a set timeframe. We set out to reframe this understanding and began by defining value, not just in terms of course artefacts but through a curriculum lens, focusing on learning experiences that were pedagogically robust, contextually relevant and adaptable. Equally important were the processes that enabled meaningful collaboration, built professional and academic capabilities, fostered strong working relationships and contributed to sustainable practices.

At this point, it was critical to consider how those principles and the creation of value sat within the context of a complex environment. This required the team to begin mapping the connections and interplay between project elements, identifying those that we could control and those that we couldn't. Our framing of course development within a complex environment reflected key elements of Senge's (2006) *Learning Organisation* model, and the related disciplines formed the core of our reframing process. This included drawing on the principles of systems thinking, shared visions, personal mastery and team learning. Systems thinking provided insight and helped us focus on the whole, rather than on individual parts, enabling us to identify relationships and underlying connections. We established a collaborative team environment that leveraged each member's diverse skills, and this diversity was crucial in addressing the diverse range of challenges we faced. This collaborative approach created opportunities for us to share knowledge and practice, learning from one another and challenge existing beliefs, assumptions, and attitudes surrounding course design. Through frequent reflective practice into our methods, creating an open and safe environment for discussion, critique, and ideation.

This reframing enabled us to identify, follow and innovate a broader range of 'how's and produce project deliverables, as well as much more. While many projects aim to deliver the minimum viable product (functional courses within programs), our focus shifted toward a maximum value product – a course that

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delivers not just content, but broader value across the ecosystem due to the connections within the complex space. This illustrates how design expertise can extend beyond individual projects to encompass broader practices, processes, and disciplinary fields (Lawson & Dorst, 2009; Dorst, 2011).

In this way, the work involved in reframing extended across different layers of design practice, similar to Dorst (2011):

- Process – Practices and components that relate to individual people and courses.
- Program – Elements and concepts that are useful and shared across a program of study.
- Project – Practices and systems that are useful and inform relationships across the project.
- Profession – Knowledge and experience that can be shared with peers outside the project.

Critical to our success was shifting our perspective away from a linear conceptualisation of the project to one that was cyclical, iterative and built up over time. The project's duration didn't require everything to be in place and established right from the outset, the three-and-a-half-year duration allowed the team to iterate and improve processes and practices. This snowball, rather than waterfall, approach helps explain a key way of working in this complex space, where work is scaffolded and planned holistically, and details, fidelity and substance are added through incremental iterations.

Working principles

The project developed organically, and the team had to learn how to adapt to working with unknowns and emergent situations. Having now completed the project and with students graduating from the resulting programs, the team had the opportunity to conduct a final retrospective and identify the key lessons learnt. These 'working principles', as Dorst (2011) would suggest, have formed the basis of how we have approached course development in a complex environment (what) to create the value of engaging online learning experiences. These working principles form what we feel is a replicable framework for others working in the field and can be adapted to suit different projects working in a complex space.

Frame creation

For all projects operating in a complex environment, the frame must be both clear and well-defined. There are three crucial areas that help to create the frame: value, constraints, and language. Rather than focusing on project aims and results, value is much more closely aligned with the people involved in the work. There are those involved in the process itself and those for whom the process is intended; a successful project should create value for both groups. To create that value, the project will operate under specific constraints in terms of resourcing and expected outputs. These constraints helped define the working environment more clearly, defining the edges of the space that needs to be worked within and setting clear limits for the project and those involved. Finally, there must be clarity around language, which often requires unpacking terminology and ensuring that all project members develop and work from agreed-upon definitions. These three areas help to reduce ambiguity and create boundaries for the project to operate within.

Team focused

Working in a complex environment requires a team approach to cope with the interdependencies and interconnectedness of the work. Moving away from an individualistic 'team of me' approach, where single-person ownership creates a dangerous bottleneck and a single point of failure, helps avoid entire initiatives from collapsing. Diversity within the team is a superpower in this environment, allowing different perspectives, experiences, skills and knowledge to intersect in the resolution of problems and issues. Diverse teams mitigate these risks by combining different perspectives, skills, and knowledge bases to solve problems more effectively. Rather than relying on a single person's limited viewpoint, collaborative teams co-design solutions that anticipate potential blind spots and incorporate redundancies. Dedicated project teams amplify these benefits by developing shared expertise over time, creating multiple people who can handle critical tasks while deepening overall capability. The concept of the team should also extend to all those involved in the project as the criticality of these relationships and the ability to learn from one another is central to project success and capability development.

