AePR

Summer 2021, Vol. 4, Issue 2

THE AAEEBL ePORTFOLIO REVIEW

Doing it Right: ePortfolios and Ethics, Practices, and Technologies

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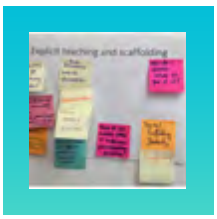

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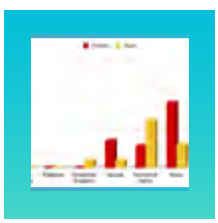

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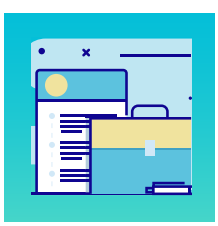

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About

The AAEEBL ePortfolio Review (AePR) invites you to submit articles and reports covering the broad area of ePortfolio use. We publish articles about pedagogy, research, technical, and organizational issues bi-annually. Our readership includes ePortfolio practitioners, administrators, and students. AePR is an online journal serving the needs of the global ePortfolio community and seeks to promote portfolio learning as a major way to transform higher education.

The AePR is a theme-based journal; therefore, acceptance is competitive. After a paper proposal has been accepted for a specific issue, the authors are paired with one of our peer reviewers. Paper proposals submitted for a current issue may be considered for a subsequent issue if it fits the upcoming theme.

Article Types

We're particularly interested in the following types of articles:

- Longer articles (3,000 to 5,000 words) about practical research, administrative reports, or case studies with generalizable results – again, not as peer-reviewed research but as reports.
- Short articles (1,000 to 1,500 words) discussing a case study at an institution/course, offering advice and opinions to other ePortfolio practitioners.
- How-to articles, tutorials on specific tools or approaches (500 to 1,500 words).
- Interviews (500 to 1,000 words) with key individuals directly involved with the use of ePortfolios.
- Announcements (up to 300 words) of items regarding the use of ePortfolios in the field.

For further details about making paper proposals, see page 68.

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From the AAEEBL Board

Dear Readers,

Welcome to this issue of the *AePR* focusing on ePortfolios and Ethics, Practices, and Technologies! Here you will find a range of articles dealing with such important topics as leveraging portfolio processes for workforce development, the ways that ePortfolio platforms can privilege student learning and reflection, the importance of considering digital ethics in our ePortfolio work, and how to apply insight from the AAEEBL *Field Guide to ePortfolios* to new ePortfolio initiatives. What strikes me in reading this issue is the rich, robust research and practice that continues to come out of the AAEEBL community.

The importance of community, connection, and sharing has never been more evident than in our current context of a global pandemic. The AePR provides a space for us all to learn from one another about emerging initiatives as well as about the ways that AAEEBL provides us a space to carry on with our work, despite the challenges that we face in our various contexts.

As we look ahead to our reimagined Annual Meeting in July (July 20-22, 2021), I encourage you to look to these great articles as a resource to spark ideas for sessions at the conference. Please consider sharing your own work in whatever way makes the most sense for your context; if you're not sure about how or what to share, please reach out to us at connect@aaeebl.org as we would love to discuss your thoughts with you.

Wishing you happy reading as well as good health and wellness!

Tracy Penny Light, PhD.
President and Board Chair, AAEEBL

From the Editor's Desk

Dear Readers,

The Coronavirus Pandemic continues to dominate the landscape of higher education. As demonstrated by AePR's own struggles to maintain a publication schedule, we all face obstacles and delays as individuals and institutions. As effective vaccines become available, we can foresee better days ahead. But none of this can happen soon or certainly enough. With over 2 million deaths worldwide attributable to the pandemic, we persist, hope, and worry.

Silver linings aren't easy to find. With regard to ePortfolio practice there are perhaps two. First, with the sudden critical reliance on technology to keep academic programs going, a deep digital divide between many faculty and their students has largely dissipated. Almost a year ago, there was no choice. Faculty had to utilize digital tools if the Spring 2020 term was to be salvaged. In a matter of weeks, most higher education institutions had shifted to virtual class sessions. Like learning to ride a bicycle, the durability of this sea change will endure; technology and education are interwoven as never before. ePortfolio platforms (if not the practice itself) will be much more easily mastered by today's faculty and students.

Second, we have more time to reflect on the development and ethics of ePortfolio practice. Most of us have nowhere to go; no one we can safely visit. Along with articles in this issue (particularly the Kelly and Cohn contributions) a good place to start is the AAEEBL Task Force on Ethics and ePortfolios. The Kelly article reflects in-depth on two ethical principles defined by the task force. All ten are worthy of attention and integration into any ePortfolio program. The task force has created a multi-tiered means of access to its findings:

- An info-graphic of the ten principles
- A web-based summary of the ten principles (3 pages)
- A PDF of the full task force document (55 pages)

As one of us drafts this, the other lies ill with the coronavirus. The pandemic has not yet run its uncertain course. But we can still look forward to better times. We can look to harness new levels of technical prowess among our faculty and students once "normalcy" returns. Less time needed for mechanics opens new doors for expansion of ePortfolio practice.

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Workforce Development Model with ePortfolio Intergration for High Skilled Immigrants and Refugees

Author: Lisha Shrestha & Surya Raj Joshi
Review Editor: Rita Zuba Prokopetz

Abstract

While it is a challenge for any immigrant to restart their careers in a host country, it is especially difficult for professional immigrants to continue the career they had in their home country. One of the approaches to assist newcomers in this endeavor is a development program that aims to leverage the existing skills of the participant. With that concept in mind, the authors of this study use ePortfolio as a tool for immigrants participating in workforce development programs. Workforce development for immigrants relies on the same tools of resume and cover letter as for any job application, placing the immigrant jobseekers at a disadvantage because of their lack of both a degree and experience in the United States. An ePortfolio has the potential to mitigate this gap. The authors use their work in Refugee Resettlement and Immigrant Workforce Development as evidence of the positive impact of ePortfolio for such jobseekers. While fields like creative art, design, and information technology have been open to consider ePortfolio as a tool to verify an applicant's experience, other non-regulated industries like engineering, finance, and service are yet to consider an ePortfolio as reliable evidence of an applicant's success. Furthermore, ePortfolios can be collaborative tools for immigrants, employers, and workforce programs working in tandem toward a career track employment plan. This evidence of previous learning minimizes the need for a new degree that the individual may not need or can afford. The authors evaluate potential uses of ePortfolio as a workforce development tool, and explore challenges, opportunities, and benefits that ePortfolios may bring to workforce development programs for jobseekers and hiring managers.

Introduction

Immigrants are a sizable proportion of consumers of workforce development services in the U.S. In 2017, approximately 29 million immigrants were working or looking for work in the U.S., comprising some 17% of the total civilian labor force (Budiman, 2020). Workforce development programs established under the Workforce Innovation and Opportunity Act (WIOA) are key resources for the public including immigrants who are looking for employment and training opportunities. The normal method for serving participants through a Workforce Development Program (WDP) is to connect participants to the job for which they qualify. During this process, the Program assesses the knowledge, skills, and attitudes of the participants to assist with their demonstration in the application.

Immigrant and refugee participants in the WDP face challenges articulating their skills and education in their resume. In addition to the language barrier, the quality of their application may place them even further from a possible job. The authors would like to focus this article

specifically on ePortfolio as a potential tool for immigrant focused WDP.

ePortfolio by its nature showcases education, work history and achievements in great detail. Hallam and Creagh (2010) mention the interest among employers to use ePortfolios as a tool for professionals entering the workforce. Studies have also found that the ePortfolio provides an individual a chance to reflect on their achievements and accomplishments, which is what employers want to see (Hartwick & Mason, 2014). In addition, research has shown that having an online presence, be it a LinkedIn profile or a full ePortfolio, enables a candidate to land a job in their desired profession more easily (Ring et al, 2017).

Prospects

A WDP coach and participant spend considerable time creating career development materials like resumes and cover letters as well as assisting with filling the skills gap. Figure 1 shows a general service flow for a typical participant in a WDP. While a career coach may track case progress in the current service flow scenario, there is no building of the resource for a participant to be able to construct a competitive resume in the future. Additionally, a resume itself may not reflect all the skills and competencies a participant may have, including soft skills. Thus, an ePortfolio can be an important repository for participants, career coaches and other stakeholders who collaborate in the placement of participants on career track employment at highest the possible point.

The ePortfolio in this study is an important repository for tasks, accomplishments, and testimonials. It also serves to provide evidence of a larger body of work immigrant participants performed outside of the U.S. In fact, digital portfolios are replacing the traditional resumes and portfolios (Willis & Wilkie, 2011) to provide a better picture of a jobseeker's skills and accomplishments.

Importance of ePortfolios in Immigrants-Refugee Workforce Development

Skill Mismatch

High skilled immigrants with a college degree have a lower chance of being employed in their field since they may not have the same opportunities to interview for professional positions as those individuals born or educated in the U.S. (Satar, 2017). Even when referred for an interview, they face challenges translating their education and experience to the expectation of the employers. Incorporating ePortfolios in career coaching activities may help to expand social networking and social capital development through use of virtual communities and collaboration. High skilled immigrant and refugee job seekers may use their ePortfolios to demonstrate lifelong experience and prior learning. Barker (2006) highlights that it is important for the job seekers to clearly reflect,

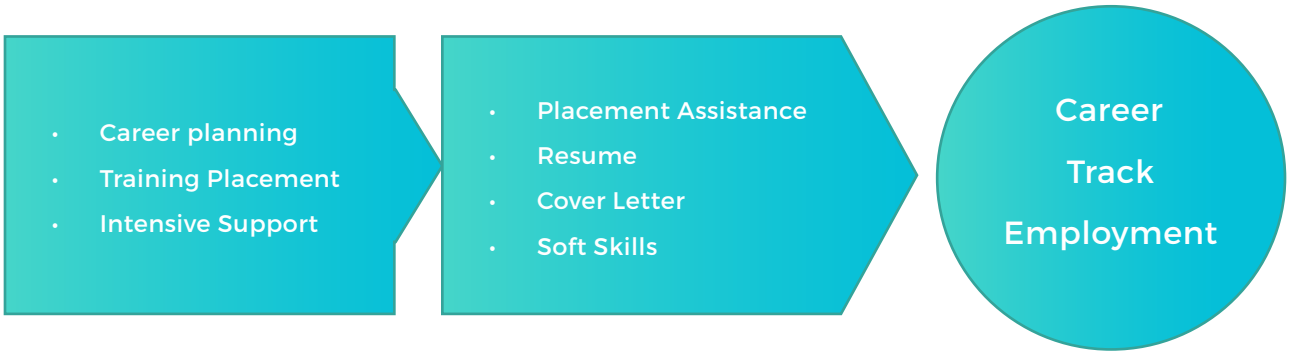

Figure 1. Workforce Development Program General Service Flow

explore and determine their non-formal and formal training.

Employer's Lack of Understanding of Foreign Credentials

Refugee and immigrant service providers and organizations facilitate communication between the job seekers and employers. This facilitation process includes a variety of services such as career coaching, training placements, networking, referrals, resume development, mock interviews, and transportation, among others. Despite intensive case management support, mainstream employers fail to understand foreign credentials and foreign work experience (Barker, 2006). This lack of understanding prevents job seekers from being hired and affects the period they are under active case management. To better facilitate and be efficient in this process, a WDP can adopt ePortfolio as a main tool for fostering job readiness. According to Barker (2006), this approach can be utilized by immigrants and employers in pre-employment, recruitment and hiring, performance management and talent management as it assists not only in gap analysis and goal setting but also in learner-controlled skills and knowledge building. This approach also helps participants track improvement of skills over time, prepare for job interviews, and enhance networking potential (Barker, 2006).

