Editorial: ePortfolios – The Eleventh High Impact Practice

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AAC&U has identified ePortfolios as an eleventh high impact practice. This inclusion is the result of the breadth and the strength of the evidence base in support of the effect of ePortfolios along a number of student success metrics. This recognition signals a new era for ePortfolios in higher education, and this editorial briefly explores the evidence behind this decision and charts a course for next steps and new domains for ePortfolios. The most promising of which may be coupling notions of Signature Work and a range of HIPs with ePortfolios.

The International Journal of ePortfolio includes an editorial on the occasion of a significant opportunity or event within the domain of ePortfolios, and this is indeed one such instance. The Association of American Colleges and Universities (AAC&U) has made the evidence-based decision to expand its set of ten high impact practices by one. The triangulation of the research from multiple sources has led to this decision, and the evidence in support of the efficacy of ePortfolios has been steadily, concertedly growing over the past decade. Key milestones leading to AAC&U's decision include the publication ten years ago of the Handbook of Research on ePortfolios (Jafari & Kaufman, 2006); research performed by many campuses through the Inter/National Coalition for Electronic Portfolio Research as well as associated publications (e.g., Cambridge, Cambridge, & Yancey, 2009); the launch in 2011 and the sustained publication since then of the peer-reviewed International Journal of ePortfolio; and in January 2017, we expect to see the publication of research resulting from the Connect to Learning (C2L) project (Eynon & Gambino, forthcoming). This sustained decade of effort leads us to this new ePortfolio era, an era where we will speak of ePortfolios and associated practices as having a high impact on student learning as well as other metrics of student success.

By way of general summary, ePortfolio pedagogy provides a set of practices that are platform agnostic and utilize a range of broadly available technologies. They are constructed within a framework for organizing learning, not as a prescription for a single end product, and they are designed to be owned and developed by the student learner with guidance from faculty and other educational professionals. Central to ePortfolio practice is active learner engagement and responsibility in their learning, along with learner reflection, upon not only the artifacts or instances of learning assembled in the ePortfolio, but also upon their process of learning that exhibits the desired outcomes at required levels of competence. When performed well, based on best practices recommended from the research, this broad set of strategies has been found to have the desired impact on students. It is within this context that we look more closely at the evidence supporting AAC&U's decision.

Evidence of High Impact

The phrase, high-impact practices, was appropriated to denote institutionally-structured student experiences inside or outside of the classroom that are associated with elevated performance across multiple engagement activities and desired outcomes, such as deep learning, persistence, and satisfaction with college. While much of the initial body of evidence undergirding these observations was based on annual results from the National Survey of Student Engagement (NSSE) through 2007 (Kuh, 2008), additional confirming data soon began to accumulate from other studies (e.g., Brownell & Swaner, 2010; Hakel & Smith, 2009). Compared with their peers, undergraduates who participate in at least one of the high-impact practices (HIPs) "officially approved" by AAC&U generally devote more effort to such educationally purposeful activities as spending more time preparing for class and interacting more frequently with their instructors and other students about substantive matters. HIP participants also report getting more feedback about their performance and are more likely to apply and reflect on what they are learning, which tends to deepen and integrate their learning.

Equally important, HIPs have a cumulative effect, in that the more HIPs a student does during their studies, the more they benefit (Finley & McNair, 2013), and this realization contributes to the notion of Signature Work (described below), posited as a component of AAC&U's reaffirmation of the Liberal Education and America's Promise (LEAP) Challenge (AAC&U, 2015a). Further, HIPs are associated with compensatory effects, in that student performance is greater than what otherwise might be expected, after controlling statistically for relevant student and institutional factors (Kuh. 2008: Kuh. O'Donnell, & Reed, 2013). The compensatory effects are particularly noticeable for students first in their family to attend college, those who were academically less well prepared when college, those from historically starting and underrepresented racial and ethnic groups (Finley & McNair, 2013). This pattern of findings holds across all institutional types -- community colleges, liberal arts colleges, urban universities, public comprehensive institutions, and research intensive universities.

The warrant for *declaring* ePortfolio practice a high-impact activity is that, on average, students who have a well-structured ePortfolio experience exhibit a similar desirable pattern of positive benefits associated with other HIPs. In Chapter 8 of their forthcoming book, Eynon and Gambino report a body of compelling results about the benefits of ePortfolio practice drawing on the data collected over four years from the 24 colleges and universities participating in the C2L project. For example:

- Average grades for students taking the required first semester "mission" course at the Rutgers University Douglass Residential College improved from 3.2 to 3.5 after nine semesters of ePortfolio practice.
- At the San Francisco State University Metro Health Academy, a learning community for high-risk students, ePortfolio practice was linked to a ten percent bump in the four-year graduation rate.
- Students in the required First Year Academies (thematic learning community) at CUNY's Queensborough Community College using ePortfolio had a 98% first-to-second year persistence rate, compared with 88% for other First Year Academy students, and much greater than the 65% overall Queensborough persistence rate.
- At Pace University, the persistence rate for ePortfolio users was 87% compared with 74% for non-users (Eynon & Gambino, forthcoming).

As with some other HIPs, the self-report data from students using ePortfolios also are quite positive, both from the C2L project and other sources (e.g., Bowman, Lowe, Sabourin, & Sweet, 2016; Cambridge, Cambridge, & Yancey, 2009; Eynon, Gambino, & Török, 2014), including individual student testimonies (e.g., http://oreneportfoliopsu.weebly.com/). Finally, Eynon and Gambino (forthcoming) and others (Hubert, Pickavance, & Hyberger, 2015; Kahn, 2014) propose that when linked to one or more of the ten HIPs on the AAC&U list, ePortfolio practice has accentuating effects, invoking the notion that ePortfolio might be considered a meta-high impact practice – when done well.

