Authentic Learning in your Online Course

1 What is it?

Authentic learning engages learners in realistic tasks that capture the complexity of real-world situations (Herrington et al., 2010; 2014; Herrington & Herrington, 2007). It is a pedagogical approach that designs learning tasks in real-life situations aiming to support successful knowledge transfer to new contexts (Herrington et al., 2014). Learners do not need to be immersed in a real context (e.g., an actual factory or a lab) to engage in authentic learning - it is the *cognitive realism* of complex and engaging learning tasks, rather than the fidelity of realistic simulations, that creates authentic learning (Herrington et al., 2014).

2 Why is it important?

In traditional academic curriculum and instructional methods students learn abstract concepts through disconnected tasks in decontextualized situations. Such disassociation between knowledge and practice prevents learners from applying acquired knowledge and skills when facing complex real-world problems. Authentic learning methods generate accessible and relevant knowledge that learners easily retrieve in real-life problem-solving contexts (Herrington et al., 2010). This approach improves learners' problem-solving skills and higher-order thinking by motivating students to actively inquire and investigate real-world problems (Maina, 2004). Authentic learning supports students when they are transferring learned knowledge and skills to the workplace by connecting them with the task's real-world significance (Lowell & Moore, 2020). It also fosters out-of-the-box thinking when designing and teaching online courses . It encourages the use of emerging online technologies as alternatives to real-life contexts (Herrington et al., 2010).

3 How to do it?

Here are nine elements of a quality authentic online learning experience (Herrington et al., 2010; 2014):

- *An authentic context that reflects the way the knowledge will be used in real life.* Once you set the learning objectives, ask yourself where and how learners will apply them. If a real setting is not available (e.g. counseling patients), you can develop a scenario (see Case-based Learning) to provide contextual information for learners about where, when, and how to apply the target knowledge or skills. The context should be all-embracing with realistic levels of complexity.
- *Authentic tasks.* Learners interact with the context and learning materials by engaging in tasks. Authentic tasks meet ten characteristics.
    1. have real-world relevance;
    2. are ill-defined, requiring learners to decide on the steps to move forward;
    3. capture real-world complexity, requiring learners to engage over sustained periods of time;
    4. can be approached from multiple perspectives using a variety of resources;
    5. encourage collaboration;
    6. promote reflection;
    7. foster interdisciplinary learning outcomes;
    8. integrate assessment seamlessly;
    9. create polished and valuable products;
    10. allow competing solutions and diverse outcomes.
- *Access to expert performances and modelling of processes.* When learners have access to examples of experts' performance, they not only observe how problems are solved, but also compare their work with the work of a "master." For example, a video of an expert (e.g., instructor) performing a similar problem will be helpful to learners before they embark on their own tasks. This modeling process provides learners access to expert problem solving. It is also valuable to provide modeling

opportunities with varying levels of expertise to avoid creating anxiety among learners.

- *Multiple roles and perspectives.* Provide opportunities for learners to be aware of confronting perspectives and controversies in the field. Allow learners to explore topics from various points of view (e.g. using role-play).
- *Collaborative construction of knowledge.* Learners need to be prepared for real-world collaboration even more in online learning contexts due to the geographical separation. Encourage teamwork to establish collaboration by setting up group work opportunities (see Teamwork).
- *Reflection.* Reflection refers to learners' conscious examining or re-examining of their past experiences to learn something more (Boud, 2006). This process enables learners' new understanding or knowledge. Consider the following: allow students to choose their own pathways rather than following step-by-step instruction when completing authentic tasks in an authentic context; organize resources in a non-linear manner so that learners can freely return to any content; encourage learners to compare their work with that of experts and other learners; promote group collaboration for discussion and social reflection. Learners can keep journals (see Journaling with Students) for self-reflection throughout the learning process.
- *Articulation.* The opportunity to articulate personal perspectives strengthens learners' understanding, builds their professional role, and enhances ownership of learning (Herrington et al., 2010). Online courses should have built-in opportunities for learners to discuss and defend their views with peers in a social context (e.g., collaboration).
- *Coaching and scaffolding.* As the expert who supports expertise development, instructors can provide appropriate levels of coaching and scaffolding in online courses. More able partners (e.g. experts in the field, knowledgeable students)

can also assist with the process.. Coaching and scaffolding (e.g. provides prompts to support students at the metacognitive level) should be available in a significant portion of the authentic activities to meet learners' diverse needs.

- *Authentic assessment.* Online courses cannot rely on traditional standardized assessment to test student learning. Learners need to have the opportunity to demonstrate their skills and products by engaging in authentic tasks that foster collaboration. Instructors should provide rubrics to communicate expectations and clearly describe varying levels of performance on the task (see Sample Course Project Checklist).

4 Additional Resources

- Authentic learning resources and ideas
- Technologies for Authentic Learning

5 References

Boud, D. (2006). Creating a space for reflection. In D. Boud, P. Cressey, & P. Docherty (Eds.), Productive reflection at work: Learning for changing organizations (pp. 158-169). Routledge.

Herrington, A. J. & Herrington, J. A. (2007). What is an authentic learning environment?. In L. A. Tomei (Ed.), Online and distance learning: Concepts, methodologies, tools, and applications (pp. 68-77). Information Science Reference.

Herrington, J. & Oliver, R. (2000) An instructional design framework for authentic learning environments. *Educational Technology Research and Development*, *48*(3). 23-48.

Herrington, J., Reeves, T.C., & Oliver, R. (2010). A guide to authentic e-learning. Routledge.

Herrington, J., Reeves, T. C., & Oliver, R. (2014). Authentic learning environments. In J.M Spector, M.D. Merrill, J. Elon, & M.J. Bishop (Eds). *Handbook of research on educational communications and technology (pp. 401-412)*. Springer.

Lowell, V. & Moore, R. (2020). Developing practical knowledge and skills of online instructional design students through authentic learning and real-world activities. *TechTrends*, *64*(4), 581-590.

Maina, F. W. (2004). Authentic learning: Perspectives from contemporary educators. *Journal of Authentic Learning*, *1*(1), 1-8.