The following is an example of the advantage of having a detailed electronic profile for a well-qualified refugee jobseeker whom this author witnessed as a career coach:

> *A refugee participant in IRCO's workforce development program was an accounting professional. Initially, she was unable to convince employers that her degree from Spain and work experience in Europe and her native Afghanistan were enough to qualify for an accounting job in the U.S. She was supported at the program through its usual career coaching methods. This participant did something different as she worked hard on her LinkedIn profile and was able to get recommendations from her previous employer. The resulting web-based presence and verification of her actual work helped her land a job as a senior account in a reputable accounting firm in Portland, Oregon.*

Increased Efficiency

ePortfolios help to diminish the length of time and distance to gather evidence of previous employments and education as it is a virtual process with digital evidence to support claims. They also guarantee secure validation of information empowering a participant to apply for a job with confidence across the country. This can be done remotely by professors, peers, universities, or accredition bodies directly into an ePortfolio. Professional validation is especially important for technical professions where verifiable skills from respectable agencies or professional bodies are important. According to a study conducted by Satar (2017), challenges such as taking care of family, lack of transportation, or having a survival job are all likely to hinder refugees from attending in-person and local professional networking events and programs. In our organization, jobseekers spent between one to 18 months being active in job search, training or both. Lack of an electronic footprint of the training track or previous experiences makes it difficult to prepare a compelling resume. ePortfolios can solve this problem by fostering a collaborative career development work. The following is an example of struggles of a qualified job seeker at Immigrant and Refugee Community Organization (IRCO) without an ePortfolio. The jobseeker was a participant in the WDP in which the author currently works:

> *In the absence of an online presence, an engineer from Iraq with Master's in Electrical Power Engineering struggled to find an engineering position. With more than six months of intense job search and interviews, he was able to land a technical interview with a firm, and he was hired on the spot. Had he been able to share his ePortfolio with the interested employers, his journey could have been much easier.*

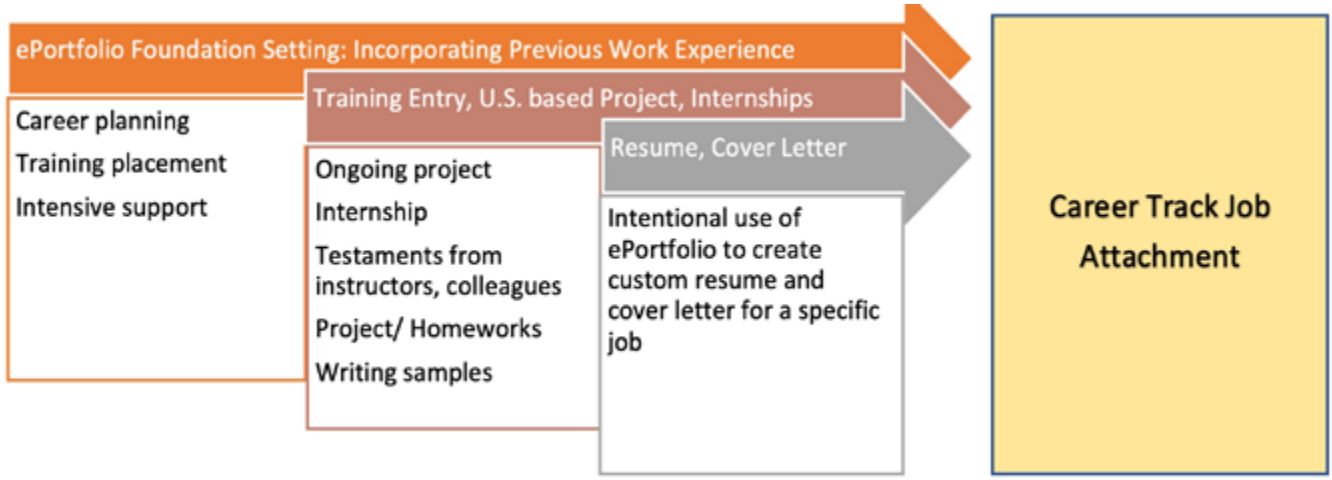

Figure 2: Proposed Workforce Development Model with ePortfolio Integration

Opportunities for Workforce Development for Immigrants

ePortfolio tools have become prominent in higher education, supporting non-traditional and historically underserved students from minority groups. Harver, Zuber and Heather (2019) state that higher education institutions are proceeding in ways that support the ePortfolio idea. Countries like Canada (Barker, 2006) and Australia (Hallam & Creagh, 2010) are also adopting e-portfolio practices for connecting high-skilled immigrants and refugees to the mainstream job market. However, such practice has not been initiated in the U.S. outside of the university setting.

For high skilled immigrants, we are proposing that ePortfolio be a part of career coaching and be developed and maintained throughout the career coaching case management cycle. The tool could bring together immigrant job seekers, workforce development agencies, current and previous employers and other entities the participants consider important in their professional development. Figure 2 illustrates one possible model.

The authors are proposing a tool to create ePortfolio by involving immigrants and refugee job seekers, organizations serving immigrants and potential employers. This ePortfolio would be underpinned by evidence-based hard skills and training along with evidence from work experience in diverse and sometimes challenging settings. This approach could bring more collaboration among all stakeholders.

Conclusion

ePortfolios are important to various stakeholders who collaborate in the placement of participants on career track employment. They can serve a skilled immigrant workforce by providing accessibility and understanding of their skills to the employers. They can help career coaches, educators, and participants to streamline the job application process as well as shorten the career track job placement timeline. As observed by the authors of this study, workforce development programs that use ePortfolios help participants broaden their future job prospects and improve job retention rate.The subject needs further investigation with the proper scientific study of the efficacy of the program.

About the Authors

Lisha Shrestha is the executive director of Division Midway Alliance. She previously worked at Immigrant and Refugee Community Organization (IRCO) and the City of Portland, New Portlander Program. She is pursuing her doctoral degree at Portland State University. Her involvement with the diverse community in Portland brought her recognition in the form of the PSU President's Diversity Award in 2015 and Community Leader of the Year Spirit of Portland Award in 2017. She is passionate about transforming needs of individuals and communities into opportunities for economic prosperity. Her research interest is in immigrant and refugee integration.

Surya Joshi (MA) works as a Program Coordinator at Immigrant and Refugee Community Organization (IRCO) in their Workforce Development Program. Surya has worked in refugee employment and training for last 6 years. He has an MA from Portland State University and Kathmandu University. He is interested in system development for immigrant and refugee employability.

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ePortfolio as an Asset for Recruitment: Perspectives from Poland and Spain

Authors: Monika Ciesielkiewicz, Claire Frances Bonilla, & Carlos Olave López de Ayala
Review Editor: Samantha Blevins

Introduction

An electronic Portfolio (ePortfolio) is a tool that is useful in both the educational and career domains. Watty et al. (2016a) define an ePortfolio as "an electronic collection of meaningful artefacts which provides evidence of learning, competencies and employability" (p. 16). This digital platform is used to collect and present evidence of skills, certifications, abilities, and achievements throughout the course of one's education and/or career. The ePortfolio allows a jobseeker to present a multimedia experience that can include video, audio and image files. It can be started at any point in one's life and can be updated and adapted over time and for specific purposes, making it a versatile and effective way of demonstrating accomplishments and expertise. Links to example career portfolios are included at the end of this article.

Though the ePortfolio has been used extensively in higher education in diverse countries and disciplines, interest in the ePortfolio in the business world is growing (Watty et al., 2016b). In a survey conducted by Hart Research Associates (2013), more than 80% of the employers interviewed considered the ePortfolio to be a useful hiring tool. Certainly, an ePortfolio could present a more extensive and personalized view of a candidate than a traditional resume. The participants in the study conducted by Watty et al. (2016b) pinpoint the following advantages of ePortfolios over traditional hiring methods:

- personalized body of learning evidence
- examples of skills, learning style and preferences
- the lens through which they view the world/life
- communication tool
- "richer" format of evidence
- helps make connections;
- a greater sense of softer skills. (p. 28)

The employers surveyed in Weber's study (2018) stated that although the ePortfolio can be used at any point in the recruitment process, they would rather use it prior to or following an interview. They believe that the ePortfolio has a unique ability to give human resources professionals insights into candidate's background, thought process, creativity, adaptability, and ability to cross train as well as to whether the candidate would be able to integrate into a team.

Research Questions

Our study sought to examine whether school principals in Poland and Spain would use an ePortfolio for hiring purposes. Recruitment in the educational sphere is where both the academic and career ePortfolios overlap. The participants were 56 principals of private primary and secondary schools from Spain (n = 23) and Poland (n = 33), who were responsible for recruitment at their institutions.

They anonymously participated in this study during 2016 (Spanish group) and 2017 (Polish group). The following research questions were addressed in this study:

- RQ1. Would school principals use an ePortfolio to select candidates for a job at some stage of the recruitment process?
- RQ2. Would school principals make an effort to review the ePortfolios of all candidates to select the best one for a job?
- RQ3. Would school principals make the effort to review the ePortfolio of the three best candidates for a job?
- RQ4. Would school principals make the effort to review only the ePortfolio of the best candidate for a job?
- RQ5. Do school principals consider the ePortfolio a useful tool to obtain more detailed information on candidates who apply for a job?

Instrument and Procedures

At the beginning of the survey, participants were given links to four different career ePortfolios. All four ePortfolios were from the United States where 54% of students used some sort of ePortfolio (Dahlstrom, Dziuban, & Walker, 2013). Two of the ePortfolios belonged to recent graduates who were starting their professional careers and the other two ePortfolios belonged to established professionals. Once having viewed these career ePortfolios, the participants responded to a two-part survey. The first section gathered information about the number of employees at their school, and whether they had had previous exposure with an ePortfolio. The second part of the survey sought information about their willingness to use an ePortfolio as part of their recruitment process for new hires and their opinion about the usefulness of the ePortfolio as a hiring tool (see above). This last section consisted of five closed-ended questions that asked participants to gauge their agreement with a statement on a seven-point Likert-type scale, ranging from strongly disagree (1) to strongly agree (7).

Results

The number of employees at the schools ranged from five to 250 employees, with both the largest and smallest schools being located in Poland. The majority of respondents had not had previous exposed contact to an ePortfolio, though the Polish educators (67%) were somewhat less familiar with the ePortfolio than their Spanish counterparts (57%). In addition, after reviewing the ePortfolios at the beginning of the survey, 86% of all respondents agreed that they would use an ePortfolio at some point in the recruitment process. There were no statistically significant differences between responses based on either country or previous contact with the ePortfolio.

The following question on the survey asked if the school principals would be willing to make the effort to review the ePortfolios of all candidates. Though reviewing ePortfolios of job candidates may be considered time-consuming by some, our data revealed that the directors of the two schools with the most employees (one from Spain and the other from Poland) either strongly agreed or somewhat agreed with reviewing the ePortfolios of all candidates.

