

Electronic Portfolios as a Means for Showcasing Student Learning and Professional Development

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What are ePortfolios?

For college students, eportfolios represent a collection selected work to illustrate their skills and serve as a reflection tool examining their learning. ePortfolio content is most commonly showcased through the medium of a web-based content management system (CMS) such as WordPress, Wix, or Weebly. Students' selected work can be text-based or presented using a variety of multimedia elements like graphics, photographs, audio and/or movies. ePortfolios can be built and maintained for shorter-term purposes (e.g., specific learning experiences, college courses) or longitudinal projects (e.g., sequential term courses, multi-year academic programs). >>>

How do ePortfolio Methods Impact the Student Learning Experience?

ePortfolio methods for examining student learning are becoming increasingly more common in higher education settings due to the versatility of the platforms for conveying course content. Reardon, Lumsden, and Meyer (2004) utilized eportfolios to showcase student learning throughout students' undergraduate experiences. The researchers claimed that eportfolios are important for job seekers to "show examples of their work to potential employers and to document accomplishments included on the resumes" (p. 369). Further, these researchers postulated that eportfolios can promote "student learning, career preparation, and employment" while serving as a "high-visibility program to positively support student recruitment and retention" (p. 372).

Within eportfolio literature, a small number of studies employed eportfolios in professional development programs oriented towards aiding students in a career advancement process. One study focused on the utility of an eportfolio system in a first-year engineering course (Carroll, Markauskaite, & Calvo, 2007) while another noted how graduate students found that eportfolios "facilitated reflection on their professional practice, especially in relation to the competencies they had developed" (Wakimoto & Lewis, 2014, p. 55). Another series of studies focused on advanced engineering students completing eportfolio preparation workshops towards the end of their collegiate experience (Sattler & Turns, 2015; Kilgore, Sattler, & Turns, 2013). Results demonstrated how eportfolios facilitated student professional development through content inclusion and reflection. Few studies

present evidence on how students are encouraged to actively transform their experiences around identified outcomes to better articulate their learning.

Utilizing ePortfolios to Facilitate Student Professional Development

Researchers at the University of Cincinnati promoted essential student learning outcomes through the medium of an introductory level professional development course called *Introduction to Cooperative Education*. Introduction to Cooperative Education was selected as the appropriate course to promote student learning outcomes due to the course serving as the gateway to cooperative education work experiences for undergraduate students. The learning outcomes emphasized in this study were derived from the Association of American Colleges and Universities' (AAC&U) Liberal Education and America's Promise (LEAP) Report (Association of American Colleges & Universities, & National Leadership Council, 2007). An eportfolio assignment structure was incorporated into one section of Introduction to Cooperative Education for one academic following AAC&U's suggestion of eportfolio integration as a best practice for examining student learning.

The study was comprised of first-year, primarily baccalaureate degree-seeking students in the information technology major. ePortfolios were used in the course as a repository for student assignments, a reflection tool, and a means for students to project an electronic identity to external constituents (e.g., peers, faculty, prospective employers). Assignments associated with the eportfolio course were thoughtfully designed

to address two specific learning outcomes from the AAC&U VALUE Project: *teamwork* and *written communication*. The identified learning outcomes were validated as essential undergraduate student learning outcomes through the administration of an industry survey given to employer-partners associated with the cooperative education program.

The researchers designed assignments that allowed students to reflect on their competence within areas of teamwork and written communication. The researchers utilized AAC&U's feedback rubrics (i.e. metarubrics) for teamwork and written communication to provide constructive insight into students' illustration of these competencies. Feedback was provided to students at the conclusion of each assignment through a rubric evaluation administered by peers and a rubric evaluation administered by the researchers. The researchers employed a program evaluation methodology, whereby the goal was to evaluate students' use of eportfolios throughout the program-specific course.

Can Structured ePortfolio Assignments Enhance Student Confidence?

The researchers desired to test whether eportfolios could be used as a tool to enhance student confidence with respect to teamwork and written communication. The researchers created pre-test and post-test student confidence surveys to determine students' self-perceived levels of confidence with respect to the aforementioned essential student learning outcomes. In between the tests, researchers employed the eportfolio assignments and feedback

methodology through the use of rubrics. Survey results indicated that participating students reported higher levels of confidence with respect to the essential learning outcomes of teamwork and written communication following the conclusion of the coordinated assignments and feedback implementation through eportfolio rubrics.

ePortfolio Impact on Teaching

The results of the present study suggest that the incorporation of eportfolios in higher education assignments may offer legitimate benefits to students. Specifically, they may enhance student confidence in numerous, valued career education competencies. Knowing that structured eportfolio assignments could contribute to enhanced confidence levels in students is noteworthy on several fronts. As educators, a central role should be the continued preparation of students for their inevitable transitions to the world of work. Teaching methodologies that contribute to this effort should be prioritized whenever possible. Utilizing eportfolios as a reflection tool to showcase student learning is a principal example of furthering student development in the career education space. Further, as first and second year students often struggle to feel self-assured prior to professional experiences (e.g., co-ops, internships) educators should be aware of those practices that could contribute to greater student confidence and self-efficacy. Perhaps the use of eportfolios and assignments aimed at essential student learning outcomes from AAC&U could be used to enhance student confidence and self-efficacy in preparation for work placement experiences.

ePortfolios are unique in that there are endless possibilities regarding how they can be structured to deliver the same level of value to students and their instructors. These platforms should be used as a space to encourage free student expression as opposed to creating a prescriptive framework for their usage.