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Human-centred practice

In a project that relies on people working effectively together, time and space must be given to the human considerations of those involved. Rather than running the project based solely on a spreadsheet and a person's perceived value on paper, there must be not just recognition, but also a promotion of the human aspects of the project. Critical to the team and the project are the formation and building of relationships. These occur through conversations and the development of rapport over time. Having consistent collaboration sessions and open discussions is crucial, as is familiarity with consensus and consent-based decision-making processes (Circle Forward, 2012). Timelines and workloads should be based on the people involved, which in turn may require adapting the scope of work to match.

Iterate and improve

At the heart of the design process is iteration. Learning design is a dynamic, ongoing and cyclical process, engaging educators, students and professionals before, during, and after the creation of an artefact or course (Bennett, Agostinho & Lockyer 2016). Rather than searching for the right way, in a complex environment, it is more correct to find the best fit and adapt what works to the circumstances. Agile practices, particularly regular retrospectives, are critical for identifying which practices, processes, or aspects the system should maintain, discontinue, or initiate in future cycles (Rubin, 2012). This not only requires time to reflect and a willingness to change, but also building in the planning for and proper allocation of time to change and continuously improve as standard practice.

Tools for collaboration

Most institutions default to individual work, making collaboration a challenging endeavour. Scheduled co-working time became a key strategy for embedding it into practice. These co-work sessions provided structure to development and enabled team members to work together synchronously, regardless of role or discipline, focusing on real-time problem-solving, feedback, and iterative design. Unlike traditional meetings, the sessions were intentionally open-ended, supporting informal learning and shared ownership. Access to digital tools enabling real-time development was also critical; while low-tech solutions had their place, digital workspaces were essential for sustaining momentum and visibility across a distributed team. Together, co-working time and the right tools shifted the focus from individual tasks to shared progress.

Applications of the framework

To demonstrate the framework and further contextualise the nature of the complexities in which we worked, we will discuss several aspects of our course development practice, outlining how each principle contributed to the work. Each example explores a different 'layer' of practice: the processes we created and implemented, the project within which we worked, the program we delivered and the learning design profession. None of these layers acted independently or were static; instead, they were adaptive and contributed to the iterations in each other, as illustrated in Figure 3.

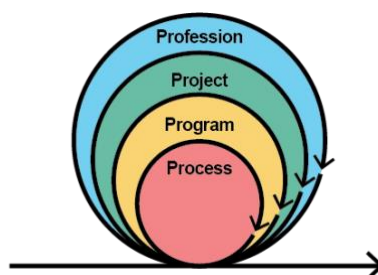


Figure 3: The iteration involved at all four levels of course development in higher education.

Process: Course map

A key artefact we developed for each course was the course map, a visual display of the critical information about the course. This process began by defining the scope of each course, gathering key information such as

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the course description, course learning outcomes, graduate attributes, program learning outcomes, and any other program or accreditation requirements. The same workspace was used to review and catalogue the current face-to-face version of the course, understand the teaching and learning activities, and any existing resources and content. The critical step was then to create a course map of the fully online version that we would work on.

At its core, our process relied heavily on conversations. After identifying our constraints (12 weeks and 150 hours of learning), we focused on refining our frame by meeting with our academic colleagues and interviewing them about their course needs, vision, objectives, and goals, as well as clarifying any areas of course development that required further context. While the process was facilitated through the development of the course map as an artefact, our team adjusted the process and the template itself each time according to the specific needs and goals of our academic colleagues, as well as the nature of the course. These nuances and the adjustments required were identified by focusing on people and relationship-building, considering everything from realistic workload and timeline expectations to the number of collaborators involved in a course development, to the different areas of technical or contextual expertise of each individual. While we began with an established template that covered all necessary areas of course mapping and planning, each staff member adjusted aspects of these elements to suit the courses they were developing and to meet the specific needs of our colleagues. This included adjusting layouts according to the design needs of a course or finding different ways to communicate and capture information with academic team members

This course map served as a foundation for planning various aspects of the course, allowing us to proceed at a pace that matched the course requirements and our colleagues' expectations. We worked holistically, designing the required activities for the entire 12-week course at a high level, rather than focusing on individual modules or specific content areas in isolation, to create a cohesive learning experience for students. It allowed us to visualise and see connections within the course and areas that would impact students, such as assessment dates, student workload, or the type of experience being weighted towards a specific activity.