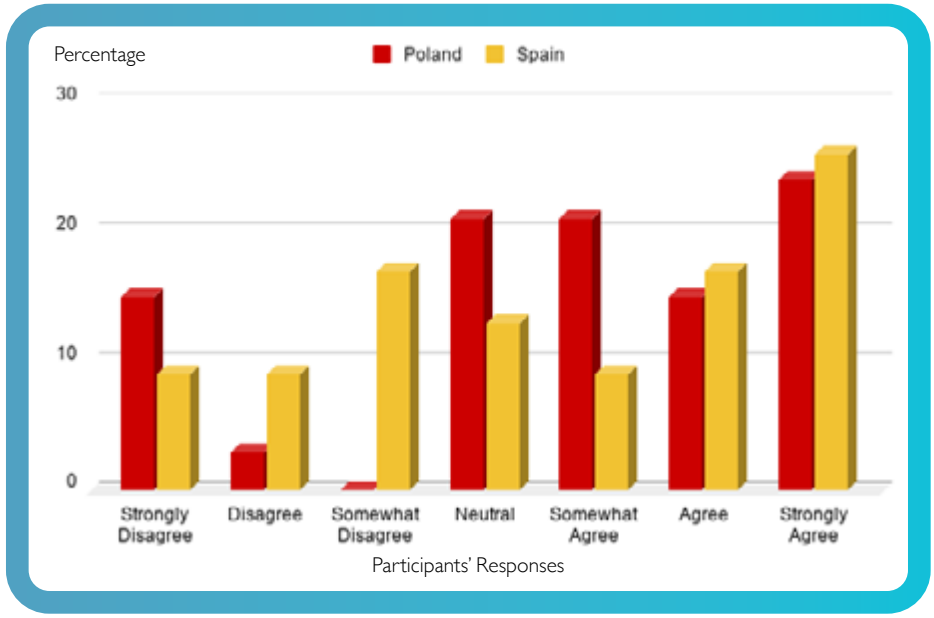

Figure 1. Willingness To Review the ePortfolios of All Candidates

These responses were not significantly influenced by previous contact (or lack thereof) with ePortfolio. See Figure 1.

The third question on the survey asked respondents to rate their agreement with reviewing the ePortfolios of only the top three candidates. As can be seen in Figure 2, the responses are heavily skewed to the right, showing a very clear willingness to review the ePortfolios of the three best candidates for a position.

The fourth survey question asked respondents if they would make the effort to review the ePortfolio of only the top candidate. Once again, school principals clearly answered in the affirmative as respondents from both countries (67% Poland and 78% Spain) agreed, somewhat agreed or strongly agreed they would make the effort to examine the ePortfolio of the best candidate. As the results were relatively monolithic in nature, no graph is included.

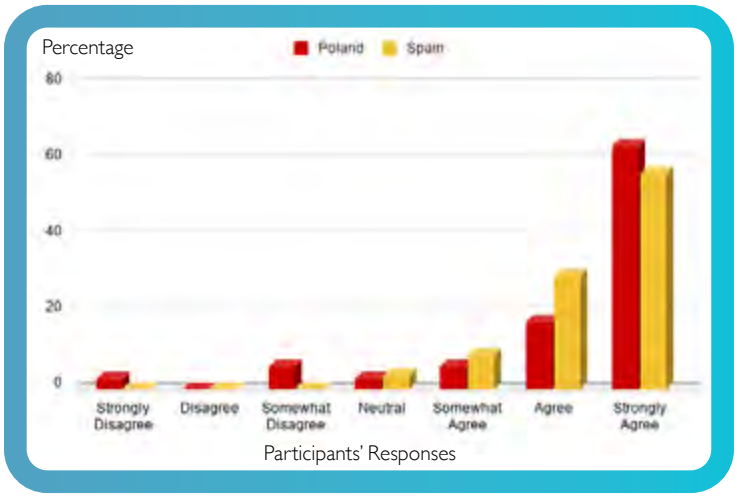

Figure 2.
Willingness To Review ePortfolios of the Three Best Candidates

The final item on the survey asked the principals to rate their level of agreement or disagreement with the statement, "The ePortfolio seems like a useful tool to obtain more detailed information about candidates for a position." There was only one respondent who disagreed with this statement, while 43% percent of all respondents strongly agreed. See Figure 3.

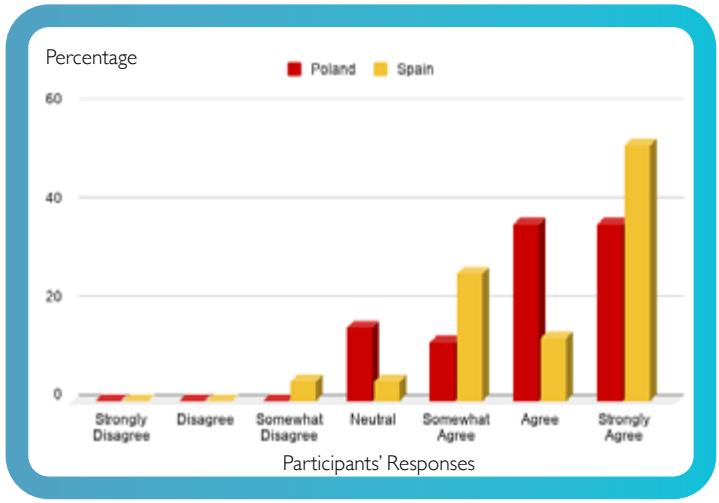

Figure 3. The ePortfolio Seems Like a Useful Tool To Obtain More Detailed Information About Candidates for a Position.

Conclusions

Our study confirms other research that indicates a willingness to use the ePortfolio for recruitment purposes (Ambrose, 2013; Ciesielkiewicz, 2019; Ciesielkiewicz, 2020; Dahlstrom, Dziuban, & Walker, 2013; Watty et al., 2016b; Weber, 2018). While it was evident that there was less exposure to ePortfolios among participants of the survey from Poland, respondents from both countries who had no previous contact with ePortfolio recognized its value as a tool for hiring qualified applicants.

The fact that these professional educators could appreciate this, even with only very brief contact with example ePortfolios is telling, especially when considering that positive appraisals were unaffected by country, school size, or previous contact. It is consistent with the findings by Watty et al. (2016a). Though not a replacement for a resume, cover letter or personal interview, a dynamic ePortfolio can give a recruitment professional the additional information that is necessary to hire the best candidate.

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The JournEy Portfolio: Designing a Culture of Authentic Student-Centered ePortfolios from Kindergarten to Graduation

Authors: Jenna Baldiviez, Carol Bartholomew, Aldene Burris, Mindietta Vogel, & Sophie Wallace
Editor: Heather Stuart

The Anchorage School District has been solidly vested in providing school choices for the community for decades. In the early 1970s, there were two open-optional schools in Anchorage, Alaska–one a K-6 program and one a 7-12 program. As their philosophies and successes became noted in Anchorage, their wait lists grew to staggering numbers. In 1994, Polaris K-12 School was created to provide another open-optional program in Anchorage and to truly embrace multi-age education by housing thirteen years of learning and growth within one building. The idea of thirteen years of school happening in one place led to a highly connected and engaged small learning community.

The open-optional philosophy of Polaris K-12 is constructivist by nature. Our Polaris K-12 open-optional philosophy is built around multiage classrooms, a non-graded portfolio -assessed elementary program, integrated curriculum based around student interests and needs, and creating self-directed, lifelong learners. We strive to support the academic, physical, and emotional growth of the whole child. Open-optional education allows for students to mentor one another in the classroom. At Polaris K-12, we believe that everyone is a teacher.

Polaris K-12 School is a public school (not a charter school) where families are offered seats based on a random online lottery system. Polaris K-12 houses approximately 450 students in grades K-12. The physical space itself is a visual representation of how we think about a learning community: we are all learning together. There is a kindergarten and first grade classroom next to the chemistry lab, and students take AP European history next door to a 2nd and 3rd grade classroom. Fostering friendships and emotional connections within our small learning community is also threaded throughout the entire K-12 program.

We work through the curriculum standards adopted by the Anchorage School District, but we have flexibility in the materials we use and how we deliver instruction. Experiential learning is highly valued in all classrooms. We specifically put that belief into action three times each year through our Intensive Program. Intensives allow students to study a specialized topic and provide time to focus their energy and talents on one course. Students can create art, learn a new skill, engage in the wilderness, work on community projects, travel, write, etc.

From the very beginning, the founders were excited about creating portfolios to curate and track student growth. Over the past twenty-five years, the portfolio has changed to now include a place to celebrate their learning, skills, habits, talents, and character development. Portfolios are a true tenant of the program. All staff are guided through the process of working through portfolio development and assessment with their students. Staff participate in professional development, collaborate regarding best-practices, and strive to hone their skills in making

the portfolio a meaningful piece of each child's journey and student-led conference.

Polaris K-12 School has a non-graded elementary program; the story or narrative that the portfolio shows guides support at home and influences how the teachers shape their instruction. At the secondary level, in a world of points, numbers and scores, a portfolio gives dimension and concrete examples of both students' skills and helps identify areas where a child may need more support.

Portfolios at Polaris K-12 School started as papers collected in three-ring binders and have evolved over time into ePortfolios. Children in the elementary program at Polaris K-12 belong to Family Groups, and they have the same teacher for two years. Secondary students belong to Advisory Groups from the sixth grade through the twelfth grade with one academic advisor for those seven years. These elements of continuity help to streamline the process of creating and maintaining their portfolios. Time, space, and technology are provided during school to create and maintain student portfolios. In our K-12 program, it is exciting to strive toward the goal of working together with a student for possibly thirteen years to house and curate their K-12 learning experience.

Theoretical Framework

There are different levels of mastery on the pathway to establishing a culture of authentic student reflection. First, we must remember, as John Dewey established, "we do not learn from experience... we learn from reflecting on experience" (Dewey, 1933, p. 78). This is also demonstrated by Jenson and Treuer in their explanation of the five elevations to ascend in order to realize the goal of a "good e-portfolio program, [in which] students will be accountable, vocal members at their year-end conferences and articulate for themselves the growth they've experienced from both failures and successes in their work" (d'Erizans & Bibbo, 2015, p. 80).

The first and lowest level of metacognitive skill development is when "students collect relevant artifacts that document their learning" (Jenson & Treuer, 2014, p. 53). Pragmatically in the ePortfolio landscape, this is achieved through digital literacy instruction for students to gain tool independence. Teaching digital literacy is made challenging by variance in student interest and the rate of skill acquisition. Some students love customizing their portfolios to express their talents and interests, while others need scaffolding to meet the lowest skill level. Once familiarity with the digital ePortfolio tool is gained, learners are freed up to perform at the second level in which, "students self-regulate, or become aware of and exercise behavior that leads to learning" (Jenson & Treuer, 2014, p. 53). Sound pedagogical practices are essential on the pathway to student ownership. Teachers help students see the connections from goals to artifacts to student achievement, and students make meaning of their learning.

The third level entails that students "critically reflect, contextualizing the meaning and significance of their learning in terms of established goals and value systems" (Jenson and Treuer, 2014, p. 53). Student voice is critical at this stage, which necessitates that "reflections should be guided by questions that make students consider the past while thinking toward the future" (Moore, 2019, p. 37). Portfolio coaching is essential to rich artifact curation; "students need to be challenged to provide narratives tying their goals to their sense of self" (Buyarski et al., 2015, p. 286). Professional educators guide students to help them make connections to the value of their learning journey and then establish goals for the future.

At levels four and five, an ePortfolio program reaches a level of optimization and mastery in which "students integrate their learning, synthesizing their experiences and transferring them to new situations" (Jenson & Treuer, 2014, p. 53).

We have a culture of support that allows willing and ready students to reach toward these high levels. Student success is developmental and dependent on each unique individual. Through careful and consistent coaching, students

develop metacognitive strategies that allow them to reflect on both successes and challenges and "build the habits of mind that provide the foundation for a lifetime of learning across the multiple context and roles in which they live" (Buyarski et al., 2015, p. 290). There are moments of brilliance from every student at every level. Time and motivation are factors outside of our control, and yet we seize challenges as opportunities to help students learn how they learn.

What Are Portfolios at Polaris K-12?

