Red Deer Polytechnic
Centre of Teaching, Learning and Scholarship

Teaching with ePortfolios at Red Deer Polytechnic

PURPOSES AND RATIONALE

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What are ePortfolios?

Physical portfolios have been used for decades by students in art, design, and architecture to show creative processes, document development, and highlight work. EPortfolios can be used in the same way, but instead house these documents in a digital format rather than in a physical one. EPortfolios are also being used in a wider range of industries, not just in the creative fields.

Increasingly, ePortfolios are being used in higher education; more than 50% of US colleges and universities (Wensveen, 2019) now use ePortfolios in some way. As one example, The University of Michigan's Department of Internal Medicine uses reflective ePortfolios to help medical residents reflect on challenges and experiences, deepen their understanding of these, and develop reflective practice and lifelong learning skills (Reese & Levy, 2009).

Research / Theory

EPortfolios are based on constructivist theory in that learners are active participants in creating their own learning when they develop their ePortfolios (Wade, et al., 2005). EPortfolios are connected to Self-Regulated Learning (Wensveen, 2019), authentic learning (Reese & Levy 2009), and transformational learning (Eynon & Gambino, 2017). Self-Regulated Learning is "the degree to which students are metacognitively, motivationally, and behaviorally active participants in their own learning process" (Alexiou & Paraskeva, 2013). Dewey (1933 & 1997) believed that reflection is critical in developing knowledge and that people learn best by reflecting on their experiences. Reflection is a cognitive and affective process that requires active engagement and involves examining one's personal beliefs (Rogers, 2001). When learners analyze and reflect on their work and choose which pieces to include in their ePortfolios, they develop independent learning, self-regulation, and critical thinking skills. Self-efficacy is a prerequisite for motivation (Deci & Ryan, 2008) and intrinsic motivation is key to the adoption of new technology (Winne & Hadwin, 2008).

Reflection, authentic learning experiences, and transformational learning are all connected. Cranton (2016) shares Mezirow's (2000) belief that when people "critically examine their habitual expectations, revise them, and act on the revised point of view, transformative learning occurs. Transformative learning leads to perspectives that are more inclusive, discriminating, and integrative of experience" (p. 29).

"The single greatest factor that influences the intrinsic motivation of students to actively engage in the creation and use of the ePortfolio is their perspective on the value and usefulness."
(Ciesielkiewicz, 2019)

Pedagogical Benefits from Using ePortfolios

EPortfolios work best when used as both a process and a product and align with authentic, student-centered and meaningful learning. At Red Deer Polytechnic we focus on student-centered learning, rather than instructor-centered teaching. EPortfolios can also help students with critical thinking, writing, and multimedia skills (Lorenzo & Ittelson, 2005). The process documents reflection, learning, and growth while the product highlights achievements. EPortfolios can help facilitate and document authentic learning experiences that focus on real-word, complex problems (Reese & Levy, 2009). Research (Kimball, 2005; Butler, 2006; Barrett, 2010) shows us that what is hugely beneficial about ePortfolios is the aspect of reflection; it is the in the process of constructing a portfolio, rather than the final showcase of work, where the learning takes place (Smith & Tillema, 2003). EPortfolios are connected to higher performance, deeper learning, and overall satisfaction with college (Di Silvestro, F., & Nadir, H., 2021).

In fact, the benefit of ePortfolios is such that they have been added as the 11th High Impact Practice (HIP) by the American Association of Colleges & Universities (AAC&U), a global membership organization dedicated to advancing undergraduate education. HIPs (High Impact Practices) help students engage in "deep approaches" to learning which are important because "students who use these approaches tend to earn higher grades and retain, integrate, and transfer information at higher rates" (Kuh, 2008).

Considerations

- What skills will students need to develop in order to create the ePortfolio?
- How will the portfolio be introduced?
- How will the portfolio be reviewed and assessed?
- Who decides what should be included in a portfolio?
- How should the pieces of evidence in the portfolio be organized?
- What kinds of artifacts are acceptable as pieces of evidence? What should, and should not, be included in the portfolio?
- Servers and backup, support and scalability, infrastructure and training/ support, security and privacy, ownership and intellectual property.

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