Choosing the right tools for collaboration is crucial in ensuring effective communication and seamless workflow. Our tool of choice was Miro, which provided a user-friendly interface that facilitated team members' engagement, sharing of ideas, and real-time feedback. Unlike static documents or spreadsheets, the open canvas and sticky notes made it simple to adapt and edit, fostering a more dynamic and responsive working environment. This adaptability is essential in a complex environment, where connections were made on the fly as team members were pushed to think holistically and iterate through the process.

Moreover, integrating tools that support visualisation and iteration can significantly reduce cognitive load. Visual tools, colour coding and tags helped to break down complex information into a more accessible form, making it easier for team members to understand and engage with the content. A task like constructive alignment was made much simpler to engage with, where we joined outcomes and assessments with arrows, reducing a complex task into a comparatively short and engaging visual task. We were able to avoid the perception that good educational practices were arduous or an extra administrative task, as noted by Loughlin et al. (2020) to be common in the higher education industry, while supporting capability development in constructive alignment and introducing an innovative new technology.

Program: Program workshops

As the project progressed into its second year, we encountered issues with the initial program documentation, which focused on administrative approvals and accreditation processes. It became apparent that the more granular elements of the student experience and scaffolding of mastery and development of graduate qualities and program outcomes needed to be codified. The design team identified the need to bring together faculty staff to collaborate on the high-level design of all remaining courses, ensuring consistency and the development of specific skills and qualities, such as communication and teamwork, and identifying additional opportunities.

To facilitate this, the team coordinated a half-day workshop in which academics and designers participated in a series of short, focused discussions. The workshop's goals were to generate ideas, share an understanding with the group, gain clarity on future courses and identify and resolve questions and issues that had already

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arisen during development. To guide the workshop, the team focused on the program's defined graduate attributes to develop an understanding of what the knowledges, skills and behaviours of a graduate looked like in each program and course. This led to further understandings of the program's competency levels, authentic assessment and course design that evidenced the program's learning outcomes, alignment of assessments to industry expectations and the participatory expectations of students. The workshops were run primarily using paper and post-it notes, and we utilised the physical space and colour so that the design was visual and immersive. Participants could 'walk through' the sequence of study and see skills being developed over time, and gaps were identified and resolved quickly.

Whilst Herfort and Tamborg (2023) advocate for multidisciplinary design-sprint workshops between educational researchers and practitioners, this practice appears to be less established in the educational field compared with other design fields. As Herfort and Tamborg note, the advantages of approaching co-design in this targeted and time-bound way include minimising gaps between participants and their knowledge. Our team was able to encourage design, systems, and programmatic thinking and engage in conversations with our academic colleagues to enhance whole-system design, rather than focusing solely on targeted course-level improvements. This, in turn, allowed us to iterate on our course-level processes, shortening some of the time spent in our discovery and planning phases.

Critics argue that a seemingly straightforward step-by-step approach can create an administrative facade that fails to fully align with the intricate reality of teaching and student learning (Loughlin et al., 2020). However, our team's design of the workshop, which re-engaged academics in constructive alignment and program mapping, was creative, engaging, and proven beneficial. According to Bosco and Fern's (2014) authentic assessment framework, authentic assessments should involve industry participation in assessment and rubric design, thereby centring people and their expertise in the process. We emphasised the opportunity for authentic assessment by asking our academic colleagues to identify assessments relevant to our courses. This initiative aimed to generate a 'bank' of appropriate, industry-requested, authentic assessment types and formats.