Portfolios have always been a fundamental part of the educational experience at Polaris K-12, but as with so much in education, they have evolved and changed over the years. When Polaris K-12 first opened, more than 25 years ago, portfolios were paper-based, and artifacts were stored in binders. As technology and ePortfolios progressed, our ability to share and create portfolios digitally did as well.

It was in collaboration with the University of Alaska Anchorage that Polaris K-12 developed a partnership with Digication, an online ePortfolio platform. Staff discussions of portfolio assessment strategies led us to redefine the 6Cs for our school; critical thinking, collaboration, creativity, communication, citizenship, and character (Fullan, 2015). After a year of discussion and research, we decided as a staff to transition the entire school from paper portfolios to ePortfolios. We refer to our new portfolio process and the resulting product as the JournEy Portfolio.

Every K-12 student develops a JournEy Portfolio with educator support. Students collect quality artifacts for their portfolios throughout each semester of the school year. At the end of the semester, students, families, and teachers meet to view the student portfolio during student-led conferences. It is a time to celebrate and reflect on the student's achievements and growth while planning for the future.

We were met with successes and challenges in the process of developing the JournEy Portfolio. While it was a staff-initiated choice to transition to digital portfolios, there were still obstacles, many of which involved the usage and availability of technology.

At first our Chromebook to student ratio was one laptop per four students and through school fundraising and standardized testing infrastructure from the district, we doubled that capacity. We are still not a one-to-one device school but are able to provide in-school access to each student as they build their ePortfolios. We have facilitated a thriving portfolio program while sharing devices, and we continue to strive to have one device per student.

Staff were at varying levels of comfort and competency with the digital platform. With support from UAA, we offered frequent and targeted professional development to meet individual teacher's needs. Over two years, we phased in Digication in stages. At first, a handful of educators integrated the portfolio tool in their classrooms and road tested it for its potential and limitations in the K-12 environment. By the onset of the second year, teachers agreed that we would have school-wide implementation of ePortfolios, and every student presented a digital portfolio during spring conferences.

When initially starting our partnership with Digication, their ePortfolios were primarily used at a postsecondary level. They were in the process of developing a new platform, with a focus on user accessibility for K-12 students. We were able to share insight and feedback on K-12 student ePortfolio needs. With this, there were technical issues and needed flexibility from both staff and students. As the platform continued to develop, and staff and student user knowledge grew, it has become a successful and valuable program piece that continues to evolve.

Some of our most significant takeaways from the process were our ability and need to provide differentiated professional development for teachers and staff, and the need for equitable access to technology. Over the course of countless staff meetings, best practices, reflection strategies, and portfolio guidelines were developed in a culture of collaboration in which every teacher contributed in unique ways.

While our systems and procedures have changed with time, the philosophical foundation of portfolios stays the same. Portfolios honor the whole child. Each student is someone's precious son or daughter. Portfolios are the vessel in which their growth is both cataloged and celebrated. When a teacher and a family come together to sit and engage with one learner at a time to discuss their ePortfolio, the child knows that they are important and that their commitment to becoming a life-long learner is important. Learning is an active process and the collecting of artifacts that demonstrate their learning is also an active process for students.

Portfolios open up the dialogue between school and home. Children can share their musical talents, their artwork, and their stage notes from play production class as well as their progress in math. Teachers can learn about the child as a whole person in many different ways. Parents, who may see small pieces and parts of a project at home, now have a chance to slow down and truly listen to the child. Students share their process, their successes and mistakes, and can talk about what they have learned. Organic conversations also happen around goal setting and the opportunity to build on this moment and to continue to be and do their best.

Students sharing their portfolio is an effective strategy in fostering speaking skills and clear communication. We are growing amazing young people. Students who build a portfolio over many years also thread together their learning. As they grow in experiences and study topics in depth, they can see how all of their separate classes have connections and interconnected themes.

Developmental Levels of Support

Polaris K-12 educators adapt their coaching to support the students they work with on the K-12 developmental continuum. While our vision and mission for the portfolios are the same throughout each grade level, we scaffold our expectations and support based on age and ability level. How students interact with their portfolio varies through a K-12 school, and these reflective skills are scaffolded over time. Teachers have an active role in helping students develop their ePortfolio. All of our classes are multi-age, and each educator approaches ePortfolios with a strong focus on developmentally appropriate practices.

Polaris K-12 students first encounter portfolio construction opportunities during their kindergarten year. Students continue building upon this experience within their multi-age kindergarten-first Family Group. At this developmental stage, teachers are providing significant technological support curating the kindergarten-first student ePortfolios. Though teachers are helping to input student artifacts within a digital landscape, students are still responsible for selecting the artifacts they wish to showcase with teacher support. Kindergarten-first teachers gather student samples throughout each semester including pictures, work samples, and videos. When it comes time to curate each child's portfolio selection from the vast array of student learning evidence, Kindergarten-first teachers provide coaching in the development of reflective skills by asking questions about the potential portfolio artifacts; "What did you work on that was fun? Interesting to learn about? Challenging for you?"

In the Polaris K-12 second-third classes, students continue to build on the reflective skills introduced in kindergarten-first. Students also develop more digital autonomy, and many students are developmentally capable of signing-in to their own ePortfolio and uploading artifacts independently with modeling and support from teachers. Teachers help intentionally highlight course artifacts as portfolio work samples for students to upload. Many students take their own pictures of work samples with the Chromebook camera and immediately upload these artifacts to their portfolio. Teachers provide support by compiling work samples for students to select from during the ePortfolio workshop time. Teachers also provide intentional support with goal-setting and providing a reflective framework for students to consider

when uploading artifacts. During the conferences, students are expected to deliver a verbal reflection independently about their portfolio artifacts and why each was selected to be showcased.

As students move on to multi-age fourth-fifth classrooms – the last portion of the elementary program – students begin to think more about the metacognition involved in ePortfolio reflections. As the elementary program is non-graded, deeper reflection skills are taught to help communicate learning and prepare students for their secondary education at the school. Fourth-fifth grade teachers encourage students to focus on the thinking processes, learning experiences, and changes that occurred within the student throughout the semester rather than a focus on summarizing a description of the artifact or sequence of events. Students build their reflective experience to not only provide verbal reflection at conferences but also provide a brief written self-reflection for each artifact within the ePortfolio. At this level, students also begin intentional personal and academic goal-setting. Students are provided scaffolding from teachers and families on how to make a plan to achieve their goals.

When students begin the sixth grade, they move from the elementary to secondary program at Polaris K-12 School. There is a change in how ePortfolios are created to reflect how students transition from having one Family Group teacher to multiple content area teachers. Secondary content area teachers facilitate the selection of artifacts and guide reflections for their respective classes. Advisors facilitate portfolio workshop time for building the ePortfolio and support students during student-led conferences. Secondary teachers have autonomy in meeting ePortfolio expectations for their classes and advisory. Students are guided by their teachers with the goal of producing exceptionally clear, focused, engaging artifacts chosen with purpose and passion. Students work to display growth and learning in a written reflection for each artifact. At this level, students are supported in synthesizing and transferring learning from one class to another and also to make connections to their learning in the broader community.

Reflective Rich Artifacts

Prior to implementation with students, as a Polaris K-12 staff, we had to define quality artifacts. It was vital to create the time and space for staff to dialogue, share examples, and develop a common understanding that aligned with our school mission. Dedicating approximately 30 hours over an academic year, we collectively participated in Professional Development. This Professional Development took place during in-service days, staff meetings, and a university course offering. We analyzed the differences between an assignment and an artifact, and moved conversations to what defines a quality artifact in an ePortfolio. We grappled with how to guide and support students through the process of creating a quality piece. Artifacts are selected and reflected upon by students. After continually revisiting and reflecting, we agreed that moving from portfolios to ePortfolios was an important opportunity to establish an intentional curation process facilitated by secondary content area teachers and elementary Family Group teachers. Students are prompted to select an artifact from each class that is generated within the context of that course or intensive and is designed in alignment with our professional agreements.

We recognized that the quality of an artifact "can be enhanced exponentially with clear instructions, expectations, and examples" (Kehoe, 2015) and that every artifact must serve a purpose. Through staff collaboration, we developed best coaching practices and redefined the 6 C's for our school and community. Teachers worked with students in developing and understanding the attributes that define a quality artifact, the importance of documenting the process versus product, and challenging students to make connections across contexts. Quality artifacts show evidence of these skills and knowledge as well as personal and interpersonal skills necessary for success in the complex world they will face.

We place a premium on artifacts that illustrate a child's ability to articulate their growth, their learning process, or newly acquired or strengthened skills, habits, and qualities of mind or character. The focus is on individual excellence. Artifacts include evidence of progress and change over time on specific skills and concepts and/or standards as well as progress towards course and personal goals. Artifacts may include finished work as well as work in progress. Work samples may be spread over a designated time period. They are pieces that make their learning visible and justifiable. Students shift their focus from having a product to reflecting on the process of learning. According to fourth-grader Rowan, "[The teacher] emphasizes that even if we're not completely done, it shows, Hey, at the beginning I was struggling, but then I finally understood. Even though I didn't finish it, I understand it now and when I do it, it makes sense." Self-reflection is key. Students compare and reflect on current understandings by using earlier work as a reference, for example: by comparing a first draft to a final draft. This may also encompass reflecting on growth over a semester, year, or even multiple years. Through this process, students are able to identify, demonstrate, and articulate to a broader audience their areas of strength as well as areas that need improvement.

Not everything that demonstrates learning is necessarily something on which the student received an outstanding mark or grade. We agreed with Penny Light et al. (2012), that ePortfolios "enable students to authentically represent their own learning in a way that makes sense to them and encourages them, ultimately, to take responsibility for their own learning" (p.11). They demonstrate academic progress where students started, problems they encountered, and skills and habits they are developing. They are a means for students to be accountable for what is learned. Artifacts not only show who the student is but also show how students meet the expectations of class. The focus is not solely on providing evidence for the content areas but is also focused on skills and habits demonstrated in other school and non-school experiences and activities. They are asked to consider how these experiences led to growth or change. The focus on the learning process blends with the 6 C's, habits and qualities of mind and character students need to be successful in life. Guiding questions such as "choose one artifact that represents your best effort and explain why this shows significant effort" support students in choosing quality artifacts. According to fifth grader Timothy, "If I worked with a friend and they helped me a lot with it, I'd rather put that in [my ePortfolio] rather than one with a higher grade because I know I had help so that would make it more important to me."

Students are able to document skills and habits in a variety of formats using a "visual representation of the student, as well as his or her goals, accomplishments, and learning" (Buyarski et al., 2015 p., 284). Quality artifacts showcase a multimedia narrative. Students can use photographs, Google Docs, spreadsheets, presentations, video, audio, and writing. Work samples can include such items as drafts, journals, reading logs, and research.

Artifacts help students make meaning of their learning by reflecting on why the skills, habit, or character trait is important to them. We encourage students to decide what goes into their ePortfolios and teachers help students gain insight into how their artifacts fit into the larger context of their learning journey. They are guided to look beneath the surface and dig deep into their learning processes. Students may provide examples of mistakes and how they helped shape their thinking and learning. They communicate learning by showing and telling. Students must analyze their artifacts and articulate how they know what they know. They look for connections to other learning, content, and/or experiences.

Teachers design questions and prompts to frame student reflection that is grounded in content standards and essential questions as well as the 6 C's of Education. Student's written and oral reflections consider their strengths and challenges and provide evidence documenting

these areas. They create individual interpretations, responses, and pathways to understanding. This process allows students to be seen as unique individuals with varied abilities. Having students see their work, whether a photo, video, etc., and scaffolding them with prompts that guide their thinking strengthens their ability to self-reflect and use meaningful reasoning to articulate their meaning making.