Eleventh High Impact Practice

It is exactly the evidence cited above, emerging in the pages of the International Journal of ePortfolio (IJeP), and other sources, that has led AAC&U to add ePortfolios as the eleventh high impact practice. As described in the research, HIPs effect enhanced student learning and success by bringing to the teaching and learning process the intentional and integrative characteristics associated with how humans learn; not just in the moment but for sustained use and transferability from one instance to different instances of practice and application. In short, all of the HIPs are HIPs not because they carry the label but because, when done well and with considered thought and implementation, they lead to deeper student learning, especially for traditionally under-served populations of learners (Finley & McNair, 2013).

AAC&U's Centennial Year called for a renewed emphasis among its member institutions on strengthening student learning - the LEAP Challenge. This LEAP Challenge calls on colleges and universities to engage students in Signature Work that will prepare them to integrate and apply their learning to a significant project with meaning to the student and to society. The LEAP Challenge responds to the changing demands of the twenty-first century - demands for more college-educated workers and more engaged and informed citizens. College graduates need higher levels of learning and knowledge as well as strong intellectual and practical skills to navigate this more demanding environment successfully and responsibly. LEAP challenges the traditional practice of providing liberal education to some students and narrow training to others. The LEAP Challenge is designed to flexibly allow all students-whatever their institution or chosen field-to leverage this blended model of liberal education and the outcomes so important for success and well-being in today's world.

In essence, Signature Work encompasses the characteristics that underlie the definition of all High Impact Practices - Proficiency; Agency and Self-Direction; Integrative Learning and Problem-Based Inquiry; Equity; and Transparency and Assessment – the key elements that promote a more intentional, integrated, and inquiry-centered undergraduate experience. (AAC&U, 2015b). ePortfolios are the most pervasive framework across higher education that clearly supports the concept of student Signature Work. ePortfolios allow students to capture and demonstrate their learning from the varied sites in which such

learning occurs. This includes the multiple modes and mediums through which the learning is manifested and through the learner's necessary ability to make meaning and sense of the learning for themselves, their programs of study, and the broader society in which they live. This learning, fostered through well done ePortfolio practice, as well as the evidence supporting these practices, led to AAC&U's adoption of ePortfolios as their eleventh high impact practice.

Institutional Change

The keys to employing ePortfolio as a HIP, though, are effective implementation and integration. While there is efficacious research from the C2L project, IJeP, and elsewhere about the cumulative effects of ePortfolio as a stand-alone practice and when paired with other HIPs, one aspect of ePortfolio implementation that is essential to its success is the ability to embrace and devote resources to the ePortfolio as an engaging pedagogy across a campus.

The role of institutional leadership in mobilizing campuses is central to scaling up ePortfolio initiatives as well as broadening adoption of the widelyrecognized well-established HIPs. Such work not only lends credibility but also bolsters the arguments made by ePortfolio advocates through research and examples of practice. By implementing ePortfolio, campuses can also continue the collection of authentic evidence of learning that documents the ways that they are living out their institutional mission and values (Penny Light, 2016). This is increasingly important for accreditation efforts as well as for recruitment and retention.

Teaching and learning centers are critical in supporting integrated efforts to implement ePortfolios. Educational developers within colleges and universities are best positioned to assist in the design of curricula that fosters integrative learning (Huber & Hutchings, 2004) through professional development initiatives among faculty and staff (Eynon & Gambino, 2016). Integration of ePortfolios needs to occur at multiple levels. Inside the classroom, ePortfolios must be considered "AS curriculum" (Yancey, 2016). This means that they should not be implemented as an activity completely disconnected within the curriculum but intentionally introduced in order to enhance and expand upon course activities via reflection and presentation of evidence of learning. To do this effectively, learning designers need to focus on the ways that ePortfolio can be integrated into the curriculum to effectively meet essential learning outcomes. Externally, ePortfolios can be thoughtfully integrated through alignment with institutional and programmatic learning outcomes as well as national movements, such as the VALUE rubrics promoted by AAC&U and the Degree Qualifications Profile.

While the recognition of ePortfolios as a HIP is a significant milestone in our field, ePortfolios may be the most impactful when thought of and employed as a meta-HIP. Reflecting on and curating evidence of learning is certainly a powerful practice in and of itself; however, the combination of this "folio thinking" process together with HIPs extends and iteratively amplifies the positive benefits of these practices. As a pedagogy, ePortfolio and folio thinking provide scaffolding to guide learners in capturing their experiences. Further, these practices prepare learners for life in the 21st century by allowing them to develop integrative learning and build habits of mind that are central to lifelong learning (Penny Light, Chen, & Ittelson, 2011). The ePortfolio artifacts and narrative become an authentic representation of learning, a record that could, in the future, be viewed similarly to a traditional transcript or resume (Black, 2016; Chen, Grocott, & Kehoe, 2016). Explorations of this very idea have been investigated in the Comprehensive Student Record project led by the American Association of Collegiate Registrars and Admissions Officers (AACRAO) and NASPA: Association of Student Affairs Professionals (AACRAO, 2016) to strengthen how we document competency-based education and curricular and co-curricular outcomes. Collectively, these efforts highlight the need and the opportunity to create closer connections between formal records and credentials and actual evidence of learning.

We are indeed entering a new era of opportunity for ePortfolio practices. As the evidence base solidifies in support of the efficacy of well-designed and wellperformed ePortfolio practices, and new initiatives are considering how ePortfolios can be leveraged in new contexts, this emerging ePortfolio era provides institutional leaders with informed perspectives on which data-driven decisions can be made regarding initiatives in teaching and learning. The most promising of which may indeed be Signature Work that couples a range of HIPs with ePortfolios.

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