The International Journal of Designs for Learning (IJDL) is pleased to publish this Special Section on Design Failure in Learning Design in diverse contexts. This Special Section includes seven design cases; six of them highlight diverse stories of failed learning design projects, and one design case highlights the use of failure-based learning strategies/techniques to engage learners in productive failure (i.e., learning with/through failure).

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Before we—Ahmed, Nikisha (Niki), and the IJDL Editorial Board—issued the Call for Proposal for this Special Section, we realized early that although we use the same terms—design failure—we mean totally different constructs. Both of us (Ahmed and Niki) focused on this topic in our distinct dissertation works almost around the same time (Lachheb, 2020; Watson, 2021) at two different universities (IU Bloomington for Ahmed and Old Dominion University for Niki). However, we focused on two different aspects of learning design practice through design failure. For Ahmed’s inquiry, design failure is a phenomenon that manifests itself in learning design practice through designers’ lived experiences of design projects/initiatives (Lachheb, 2020). Through his inquiry, Ahmed found that this failure generally could be one or both of the following:

- A failure during the process of design—design failure at the process level; thus, the processes stalled/failed to deliver a learning design solution/experience for learners.
- A failure when the design did not satisfy its stakeholders/target audience—design failure at the outcome level; thus, what has been designed did not work when judged through specific measures/metrics of success.

For Niki, design failure is using failure-based learning strategies/techniques to engage learners in productive failure (Watson, 2021). This overall value guides several pedagogical approaches with the goal of increasing self-confidence and intrinsic motivation.

Instead of problematizing our differences in what we mean by design failure, we celebrate them. We used our diverse thinking on design failure in learning design practice as a base for the Call for Proposals. We issued the call seeking design cases dealing with design failure, either as designers’ lived experiences of design projects/initiatives or as failure-based learning strategies/techniques to engage learners in productive failure. The range of design cases we
sought included design failure in K-12 or higher education or workplace [non-educational] settings.

We worked as a team tirelessly with the IJDL Editorial Board and the authors to ensure that the design cases must illustrate the following:

• A vivid and rich description of what has been designed and failed or how the design process failed to yield its intended outcomes.
• A detailed account of the design judgments/decisions that led to failure and the experience/emotions/thoughts that came to designers/stakeholders when the design (process or outcome) failed.
• The interesting ways designers designed for learning failure, intentionally, and how they engaged learners in productive kinds of learning failure.

As a result, this Special Section includes seven design cases; six of them highlight diverse stories of failed learning design projects, and one design case highlights the use of failure-based learning strategies/techniques to engage learners into productive failure.

THE STORIES WE WANT TO HEAR THE MOST ARE THE STORIES WE NEED TO HEAR THE LEAST

Six design cases in this special Section showcase authentic and compelling stories of design failure:

Zydney and Hord share the story of their first attempt to create a virtual mathematics tutoring program for students with learning disabilities, prompted by the COVID-19 pandemic. Through detailing their design decisions and motivations, they share three interrelated design failures: problems with flexible scheduling, challenges with seeing students’ work, and inconsistent use of a collaborative and communication tool.

Gray and Exter narrate the story of their design process that resulted in recommendations for a four-year undergraduate curriculum in transdisciplinary studies. Through sharing their design activities and decisions, they narrate the instances of failure that precipitated their design work, the instructional and institutional constraints they faced, the blueprints for a future instructional design they created on the course and program level, and the ultimate failure of the degree program they sought to support.

Yang and Harbor share their story of what program leaders learned from their failures in designing a program of authentic learning about teaching diverse audiences through educational outreach. Through their analysis of post-program data, they revealed seven design failures related to the lack of upfront analysis to inform the program design. They detail each design failure through a fishbone diagram method to identify the corresponding and contributing factors for each failure.

Heard shares the story of the failure of a Digital Practices course by illustrating how university students were unable to apply their newfound software program knowledge to design intricate art projects. The design case reveals that the design failure includes a lack of structure in the Tool Lab design, an influx of unnecessary material, a loss of student engagement, and minimal incentive to complete follow-up quizzes.

Cooper and Renshaw share their story of a design failure they experienced before and after working with a Subject Matter Expert (SME) on a case-based simulated learning event in the context of medical education. Learning from their initial failures, they took intentional design actions to ensure design success.

Rajcic shares the story of a class that teaches Emotional Design Theory in application to designing pandemic face masks. The design case reports how the design succeeded in teaching emotional design theory but failed to initiate greater student creativity in applying theory, most notably in the visceral level of emotional design.

Though each design case is unique, it speaks to a particular design situation, and it is heavily influenced by the subjective worldview of its author(s)/designers, each design case tells a story of a lived design experience. Each experience includes tension and opportunities for the growth of design expertise. Every designer wishes their design did not fail—none wants to fail. However, reading closely each design case allows us to recognize that design failure stories are the stories we want to hear the least, but they are the stories we need to hear the most.

THE ONE STORY OF LEARNING WITH AND THROUGH FAILURE

Buseyne and colleagues describe in their design case how they use productive failure learning strategy/techniques to teach adults Collaborative Problem Solving (CPS) skills. In their design case, they outline the design process of their CPS training along with the design decisions they made in implementing productive failure. They claim that their productive failure learning strategy fostered adults’ CPS-competencies development.

When designing and developing, it is expected that one might encounter challenges. Implementing failure intentionally in the learning design invites unique challenges that designers must face to provide opportunities for learners to engage in meaningful and authentic learning activities while employing a failure-based strategy. We encourage you to embrace these challenges and use them as a conduit...
for changing the narrative of how failure may be used to facilitate learning and development.

CONCLUDING THOUGHTS

We hope these seven design cases enrich the repertoire of design precedents of learning design—an area IJDL has pioneered since 2010. As detailed in their diverse contexts/settings, these design cases must not constitute a set of “lessons learned” that speaks about the broad generalizability of the design contexts/situations to other contexts—that is not the purpose of a design case as a valid scholarship genre. As we have encouraged the authors to engage in design reflection that speaks to the unique particularity of the design situations they faced, without attempting to generate “generalizable truth” similar to “implication” sections in journal articles, we encourage you, the readers, to engage in design reflection and identify your design failure in a concrete way (and while you’re at it, write a design case about it and submit to IJDL).

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REFERENCES