Through support and practice, students develop their ability to see their growth over time. Artifacts from earlier in the year are used as a baseline to evaluate work done later in the year. This accumulation of artifacts becomes a chronicle of growth from which students examine and celebrate their development over time. Students identify strengths and areas of growth and identify strategies they use to build on those strengths and improve their weaknesses. Students are able to create clear, actionable goals from reflecting using their artifacts as evidence.

As students develop higher levels of metacognition, their artifacts and reflections showcase an honest, authentic product in which students own their understanding of how they learn. Being able to understand the meaning and importance of a certain skill, habit, or character trait and communicating its meaning is a complex process and requires higher order thinking.

Conclusion

When we first switched from binder portfolios to ePortfolios, we missed the beauty in laying out different pieces of a child's writing over the semester on the table. It was rewarding to see clear growth in skills and to feel the pencil grooves, rumpled edges, and eraser marks. With time and persistence, we have come to see the ePortfolio as a more effective curation method because it takes the long view. Now students catalog years of learning and skill development in one place over time. By helping students gain digital literacy skills and then focusing on deep reflection activities with frameworks that allow them to tell the story about their learning, we begin to optimize the opportunity for ePortfolios to become a "visual representation of the student, as well as his or her goals, accomplishments, and learning" (Buyarski et al., 2015, p. 284). But, of course, the ePortfolio is not the target. Our approach is a means to establish habits of authentic, active, and empowered student reflection. As technology, K-12 education, and the world changes, ePortfolios are incredibly effective at facilitating a child's developing understanding of their own potential. ePortfolios that span a K-12 experience form a foundation on which young people gain the confidence to make informed decisions about how to set goals, challenge themselves, and discover who they are and how they learn. We hope that you build on our experiences and share with us the successes and challenges you encounter in the rewarding and exciting work of K-12 ePortfolios.

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Aldene Burris is a secondary Social Studies teacher at Polaris K-12 School in Anchorage, Alaska. For nearly twenty years, she has been involved in the challenging and dynamic process of helping students take ownership of and make meaning of their learning through the use of portfolios and ePortfolios. Outside of the classroom, she enjoys horseback riding, hiking, and alpine skiing.

Mindietta Vogel is a secondary English teacher at Polaris K-12 School in Anchorage, Alaska. She is nationally board certified in Adolescent and Young Adulthood English Language Arts. With her colleagues and students, she has presented our portfolio journey and best practices for helping students develop independence around learning at local and national conferences. Through her work with the Alaska Writing Project, she has taught professional development courses on Action Research, Teachers as Writers Retreats, and the Summer Institute. A short piece in *English Journal* (March 2016), "Teaching Writers, Not Writing" was published in the column A Thousand Writers: Voices of the NWP.

Sophie Wallace is an elementary teacher at Polaris K-12 School in Anchorage, Alaska. Sophie has presented work at the 2016 National Association for the Education of Young Children and the 2017 American Education Research Association surrounding the Alaska Developmental Profile under the direction of Kathryn Ohle, PhD, and Hattie Harvey, PhD. Sophie was honorably selected to represent graduating students by writing and delivering a speech entitled *Striving To Grow as You Go: The Celebration of Lifelong Learners* at the Fall 2016 University of Alaska Anchorage Commencement Ceremony. She enjoys long-distance running, gardening, reading, and making art in her free time.

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Plotting a New Site on the Map of International ePortfolio Practice

Authors: Ana Ward-Davies, Kathryn Coleman, Karen Donald, & Lisa Cheshire
Review Editor: Russel Stolins

The field of ePortfolio practice and pedagogies in higher education is vast. Many university-wide studies have been completed on platforms and practices, reflection and self-regulation for lifelong learning to develop and design learning, assessment and graduate portfolios. To begin this pedagogical study, we set out to see what had been done, asking questions of the scholarship and beginning with the *Field Guide to ePortfolio* (Batson et al., 2017), to see what had been discovered and to plant new ideas on the map of international ePortfolio practice from there. To avoid reinventing the wheel, we began with the last big survey of the pedagogy and practice and ePortfolio. This short article will explore what we have learned from deep diving into the literature and using the *Field Guide* and other supplementary readings to launch from and plot a new path in our current landscape in Australia. When this project began, we were in a different world, a pre-COVID, pre-pandemic higher education. Now we find ourselves in a virtual university campus, teaching, learning and assessing online inside our learning management system as a digital classroom, making this even more important work.

There are many considerations that need to be explored before implementing an ePortfolio program. Our project began with a scoping exercise considering the needs for the implementation process in graduate entry health professional courses in the Melbourne Medical School and the Department of Physiotherapy pre-COVID. It was a pedagogically focused one that included a front-loaded cross-faculty approach to learning design and professional learning. This co-designed and collaborative development and implementation of an ePortfolio for health professional practice deviates from high stakes, summative assessment of learning toward an iterative, developmental assessment for learning. It is underpinned by a desire to develop authentic ePortfolio practices for students as professionals and supported by explicit teaching to scaffold and develop intrinsic motivation for ongoing, self-regulated learning, feedback and reflective practice, all key requirements for health professionals. We began this assessment reform supported by a competitive University of Melbourne awarded Learning and Teaching Initiative grant to encourage flexible and self-regulated learning, opportunities for greater flexibility and adaptability in assessment delivery, and a student-centered approach to assessment in ePortfolios.

As we began the journey, we decided that within the milieu of the global ePortfolio research available, it is not necessary to "reinvent the wheel," so, after consulting the *Field Guide* and other seminal texts, we thought we should

pause and reflect on what have we learned on this journey.

This paper explores two big ideas expressed across the *Field Guide* and other seminal texts:

1. Front loading assessment reform with professional learning and authentic learning design is necessary.
2. Faculty and university support mechanisms matter.

Front Loading Assessment Reform

Front loading assessment reform with professional learning and authentic learning design is necessary for health professionals. The ePortfolio implementation across courses graduating medical practitioners and physiotherapists emphasizes the importance of authentic learning experiences for healthcare professionals, with the development and scaffolding of self-regulated learning skills driving the program. Literature surrounding ePortfolio programs — both from the broad landscape of ePortfolio literature and specifically from within the health sciences — contend that this learning goal can be achieved through successful ePortfolio implementation and by using the ePortfolio as a tool for self-reflection; there is evidence that students have greater ownership over their learning (Babovic et al., 2019; Jenson, 2011) and can develop self-regulated learning and metacognitive skills by honing their reflective practice (Penny Light et al., 2012).

The iterative nature of ePortfolio practice echoes frameworks of authentic learning, which emphasize the role of sustained investigation, longitudinal thinking and ongoing reflection (Cordie et al., 2019). There is significant evidence that an iterative ePortfolio format, with students engaging and re-engaging with data, reflections and feedback, can support self-regulation and metacognitive skills (Haggerty & Thompson, 2017; Jenson, 2011; Nicholls et al., 2017; Polly et al., 2013), even in students who did not enjoy reflective thinking (Lucas et al., 2019). In a study of physiotherapy students, Peacock et al. (2011) noted that there was evidence of learners reflecting on feedback and "using it as a springboard for the development of metacognitive skills and planning [for] future learning" (p. 43).

In multiple accounts, the importance of scaffolding and structuring reflective practice and self-regulated learning skills is reiterated (Hood, 2017; Polly, 2017; Walker et al., 2017). Polly (2017) emphasizes the significant and far-reaching impact reflection can have within medical education but acknowledges that this requires specific structure. Scaffolded reflection prompts with a combination of didactic and dialogic prompting (Hood, 2017), the use of a visual guide (Walker et al., 2017), targeted prompt questions that can be removed to allow greater self-assessment (Polly et al., 2015) or modified to reflect career progression (Polly, 2017) are several scaffolding techniques in the literature that may guide our approach to develop student self-regulated learning.

Faculty and University Support Mechanisms Matter

The Learning and Teaching Initiative Grant we were awarded emphasized the ePortfolio as a tool for flexible and self-regulated learning that could enhance opportunities for greater flexibility and adaptability in assessment delivery as well as support a student-centered approach to assessment. Significant ePortfolio literature discusses the importance of underpinning pedagogy to drive the transition to ePortfolio-based learning and teaching; there is evidence that ePortfolios require a pedagogical shift as much as a technological one (Benander et al., 2017; Overton & Johnston, 2016; Penny Light et al., 2012). In the *Field Guide*, Buyarski et al. (2017) argue that these pedagogies tend to be constructivist and connectivist, drawing on models of learning where students are given the tools to construct their own knowledge with support from experts, learning socially and through new experiences.

Developing student-centered learning and assessment tasks that allow students to showcase their understanding across a range of mediums and modes was paramount in designing this

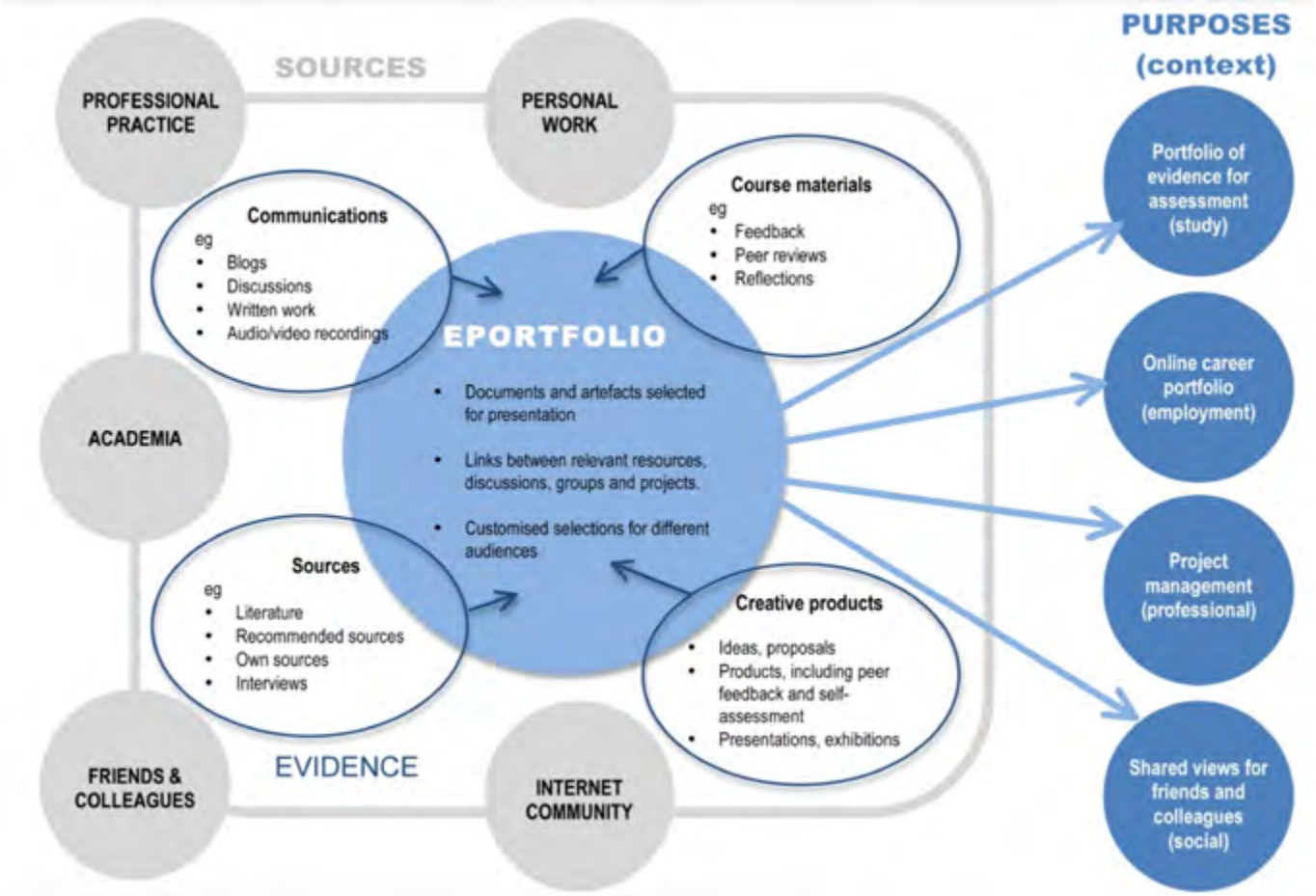

Figure 1. Model for ePortfolio Practice (Allen & Coleman, 2011)

learning and teaching initiative. The ePortfolio meets this need through digital interfaces where students can flexibly demonstrate learning through visual, oral, written work and videos (Buyarski et al., 2017) and take their ePortfolios with them after university as global citizens (Benander et al., 2017).

