

# Chapter 8

## Designing Practice(s) for Learning in Online Learning Contexts

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### ABSTRACT

*Practice is a regular part of learning, and it is used for a variety of learning objectives and outcomes. There is very little in the academic research literature about how to design assigned and formal “practice(s)-for-learning,” much less for an online learning context in higher education. This work explores the extant literature on practice design and proposes some initial approaches for defining practices-for-learning in online learning. This work provides a construct for highlighting the main levers of practices-for-learning (through interrelated paragraphs of mapping sentences). This work also asks some critical questions for the design of learning practice in online contexts.*

### INTRODUCTION

Learning is defined as the acquiring of knowledge, skills, and abilities / attitudes, based on experiences, study, observation, and other efforts. It is conceptualized as being an inherent part of personhood and a necessary aspect for adaptivity and survival. For learning to occur, the human brain has to encode new information and make that available in the short-term as well as the long-term, and it has to be able to apply the former knowledge to new contents (McLaughlin & Coderre, 2015, p. 321). Learning has to enable “an *enduring* change in behaviour...” (Schuell, 1986, as cited in McLaughlin & Coderre, 2015, p. 321). New learning “produces a cascade of consequences that, to some extent, both modifies what we already know and influences future learning” (Seitz, 2017, p. R225). Some types of learning can be acquired with a one-off, but a lot of other types of learning require multiple exposures and experiences to attain. Practices enable the multiple exposures over time.

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Practice exercises are commonplace in teaching and learning, in face-to-face (F2F), blended, and online learning. In early days, practices were drills, with the idea that repetitions would establish new ideas and skills in learners. As a traditional form of instruction, drills were also known as “mechanical practice” or “pattern practice” (Wong & VanPatten, Fall 2003, p. 403), such as to teach “form-only” aspects of language. Over time, practices have become more complex, and the research into their efficacy has become more nuanced. Yet, there is very little about how to design practices (how to engage “practice design”). What are practices-for-learning? What considerations should be input into the design of practices? What theories should inform the designs, and how should these elements align? What are some pragmatic approaches?

This work aims to explore the research literature to collect applicable knowledge to inform a reasoned approach to practice design. Here, “practice(s)-for-learning,” defined as “repeated exercises or activities or skills to acquire and maintain proficiency,” are understood as both general and specifically applied (in particular learning contexts) phenomena. Particularly, this work will explore pragmatic “practice design” approaches for practice-for-learning in online learning contexts.

## **REVIEW OF THE LITERATURE**

A review of the literature to contextualize practice(s)-for-learning begins with a light summary of adult learners, their understood preferences and motivations for learning, and heutagogical aspects. The practices-for-learning are understood to occur experientially and reflectively, evoking the 1984 Kolb’s Experiential Learning Cycle, consisting of four steps: (1) concrete experience, (2) reflective observation, (3) abstract conceptualization, and (4) active experimentation. The power in engaging in particular practice and reflecting on that practice to advance the skills and the work. Experience is a core part of all learning (Andresen, Boud, & Cohen, 2000). Innovation itself is important in the experimentation phase especially (with a focus on improvements to prior practice and novelty). “Experiential learning” refers to human making of meaning from lived experiences, in embodied and disembodied (virtual) ways, and in serendipitous-to-designed experiences. Then, definitions of various forms of practices are described, along with learning practices. Finally, a novel approach is described for the designing of practices.

Malcolm Knowles (1984) suggests that adult learners need to have a reason to learn something and that they build new learning on prior learning; they prefer to be engaged in the planning of their own instruction; they prefer problem-based focuses instead of engaging content; they learn better with internal (vs. external) motivations (Knowles, 1975; Knowles, 1984a; Knowles, 1984b). Heutagogy, the study of self-determined learning (Hase & Kenyon, 2000), describes learners who “are highly autonomous and self-determined” (Blaschke, 2012, p. 56). Heutagogy has re-popularized given the alignment of self-driven adult learners with the capabilities of Web 2.0, online learning, and technologies that enable learner-driven learning (Blaschke, 2012, p. 56). The technologies that enable learners to “interact with peers and mentors to frame issues, brainstorm, validate and share information, make decisions, and create management protocols” may create “the best environment for learning” in professional practice (Parboosingh, 2002, p. 230). Technology systems have been created for decades to enhance human learning and performance. Early technologies for language learning harnessed multimedia for pronunciation (Warschauer & Healey, 1998, p. 57). Technologies designed to train psychomotor capabilities also involve data capture of learner performances (speed of learning, performance consistency, and others) (Prasad, et al., 2002).

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