Experiential Learning in Action: Teaching Kolb’s Theory Through Origami in Asynchronous Environments

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This paper expands on the AECT 2025 session, “Experiential Learning in Action: Teaching Kolb’s Theory Through Origami in Asynchronous Environments,” and documents a self-referential design in which graduate students learned Experiential Learning Theory (ELT) by enacting its cycle while folding a paper crane. In a group-paced, asynchronous Canvas module, learners completed four short activities—concrete experience, reflective observation, abstract conceptualization, and active experimentation—each paired with a 30-second video reflection prompt. Nineteen students participated; most were new to ELT and to video-based discussions (initially Flip, later Padlet). Students reported higher engagement, clearer metacognitive awareness, and plans to transfer the approach to their own

teaching contexts, while also noting challenges linking reflection to theory and occasional platform issues. Findings suggest that simple, embodied tasks such as origami can foster experiential learning online when paired with purposeful reflection and iteration.

Introduction

This proceeding presents the design, implementation, and outcomes of an origami-based lesson aligned to Kolb's Experiential Learning Theory (ELT). The lesson was featured at AECT 2025 in Las Vegas and demonstrated how a tangible making task can operationalize the ELT cycle in an online, asynchronous environment. Session goals were to (a) apply ELT through a self-referential lesson, (b) experience learning by doing an origami task, and (c) support attendees in adapting the approach to their contexts.

The session positioned teaching and learning as reflective, imperfect, and human processes and invited participants to "learn through doing." A positionality statement framed the facilitation as iterative and open to feedback.

Background: Experiential Learning Theory

ELT (Kolb, 1984) describes learning as a cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation. In online and blended contexts, ELT's emphasis on action and reflection has been linked to gains in competency, engagement, and satisfaction. Prior work highlights ELT's adaptability across modalities (from virtual labs to 3-D environments) when designs intentionally scaffold the reflective and applied phases (Abdulwahed & Nagy, 2009; Jarmon et al., 2009; Konak et al., 2014). The session introduced the ELT cycle with visuals and a brief overview of revisions that foreground context and culture as influences on how learners move through the cycle (e.g., Morris, 2019).

Within the session, the ELT phases were presented explicitly, preparing learners to map their origami experience to the model.

Context and Course Design

The origami lesson originated as a fully online, asynchronous mini-lesson in a graduate course hosted in Canvas and aligned with the University of Central Florida's emphasis on experiential learning and community collaboration. The course was group-paced and divided into modules. Participants were graduate students (N = 19) with limited prior experience in ELT or video-based discussion. The initial tool was Flip; the current implementation uses Padlet.

Instructional Procedure

The unit was self-referential: students learned ELT by doing ELT. Each ELT phase was translated into an origami activity with a short, structured video reflection.

Concrete Experience

Learners attempted to fold a paper crane from memory without instructions and immediately recorded a 30-second reflection describing emotions, surprises, and initial strategies.

Reflective Observation

Students examined their first crane and reflected on approaches taken under uncertainty (e.g., what they noticed about their process and decision points), again in a 30-second post.

Abstract conceptualization

Next, students connected their experience to theory by explaining what the activity revealed about learning through experience and how reflection aided sense-making.

Active Experimentation

Finally, students repeated the crane using step-by-step instructions or a demo video, applied insights from earlier phases, and compared first and second products in a concluding 30-second reflection. (See the instruction diagram shown in the session.

Table 1

Mapping ELT phases to origami activities and prompts

ELT phase	Activity	Reflection prompt (30 s)
Concrete experience	Fold crane with no instructions	What did it feel like to begin without knowing how? What surprised you?
Reflective observation	Examine the first crane	What did you notice about your process and strategies?
Abstract conceptualization	Connect to ELT concepts	What did this teach you about Kolb's cycle or learning through experience?
Active experimentation	Refold with instructions	How did your second attempt change with context and practice?

Findings

Student feedback emphasized that doing the steps led to understanding, that short video reflections made learning feel personal, and that several planned to adopt the approach in their own teaching (e.g., "I actually got it once I went through the steps myself"; "Very meta"). Aggregated positives included growth in applying ELT principles, deeper understanding through immersion, meaningful social presence even asynchronously, and high satisfaction with the reflection format.

Challenges included difficulty articulating theory-rich reflections among some learners, a recommendation to extend video responses to up to 5 minutes, and occasional Padlet LTI/cookie permission issues—suggesting a need for step-by-step

technical guides and additional scaffolds that connect lived experience to conceptual language.

Discussion and Implications

Three design implications stand out. First, embodied, low-threshold tasks (e.g., origami) can surface the affective and cognitive dynamics of learning that ELT seeks to make visible. Second, short, structured reflections cultivate metacognition and social presence in asynchronous settings; expanding time limits for some prompts can deepen analytic rigor without sacrificing accessibility. Third, iterative cycles (first attempt → reflection → re-attempt) enable learners to witness transformation across products and processes.

These implications align with prior ELT research in online and simulated environments reporting competency gains and stronger engagement when tasks require action, reflection, and transfer (Abdulwahed & Nagy, 2009; Jarmon et al., 2009; Konak et al., 2014). Instructors may adapt the task beyond paper cranes by inviting students to select a novel, discipline-relevant micro-challenge while preserving the ELT cadence.

Limitations and Future Directions

Findings derive from one graduate cohort and a single course context. Future iterations will compare alternative media (e.g., AR/VR demos of folding) and evaluate whether extended reflection windows (up to five minutes) improve theoretical precision without diminishing participation. The session also suggested exploring technical troubleshooting artifacts (browser cookie settings, LTI permissions) to reduce access friction.

Conclusion

The lesson demonstrates how “learning by doing” can be designed for asynchronous environments without sacrificing reflection or rigor. By cycling through experience, reflection, concept-building, and re-attempt, learners not only study ELT—they live it. Simple artifacts (two cranes) serve as evidence of transformed understanding, making ELT tangible and transferable across varied teaching contexts.

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