While ePortfolios can successfully strengthen summative assessments, these are best enacted through an iterative, process-based approach (Kelly-Riley et al., 2016; Peacock et al., 2011; Chen & Penny Light, 2010; Rhodes, 2011). In addition, a well-structured platform and ongoing mentoring are cited as beneficial facets of ePortfolio implementation (Bowman et al., 2016; Gordon, 2017). There is evidence that this approach will support self-regulated learning, where students are more interested in learning than grades (Nicholls et al., 2017). But each of these approaches required developmental professional learning.

Our team took a scaffolded mentoring approach that used design thinking to frame workshops and seminars, building the literacies and capabilities for the teaching teams involved. Guided by Allen and Coleman's (2011) Model for ePortfolio practice seen in Figure 1, these experiential professional learning seminars were developed to create opportunities within the teaching research nexus and use important relevant ideas from the field to inform ePortfolio design and guide developing pedagogies. Using a way-finding approach, Kate and Ana created space to traverse the why of ePortfolios, the what of assessment design and ePortfolios as sites for the construction of knowledge and then began the Inquiry-reflection-inquiry framing led by Poklop and Peagler's ePortfolio planning framework (2010). We worked in a collaborative,

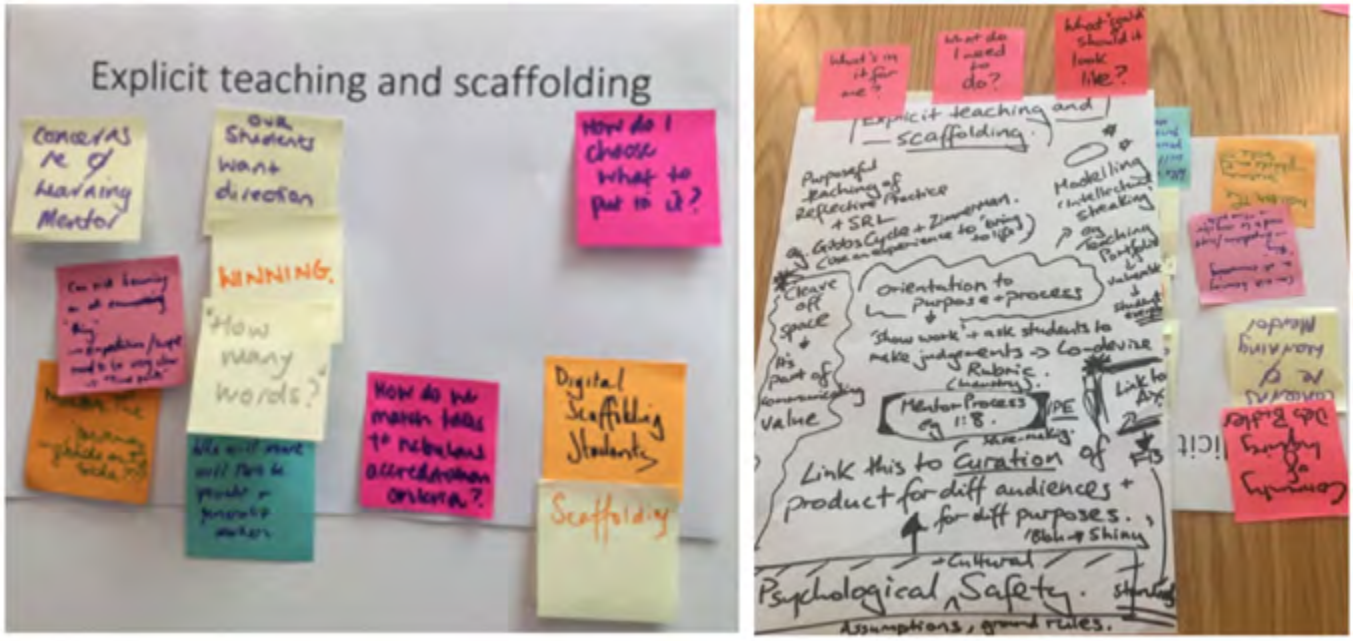

Figure 2. Deconstructing and Reconstructing Learning and Assessment Through Collaborative Professional Learning

professional learning community to guide pedagogies and technologies in medicine and physiotherapy to begin a co-design of teaching and assessment, an example of which is shown in Figure 2. These images are two iterations of thinking through collaborative professional learning using wayfinding to deconstruct and reconstruct teaching, scaffolding, learning and assessment.

Conclusion

The next step involves engaging a collaborative group of students from the medical and physiotherapy courses at the University of Melbourne to participate in an ePortfolio trial. This will allow students to explore the ePortfolio site, give feedback and consider avenues for change. There will be opportunity to research the impact of interdepartmental collaboration, both from student and faculty perspectives, which is a relevant authentic learning process given the collaborative nature of healthcare professions. Additionally, we will be able to consider the implications of student choice in assessment which may strengthen claims that flexible approaches to assessment can support self-regulation by giving students flexible options and greater agency in how they are assessed (Coleman et al., 2012; Peacock, 2011).

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An Analysis of Digital Ethics Principles in Action

Authors: Kevin Kelly, Morgan Gresham, & Sarah Zurhellen
Review Editor: Adam Wear

A Growing Demand for Digital Ethics Resources

Whether they know it or not, higher education stakeholders—including students, educators, campus leaders, and software vendors—face a range of ethical choices when they create, review, support, and showcase ePortfolios at different levels. For example, students must cite and give proper credit when they refer to someone else's work. Educators must prepare students to share their work in formats that are accessible to classmates and other reviewers who have different devices and abilities. Campus leaders must let students know when and how their work will represent the institution during accreditation reviews. Software vendors must use clear end-user license agreement language to explain when and how they intend to use student data collected through their platforms. These few instances represent a relatively small number of digital ethics scenarios related to ePortfolios. A recent review of the literature (Brown Wilson et al., 2018) has identified many more scenarios like these, pointing to the need for practical resources to support stakeholders grappling with digital ethics issues.

Among its primary functions, the Association of Authentic, Experiential, and Evidence-Based Learning, or AAEEBL, supports and advances the use of ePortfolios in higher education. As an international organization, it brings together a diverse set of voices and perspectives around important topics. Based on a growing demand to identify key issues, questions, references, and resources related to digital ethics and ePortfolios, AAEEBL board members put together a series of events and community conversations that maintained ethics as a constant throughline over a two-year period. Notably, the arc of the community conversations about ethics included the following milestones:

- At AAEEBL's July 2018 Annual Meeting, representatives from Auburn University led a well-attended, interactive workshop session about ethics and ePortfolios. This session sparked a number of follow-up conversations among community members.
- At its July 2019 Annual Meeting, AAEEBL facilitated a conference-wide Digital Ethics Forum at the end of the first day. A combination of board members and community members facilitated the event as an "unconference," meaning the session leaders crowdsourced the interests and experiences of everyone in the room.
- In Fall 2019, AAEEBL launched a year-long Community of Inquiry related to ethics and ePortfolios. This included hosting regular, international online events such as global Twitter Chats and interactive panel discussions with members of AAEEBL, ePortfolios Australia, and ePortfolio Ireland.

Also stemming directly from the July 2019 forum, AAEEBL moved toward more intentional work and partnered with Auburn University to create a Digital Ethics and ePortfolios Task Force. Members came from multiple countries—the U.S., Australia, and New Zealand—and represented organizations that served different demographics, such as urban and rural

campuses, a Historically Black University, and an open source ePortfolio development group. Charged with developing a practical resource for ePortfolio practitioners, the Task Force members met once per month. They worked asynchronously between those meetings—first to research relevant issues and effective practices, and then to draft a resource document. After identifying too many ethics-based issues to address in one year, the Task Force members decided to focus on half of them. At AAEEBL's July 2020 Virtual Annual Meeting, the Task Force unveiled a set of ten Digital Ethics Principles in ePortfolios, which are summarized directly below (Cicchino, 2020).

Summary of the Digital Ethics Principles

When the project first began, Ethics and ePortfolios Task Force members identified common ethics issues—e.g., citation, attribution, accessibility, student data—plaguing the ePortfolio stakeholders. They then broke into subgroups that concentrated on and pulled together research about specific ethics issues. Based on this collective research, the Task Force generated core principles, strategies for putting the principles into practice, and scenarios showing those practices in different contexts. Above all, the team wanted to make the principles relevant and applicable to all readers.

After months of editing and adding relevant examples, the Task Force organized the principles into three categories—principles for