While the researchers in this study only examined two variables with respect to student confidence, these variables aligned directly with AAC&U employer-partners' desired student learning outcomes as well as the desired student learning outcomes of the research institution. Additional exploration of other AAC&U student learning outcomes would enhance the validity of this study and contribute to further research in the realm of eportfolio integration in professional development courses.

Recommendations for ePortfolio Implementation

For educators that have taught courses the same way for several years, the thought of incorporating new technologies in the classroom can feel like a daunting task. However, there are rewarding benefits to pushing through some of this temporary discomfort. ePortfolios specifically provide an interactive, online space for students to share significant experiences and provide a digitized representation of their identities that are unlike traditional assignment platforms. Students that utilized eportfolios in this study reported they enjoyed having the ability to share assignment content and aesthetic features with their peers. Many of this sharing occurred during formalized workshop sessions in class; some of this occurred organically outside the traditional classroom environment as well.

It is recommended that a stable platform such as WordPress, Weebly, or Wix be utilized should educators consider eportfolio implementation. These existing platforms have incredibly user-friendly interfaces that simplify content manipulation for development purposes. Additionally, these platforms have free versions that will not impose unnecessary financial burdens on students or educators. Finally, these platforms are considered widely used content management systems across the globe. Some employer-partners within this study even reported their desire for student-candidates with content management system experience as a prerequisite to employment.

An additional recommendation for eportfolio integration in courses is that educators should encourage student creativity within their design, communication of assignments, and artifact (e.g. pictures, designs, videos) inclusion. ePortfolios are unique in that there are endless possibilities regarding how they can be structured to deliver the same level of value to students and their instructors. These platforms should be used as a space to encourage free student expression as opposed to creating a prescriptive framework for their usage. Initially, students may feel some sense of dissonance regarding their freedom for expression, however, this dissonance should dissipate as feedback

is provided from the instructor and peers throughout the eportfolio development process.

Lastly, eportfolios should be seen as an opportunity for educators to provide validation to students regarding their expression of significant life experiences. Educators have a critical responsibility to provide validation to students in their personal learning process. It should be acknowledged that the sharing of life experiences and personal learning through a public medium suggests a degree of vulnerability and trust on behalf of students. Educators can use this opportunity as a chance to validate students as knowers, which is a critical component of the student development process (Baxter Magolda & King, 2004).

Conclusion

In an age where students in higher education possess extraordinary degrees of technical acumen, educators can make the intentional effort to incorporate some technological advancements into their teaching to provide a platform for assignment content, as well as a chance to promote fun, creativity and self-reflection. ePortfolio integration is one way that educators can make strides in this direction. Moreover, should eportfolio assignments be used as a tool to enhance student confidence with respect to course objectives or essential student learning outcomes, it can be presumed that educators are assisting students in a powerful development journey — one that contributes to their ability to succeed in work-integrated learning experiences and professions.

References

- Association of American Colleges & Universities, & National Leadership Council (US). (2007). *College learning for the new global century: A report from the national leadership council for liberal education & America's promise*. Association of American Colleges & Universities.
- Baxter Magolda, M. & King, P. (2004). *Learning partnerships: Theory and models of practice to educator for self-authorship*. Sterling, VA. Stylus Publishing.
- Carroll, N. L., Markauskaite, L., & Calvo, R.A. (2007). E-portfolios for developing transferable skills in a freshman engineering course. *IEEE Transactions on Education*, 50(4), 360-366.
- Kilgore, D., Sattler, B., & Turns, J. (2013). From fragmentation to continuity: Engineering students making sense of experience through the development of a professional portfolio. *Studies in higher education*, 38(6), 807-826.
- Reardon, R. C., Lumsden, J. A., & Meyer, K. E. (2004). Developing an eportfolio program: A comprehensive tool for student development, reflection, and integration. *NASPA Journal*. 42(3), 368 – 380.
- Sattler, B., & Turns, J. (2015). Preparedness portfolios and portfolio studios: Supporting self-authoring engineers. *International journal of eportfolio*, 5(1), 1-13.
- Wakimoto, D. K., & Lewis, R. E. (2014). Graduate student perceptions of eportfolios: Uses for reflection, development, and assessment. *Internet and higher education*, 21, 53-58.