Project: Smart Storyboard

The Smart Storyboard tool emerged as a direct outcome of the limitations we encountered in early course development cycles. Prior project conventions relied heavily on document-based authoring, such as Word files or Google Docs, which became laden with track changes, inserted media and comment threads. The documents became unstable due to the weight of collaborative feedback, slowing progress and hindering the overall structure of a course being developed. Project officers in the team were using spreadsheets to track timelines, due dates, and manage media, which was detached from the artefacts they represented, creating redundancies, delays in communication, and increasing stress and cognitive load on the team to deliver the work on time.

The team was fortunate to be able to collaborate with our Media Team, which enabled us to act quickly and develop our own custom software solution to address this issue. Their technical capability and deep familiarity with both the learning management system and our pedagogical model allowed this storyboard tool to move from idea to functioning prototype in weeks rather than months. This enabled the team to test the tool in real-time and embed improvements based on immediate feedback, without the overheads typically associated with external procurement or vendor engagement. Based on our storyboard documents, the new Smart Storyboard wasn't just a tool, but an intervention that arose organically from within the project as we worked iteratively to reframe how collaboration could be supported and at scale. It showed how our design-led framework fostered innovation at the project level. Faceted by this complex environment, with multiple concurrent course builds, asynchronous contributors, and changing staff, the team needed a centralised, structured, and adaptable workspace that was intuitive for academic authors while being robust enough to serve media project and LMS integration requirements.

We applied concepts from systems thinking (Senge, 2006) to identify the primary friction points in our workflow, particularly where visibility, continuity, and alignment were breaking down. We embraced the idea that course development involves interdependent structures and feedback loops that shape outcomes over time. Rather than viewing tasks in isolation, we approached the process as a dynamic system. We designed

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Smart Storyboard to help tackle these broader, system-level challenges by creating a shared digital space where teams could co-design with both structure and flexibility. The tool streamlined collaboration among designers, academics, and media producers by mapping how content, learning patterns, media elements, and assessment tasks interconnected, reinforcing a systems-level view of how courses come together. The tool provided a modular, structured interface containing content blocks with metadata to show status, assignee, duration and learning types. A dashboard showed progress as well as the pedagogical intent and student experience across a lesson, module and course. A system for tagging, flagging, developing video storyboards, and previewing media assets for production and reuse was included as well as an export function to translate structured content into Canvas LMS pages directly.

Smart Storyboard didn't just streamline course builds; it became a way to put our design values into practice. It supported rapid feedback and iteration, reinforcing our commitment to continuous improvement. Most importantly, it reflected our working principles: keeping people at the centre, staying aware of systems, and driving toward meaningful change. Smart Storyboard emerged as a clear outcome of our reframing process. It didn't reduce complexity by flattening it. Instead, it worked with the complexity by supporting relationships, increasing visibility, and grounding collaboration across a distributed team. This innovation now supports projects, demonstrating how project-level solutions can generate lasting organisational value, echoing Dorst's (2011) idea that design thinking creates frames that help organisations work more effectively with complexity.

Profession: Types and patterns

As learning design continues to evolve as a professional field, there is a growing need for a shared vocabulary to discuss the learner experience and guide design conversations. Many conversations the learning design team need to facilitate relate to pedagogy and educational concepts that tend to use specialised language and discipline-specific terminology. Having a relatively simple way of discussing and visualising the learning experience was a challenge the team set out to address, helping us centre the people involved in course and program development and enabling us to collaborate on co-designing the learning experience holistically at the course and program level.

Building on Laurillard's (2012) conversational framework, our team drew on Klapdor's (2021) work, which provided both a conceptual foundation and practical tools for building a common language around learning design. The seven learning types (assimilative, investigative, discursive, formative, productive, evaluative, and social) alongside their associated activities (content, external, discussion, practice, assessment, review, and interactive) helped to provide a simple vocabulary that could be shared and enable discussion to assist with the co-design and co-development. An accompanying colour palette was developed and used alongside the text, creating a visual language element that became a consistent feature embedded in our processes. These dual language elements became a shared reference point across our team and in our conversations with academics. By aligning course processes and design with them, we were able to clarify intent, identify imbalances, and spot reuse opportunities. However, as we transitioned to lesson-level development, the limitations of activity types became more apparent. We could ask questions such as: What exactly counts as "content" in a specific topic? How should different activities be sequenced to create meaningful engagement? To fill that gap, we introduced learning patterns. Borrowed from Alexander's (1977) idea of a pattern language, these patterns are reusable and adaptable structures that support the design of learning sequences. Patterns aren't templates, but provide a more systems-like tool to construct and guide design without dictating outcomes.