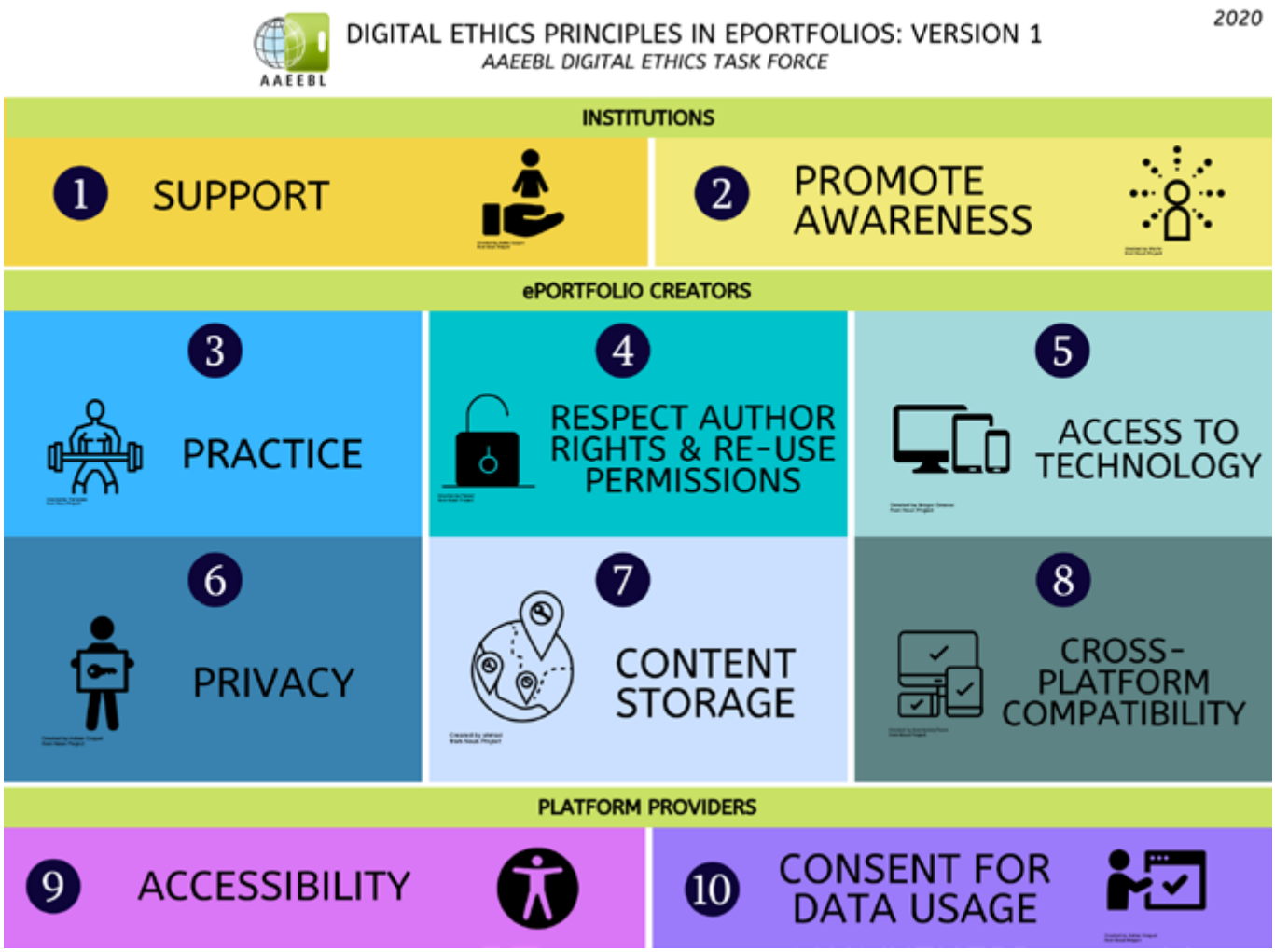

Figure 1. Graphic Depiction of the Ten Digital Ethics Principles

institutions, for ePortfolio creators, and for platform providers (see Figure 1 on the previous page). The principles recommended for each of the three categories are listed below:

Institutions

- provide adequate support for ePortfolio creators
- promote awareness of digital ethics issues

ePortfolio Creators

- practice developing their digital literacies
- respect author rights and re-use permissions
- have equitable access to ePortfolio technologies
- control who may access their ePortfolios
- know where their content is stored and who may access it
- be able to develop their ePortfolios across devices

Platform Providers

- vet their digital environments for accessibility
- get consent to collect, use, or share ePortfolio creators' data

Although these principles have primary audiences, they are applicable to other stakeholders as well. To review the entire set of ten principles, along with the strategies and scenarios, visit the Task Force's publication on the Scalar platform (https://scalar.usc.edu/works/aaeebl-digital-ethics-principlesversion-1/index).

In the remainder of this article, Task Force members analyze two principles that apply directly to current ePortfolio work at their institutions. The first principle, Support, states that institutions provide appropriate support for ePortfolio creators. The third principle, Practice, contends that ePortfolio creators should have adequate opportunities to practice developing collections of works that are themselves accessible. This analytical work models how institutions that use ePortfolios can leverage the Digital Ethics Principles to make necessary adjustments and to inform local practice.

Exploring Principle 1—Support—in Action

Principle 1: Institutions should provide appropriate support for students, educators, administrators, and staff who create ePortfolios.

Principle 1 – Abstract: Institutions must devote resources to supporting ePortfolios, including professional development in ePortfolios. ePortfolio stakeholders are encouraged to partner with offices that have expertise in disability, informational literacy, technology, writing, and teaching and learning to create inclusive ePortfolio requirements with built-in alternatives for individuals with limited access to technology and the Internet.

As anyone who has ever worked to write or implement a set of guiding principles has experienced, the moment a principle is put into context, the inextricability of each principle becomes evident (if it wasn't already). Similarly, while the goal here is to provide scenario-based introductions to several of the 10 principles related to digital ethics and ePortfolios developed by the AAEEBL Task Force on Digital Ethics, doing so will necessarily reveal the extent to which these principles are intertwined, suggesting that their application in all instances must be an iterative process, involving implementation, experience, reflection, and revision. In the development of these principles, our Task Force recognized the importance of considering the different ePortfolio stakeholders and acknowledging that their priorities are not always aligned. Thus, we also included scenarios written with different stakeholders in mind to illustrate how each principle applied to particular situations in which they might find themselves.

Principle 1 states that "Institutions should provide appropriate support for students, educators, administrators, and staff who create ePortfolios." In naming the various stakeholders involved in this enterprise, Principle 1 makes clear the number of voices and perspectives that must be involved and engaged in order for any ePortfolio implementation to be successful. It further elaborates, "Institutions must devote resources to supporting ePortfolios, including professional development in ePortfolios. ePortfolio stakeholders are encouraged to partner with offices that have expertise in disability, informational literacy, technology, writing, and teaching and learning to create inclusive ePortfolio requirements with built-in alternatives

for individuals with limited access to technology and the internet." Although ePortfolio initiatives can develop successfully from a bottom-up (starting with individual teachers and classrooms and slowly expanding to larger departments and units on campus) or top-down (beginning as a plan implemented across a department, college, or institution) approach, both approaches require bringing together members of each stakeholder group to identify, organize, and design appropriate support for everyone who will be involved in the ePortfolio pursuit.

Here, we consider the case of an institution-wide ePortfolio implementation at a mid-sized, 4-year state institution in the southeastern U.S. that was motivated by the addition to the list of high-impact practices (HIPs) created by the Association of American Colleges & Universities (AAC&U). Several units on campus were already using ePortfolios in their individual programs, but the goal of this initiative was to make ePortfolios an active and productive practice throughout the General Education curriculum. In order to do so, support was provided in the following ways: a full-time, 12-month Adjunct Assistant Professor position was created for an ePortfolio Director, who was assisted by one graduate student and one undergraduate student; an ePortfolio committee was created to research and eventually roll out potential platforms; and an office and website were created to provide both physical and virtual spaces for faculty and students who had questions or encountered problems. The ePortfolio Director worked with all of the offices identified in Principle 1 to consider questions of access, permissions, content storage, privacy, and consent (see Principles 4, 6, 7, and 10), and students were included on the decision-making committee in an effort to ensure that the primary users of ePortfolios would benefit from their implementation.

In many ways, this reads like a dream scenario: the institution supported the operation with financial, technical, and human resources; the Director worked with offices across campus to consider important ethical principles; and the decision-making body included representatives from all stakeholder groups. After deliberating, the committee decided to select a single platform that offered "ePortfolio creators…ultimate control over public access to their portfolios and the ability to change the privacy settings at any time" (Principle 6) and required "consent to collect and store data from ePortfolio creators" (Principle 10). By adopting a single platform designed specifically for educational scenarios, the committee selected to use their resources efficiently, enabling the newly developed ePortfolio office to focus on training and support for the tool without having to worry too much about issues of student privacy and consent (since those protections were built into the platform). Moreover, because this implementation was motivated directly by the desire to improve the student experience through HIPS, assessment was a key component. The university needed to be able to understand and document how the use of ePortfolios was impacting the students' learning experience. The selected platform provided a robust backend that enabled simple, large-scale collection of anonymized student work as well as the ability to replicate the assignment and grading capacity of a typical learning management system (LMS). Thus, it was also deemed valuable due to its assessment capabilities.

Although several programs and departments had been using portfolios to document student learning and conduct assessment for many years, the University did not have any overarching guidelines or documented expectations regarding the use of ePortfolios, and implementation decisions prior to this moment had been left up to departments, programs, and, in many cases, individual instructors. In the case of this implementation, administrators decided that it made the most sense to pilot the new ePortfolio platform in the university's Rhetoric & Composition (RC) Program, where students take the first two of their four general education writing requirements. In the first year of the pilot, the goal was to roll out implementation in a select

set of first-year composition courses during the first semester and then another select set of second-year courses during the second semester. Faculty could self-select to be part of the pilot, and the ePortfolio Director provided training through group workshops and individual consultations. This phased pilot would take place for two years (four semesters) before the platform became mandatory for all RC faculty.

Several issues immediately arose. First, the platform was clunky, looked outdated, and did not offer cross-browser and device compatibility (see Principles 8 and 9). It only operated properly on Firefox or Chrome, and it did not work at all on phones. Moreover, its frontend interface was often compared to the defunct, early social media platform MySpace. Second, the RC faculty quickly recognized that as the only program on campus composed entirely of non-tenure track (NTT) faculty, they were being used as guinea pigs. A couple of tenure-track (TT) faculty who taught composition courses opted to use the platform because they wanted their students to have the same experience that the majority of other composition students were having, but TT faculty were not forced to use it; the mandate only applied to NTTs. Third, the training was focused explicitly on the tool. Since the technology, rather than the pedagogy, was the primary target of everyone's attention and the technology was less than stellar, it was difficult for faculty to see the value of shifting modalities from the traditional paper portfolios that they understood and were comfortable with. Naturally, given the lack of enthusiasm among faculty, the students mirrored the faculty complaints—the platform was clunky, the process of creation felt like busy work, the value felt negligible at best.

Over the course of several years, the provider improved the frontend interface and added mobile compatibility, but cross-browser compatibility remained a problem as did access during peak times in the semester when the servers were consistently overloaded. Eventually, the program's leadership changed, and the new director of RC decided to retain ePortfolios as a requirement but allow faculty to use the platform of their choice. Of course, this has created a separate set of issues directly related to support. The university's ePortfolio office continues to support only the single platform (which is used sporadically across campus), so faculty who choose to use another platform have to rely on external support, which is often less immediate and reliable. In addition, they have to take it upon themselves to consider issues of privacy, storage, etc. that the university-supported platform handles internally. Lastly, and perhaps the most impactful outcome, ePortfolio practice for students lacks continuity. Each semester, they may find themselves having to learn and adapt to a new platform, and they do not have the opportunity to see their collection of artifacts and reflection build over time, courses, and practice to provide a broad view of their general education experience when they graduate.

Upon reflection, those of us involved in the process discovered several important points of breakdown that led to the (eventually and mostly) successful implementation of ePortfolio practice but not the successful adoption of a single shared platform across the program. First, while important stakeholders from various university units comprised the decision-making committee, it did not include NTT faculty from the RC program, largely because the review of platforms occurred before the decision to start the implementation in this program. By the time the pilot program began, the platform had already been selected and heavily invested in. Second, the responsibility for implementing the plan fell solely on the most vulnerable faculty members, NTTs, who felt they had little to no say in the adoption process and, thus, were not invested in its success. Lastly, we return to the issue of support and its inextricable relationship with practice: Because the faculty training focused almost exclusively on technical knowledge and assessment, preparing faculty to set up and navigate the ePortfolio instances for their courses and showing them how useful the platform would be for programmatic assessment,

we put the cart before the horse in the most traditional way. In retrospect, spending the year before the pilot focusing our professional development activities on ePortfolio pedagogy and practice would have engaged faculty in the scholarly developments of the field, given them time to develop their individual ePortfolio praxis, and enabled them to acquire practice working in a new mode without having to be concerned with instrumentalizing technical knowledge. Principle 1 invites conversation among students, faculty, administrators, and departmental bodies/programs to foster questions like:

- Who will provide support for the technical knowledge required to use ePortfolio platforms, and where will that support be housed in the university?
- Who will provide support for ePortfolio pedagogy?
- How will instructors and students be supported in understanding the relationship between the pedagogical and technical aspects of using ePortfolios?
- How can support be distributed and provided equitably to ensure that all stakeholders understand the value of and can benefit from ePortfolio practice?

Exploring Principle 3—Practice—in Action

Principle 3: ePortfolio creators need opportunities to develop and practice the digital literacies necessary to create accessible and effective ePortfolios.