Over time, we adjusted and adapted our processes, templates, conversations and tools to embed these learning types and patterns as a holistic, system and project-wide approach. This included including them in our course maps and the Smart Storyboard tool discussed above. This sped up onboarding, made academic-designer collaboration smoother, and supported a more consistent intentional learner experience across a wide range of courses. This consistent use throughout the programs led to our development of open educational resources to share back with the profession, starting with our colleagues within the university and extending more broadly through international conferences, presentations and online resources. This has led to their adoption and use more broadly, beyond our project and university, and has been incorporated into other published works and practices internationally (Cruz, 2024).

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Implications for practice and transferability

The project fundamentally transformed the team operations and organisational capacity and demonstrates design's power for small teams to create impact far exceeding their direct output. The design-led approach necessitated rethinking and reframing of course development processes to be collaborative, iterative and future-focused, to deliver maximum value to students, collaborators, and the organisation.

The working principles identified in this case study offer a framework that can be adapted across different institutional contexts, though several considerations affect transferability. Frame creation requires minimal resources but demands significant cultural change toward collaborative decision-making. Team-focused approaches work best with dedicated project teams but can be adapted through cross-functional working groups. Human-centred processes require time investment upfront, but reduce conflicts and delays later. Iteration capabilities depend on institutional agility and willingness to experiment. The technological innovations described, particularly the Smart Storyboard, emerged from specific circumstances – an in-house development team and urgent workflow problems. However, the underlying principle of developing tools that match team needs rather than forcing teams to adapt to available tools remains transferable. Institutions might achieve similar outcomes through careful selection and customisation of existing platforms or through partnerships with educational technology providers. Critical to success is leadership support for experimentation and acceptance that complex problems require ongoing adaptation rather than one-time solutions. Institutions seeking to implement similar approaches should expect initial resistance from staff accustomed to linear processes and should invest in relationship-building and shared language development from the project's outset.

For institutions embarking on similar transformations, the message is clear: invest in relationships, embrace complexity rather than trying to eliminate it, and build capacity for ongoing adaptation. A recommended approach to adoption can be summarised as:

1. *Form a cross-functional core team with collective ownership.*
2. *Collaboratively establish the frame of work, value and success criteria.*
3. *Establish a shared design vocabulary across the team.*
4. *Create regular iterations and schedule retrospectives and reserve time to act on changes.*
5. *Select or shape tools to fit the best process, not the other way round.*
6. *Secure leadership sponsorship for iterative scope and continuous improvement.*

A call for systemic change in course development

This case study demonstrates that reframing course development from a complicated to a complex problem fundamentally transforms both processes and outcomes. The shift from minimum viable products to maximum value creation requires more than just procedural changes – it demands cultural transformation toward collaborative practice, systems thinking, and acceptance of ongoing adaptation. The learning design profession stands at a critical juncture. As online and hybrid learning become permanent features of higher education rather than emergency responses, the field must move beyond template-driven, transactional approaches toward sophisticated design practices that acknowledge the interconnected nature of educational challenges. This requires professional development that builds systems thinking capabilities, institutional policies that support collaborative work, and recognition that sustainable course development is an ongoing practice rather than a discrete project. The question facing the learning design community is not whether traditional linear approaches are sufficient, but whether we will collectively commit to the more demanding yet ultimately more rewarding path of collaborative, design-led practice that creates lasting value for learners, educators, and institutions alike.

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ASCILITE 2025

Future-Focused:

Educating in an Era of Continuous Change

Klapdor, T., Alchin, K., Bartlett, R., Lemieux, D. & Klynsmith, J. (2025). Reframing: Solving complex problems with learning design. In S. Barker, S. Kelly, R. McInnes & S. Dinmore (Eds.), *Future-focused. Educating in an era of continuous change*. Proceedings ASCILITE 2025. Adelaide (pp. 118-128).
<https://doi.org/10.65106/apubs.2025.2632>

Note: All published papers are refereed, having undergone a double-blind peer-review process.

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