Principle 3 – Abstract: ePortfolio creators need practice with digital literacies. ePortfolio instruction should teach creators what ePortfolios are, why they are creating one, how to employ visual design and Universal Design principles when creating one, and how to work with ePortfolio tools and technologies. When creating ePortfolios, a knowledge of their audience, context, and constraints should guide creators.

This case will speak to the existing 3 scenarios that focus more on the student experience and describe ways instructors might provide the kinds of practice those students would hope to encounter.

Using common tools and leveraging what is familiar for students can help them practice digital literacies in new ways. In "Composing Multiple Spaces: Clemson's Class of '41 Online Studio" Gresham (2010, p. 52) notes that we design that with which we are already familiar and in that sense, it is imperative that students have multiple opportunities to experience and compose with many common tools as they develop ePortfolios so that the "familiar" does not limit or impede their ultimate design. Imagine the difference between Student A in Principle 3: Practice Scenario #1 and Student B in Principle 3: Practice Scenario #2. Student B is a non-traditional student returning to college whose instructor now requires an ePortfolio. Experience tells us that Student A, the undergraduate business student who started an ePortfolio in their first-year composition course, may also be in class with Student B. Actual students at the institution provided valuable feedback and prefer to remain anonymous. One student describes this scenario:

> *[The institution] could introduce portfolios more effectively if it was implemented on a more school-wide scale (at least for certain majors). As of right now, the lack of unity on it makes it where most classes have no form of ePortfolio inclusion, and others are primarily focused on ePortfolios. Students get stressed out by the introduction of a new system, only for it to be applied to a single class and possibly not used again. (Male Student #1, personal communication, September 7, 2020).*

As Principle 3 invites us to consider practice, we can locate multiple moments of practice here. As the principle notes, early in the process, there should be conversations about what an ePortfolio is conceptually and then how different applications can be "effective strategies for storing, attaching, and curating artifacts." Often ePortfolios are suggested to students as merely a technological container for their products, and much of the focus in those cases becomes how-to of technology. The other extreme values the archival concept with no attention to the where or how students may collect their artifacts. Because students and faculty often have different unstated expectations around the ePortfolio, practicing producing, assessing, and

revising plenty of artifacts for possible inclusion is a way to foster discussions around types of portfolios and audiences for those portfolios.

While students often see the value of creating ePortfolios, they may be limited in their opportunities to practice ePortfolios prior to encountering them as a major requirement. As a student recently noted,

> *The first time a student makes an ePortfolio should not be for Senior Portfolio, which is pretty much what I am going through right now. I think [The Principles] would be great to use for all students, especially those with a required Senior Portfolio course. Maybe these principles could be introduced and expanded upon in a future class of an introduction course, such as Intro to the Major. (Female Student #2, personal communication, September 7, 2020)*

As with many High-Impact Practices, ePortfolios are often seen as a capstone project rather than a cornerstone. Using the principles as a guide, institutions may instead encourage students to begin ePortfolios early in their educational experiences. One means to do this is through using common tools. In a course, students may be invited to use Google Sites as the container for their ePortfolio. Many students now have familiarity with Google—if through nothing else than Gmail—so working with a tied-in common tool like Google Sites eases the students' need to learn an entirely new product.

Another aspect of practice is practicing digital literacies. As Kahn (2014) notes, increasingly students are asked to "capture work representing authentic performances in multiple digital media—like a video clip of a candidate for teacher licensure teaching a lesson" or the videos Neal describes in "Perils"—and these types of digital literacies and digital compositions take time, practice, and access. Principle 5 addresses issues of access that must also be considered: access to laptops and other composing technologies, training and support for different technologies, and "ensuring that hardware, software, and ePortfolio platforms and support are readily accessible to account for students' diverse schedules." ePortfolios have the potential to serve as a "meta-high-impact-practice" (Kahn, 2014), and the Principles offer a series of heuristics that enable better and more equitable access to this HIP.

Finally, reflection is an essential part of successful implementation of ePortfolios. As Harring and Luo (2016) note, students frequently "failed to see how creating an ePortfolio could provide a different and more integrative lens to view their educational experiences." Students must have multiple, significant opportunities for guided reflection. Deep reflection must be taught and practiced through multiple contexts. Neal's "The Perils of Standing Alone: Reflective Writing in Relationship to Other Texts" (2016) describes the importance of using reflection in ways that move it beyond "conformational" text toward descriptive "rhetorical decision make"—a task that must be repeated with purposeful instruction. As Principle 3 suggests, students should be advised not only to "think about the context" of their work but also to make sure that they "understand the many rhetorical choices they are making during the process and how these choices differ from those made during the composition of more traditional documents such as essays, resumes, and cover letters." Importantly, that understanding must also be able to be communicated effectively to others, avoiding the trap of "author-centric...likes, dislikes, preferences" (Neal, 2016, p.81), a skill that comes from clearly defined practices. Principle 3 invites conversation among students, faculty, and departmental bodies/programs to answer questions like:

- Why am I creating this ePortfolio? What is its purpose?
- Who will be reading this ePortfolio? Why?
- What should be housed in this ePortfolio?
- How should I describe the contents and the value of this ePortfolio to others?

Conclusion and Next Steps

Although the ten Principles are interconnected, we chose to focus on specific Principles to showcase their applicability at an individual level. By highlighting Principles 1 and 3 through

specific instances of implementation, we hope to illustrate the value of applying these principles in practice and to show how the strategies recommended in the Principles text can work in specific local contexts. We encourage you to review all of the Digital Ethics Principles, along with the concrete strategies for applying each and sets of scenarios depicting how the Principles fit within different contexts.

As we concluded each case study with a set of questions to consider, we close here with a broader list of questions/considerations. This list is designed to remind you, the readers, to see this interconnected set of Principles as a resource to support you, your colleagues, and your institutions as you address digital ethics challenges when you use ePortfolios:

- How can we use the scenarios that accompany the Principles to foster awareness of digital ethics issues that can arise when ePortfolios are used at our institutions?
- How can we engage different stakeholders in conversations about digital ethics issues throughout ePortfolio-related processes, such as teaching and learning, research, professional development, program review, accreditation, or technology adoption?
- How can we leverage the strategies that accompany the Principles to turn awareness into action and to address ethics issues?
- What types of support must we provide to different stakeholders, and how can that support be scaffolded productively?
- If we must focus our attention on one or two issues, how can we use the Principles to prioritize our efforts?

We hope that the principles, strategies, and scenarios on Scalar, combined with the case stories and considerations above, foster rich conversations about digital ethics and ePortfolios in your program and across your institution. We look forward to reading about how the Principles have informed your own work as those conversations turn into local projects and initiatives.

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Not Just an Invisible Container: Exploring How ePortfolio Platforms Can Privilege Student Learning and Reflection

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Review Editors: Christa van Staden & Barbara Ramirez

Abstract

Platforms used for building ePortfolios influence how and why students build ePortfolios (Watty & McKay, 2015; Arola, 2010). In this article, we trace our science communication program's selection of a specific ePortfolio platform for a student capstone project. This process involved testing both free and proprietary options as a means of exploring how platform impacted the development and refinement of an ePortfolio curriculum for our students. We discovered that the productive constraints and affordances of platforms affected how students curated their artifacts, crafted their reflections, and created coherent visual design for their ePortfolios. In addition, we prioritized archiving students' ePortfolios in our library's digital repository of scholarly work and explored ways that various platforms would allow us to responsibly preserve the evidence of student learning. We describe our choices around design flexibility, archival capacity, data privacy, and student experience with different ePortfolio platforms. We argue that aligning an ePortfolio platform with program pedagogy must be tied to three key factors: collaboration, continuity, and agency. In this article, we describe how our curriculum evolved along with platform selection and share examples of how students built ePortfolios across different platforms. Platforms are not merely invisible containers for students' work; rather they are spaces that can privilege particular learning and reflective experiences.

Introduction

One of the first actionable decisions an institution makes when choosing to adopt an ePortfolio curriculum is a choice of platform. Options for ePortfolio platforms in 2020 remain diverse, and institutions must weigh several factors in their platform adoption choices, from privacy considerations to design flexibility and user experience to assessment capacity. The goals of an institution's ePortfolio program should dictate the choices that users make in adopting an ePortfolio platform, yet this key relationship between platform and student design capacity is rarely discussed in ePortfolio scholarship.

While scholarship on ePortfolio pedagogy often examines the use and role of visuals for communicating meaning (Silver, 2019; Munday, et al., 2017; Andrus et al., 2015; Gallagher & Poklop, 2014; Ramirez, 2011), there are fewer examinations of how choice of platform impacts how students construct and conceptualize the goals, purposes, and ultimately, the final designs of their ePortfolio projects. Arola (2010) speaks to the ways in which templates impact design decisions but does not speak directly to templating or design limitations for ePortfolios in particular. We aim to bridge this gap by considering how platform choice impacts not only the kinds of visuals or multimedia that students choose to include as artifacts but can also fundamentally

shape the story that students tell about their learning within the space of the ePortfolio.

ePortfolios exist within an ever-widening digital ecosystem where students are developing digital presence through social media participation, building websites for student organizations or groups, and other capacities. Therefore, it is important to consider how the choice of ePortfolio platform itself may shape or influence students' digital presences. To that end, choosing an ePortfolio platform can be part of a larger conversation about how students control the visibility of their work and archive evidence of their learning in public online spaces. Even if students are building ePortfolios on platforms protected by private institutional licenses, they may still consider how work created within an ePortfolio platform may be re-used in public-facing websites or social media profiles they may design after a course or academic program is over.

At Stanford University, undergraduate students enrolled in a science communication program, the Notation in Science Communication (NSC), use ePortfolios for capstone projects. The NSC is housed in Stanford's independent Program in Writing and Rhetoric (PWR). After admission through a selective application process, students complete coursework in science communication, receive advising from STEM and writing faculty, and produce a capstone ePortfolio that demonstrates their growth and learning as science communicators. Students complete two ePortfolio-focused courses: PWR 99A, a one-unit course taken when students enter the NSC program that introduces ePortfolios and the practice of reflection, and PWR 99B, a two-unit course taken in winter quarter of senior year that supports students as they build their capstone ePortfolio in preparation for graduation. These ePortfolios are evaluated by a team of faculty, and students whose ePortfolios demonstrate their achievement of the NSC learning goals earn a designation on their official transcript, referred to as the "notation."

In this context, we discovered that the productive constraints and affordances of platforms affected how students curated their artifacts, crafted their reflections, and created coherent visual design for their ePortfolios. Given that the students' ePortfolio functioned simultaneously as an opportunity for students to create a showcase of their learning while also demonstrating their progress and room for growth in their writing, students had to navigate the needs of multiple audiences, from an initial evaluation committee to a broader public that may access their work on the public Web.

Knowing about these different audiences and purposes fundamentally shaped students' design decisions within the platform options available to them. In this article, we detail our own process of testing and exploring four ePortfolio platforms at Stanford over the course of four years to help students align their goals and purposes for creating an ePortfolio with the Notation in Science Communication program's learning objectives and outcomes. We move chronologically through our experiences of assessing these platforms, considering how each impacts the students' portfolio composition processes. To do so, we offer examples of student work produced within the various platforms we considered, assessing how the platform choices directly impacted students' reflections and the compositions of their final ePortfolios. After our analysis of the platforms we assessed, we consider institutional implications of platform choice and the ways selection strategies impact adoption and implementation of ePortfolio pedagogy.

Throughout this process, we learned that picking a platform is a critical part of developing students' critical digital literacy and awareness of the intersection between audience, purpose, and design. By helping students understand the affordances, limitations, and possibilities within each platform, we also helped students navigate choices about identity, design, and the visibility of their work on the public Web.

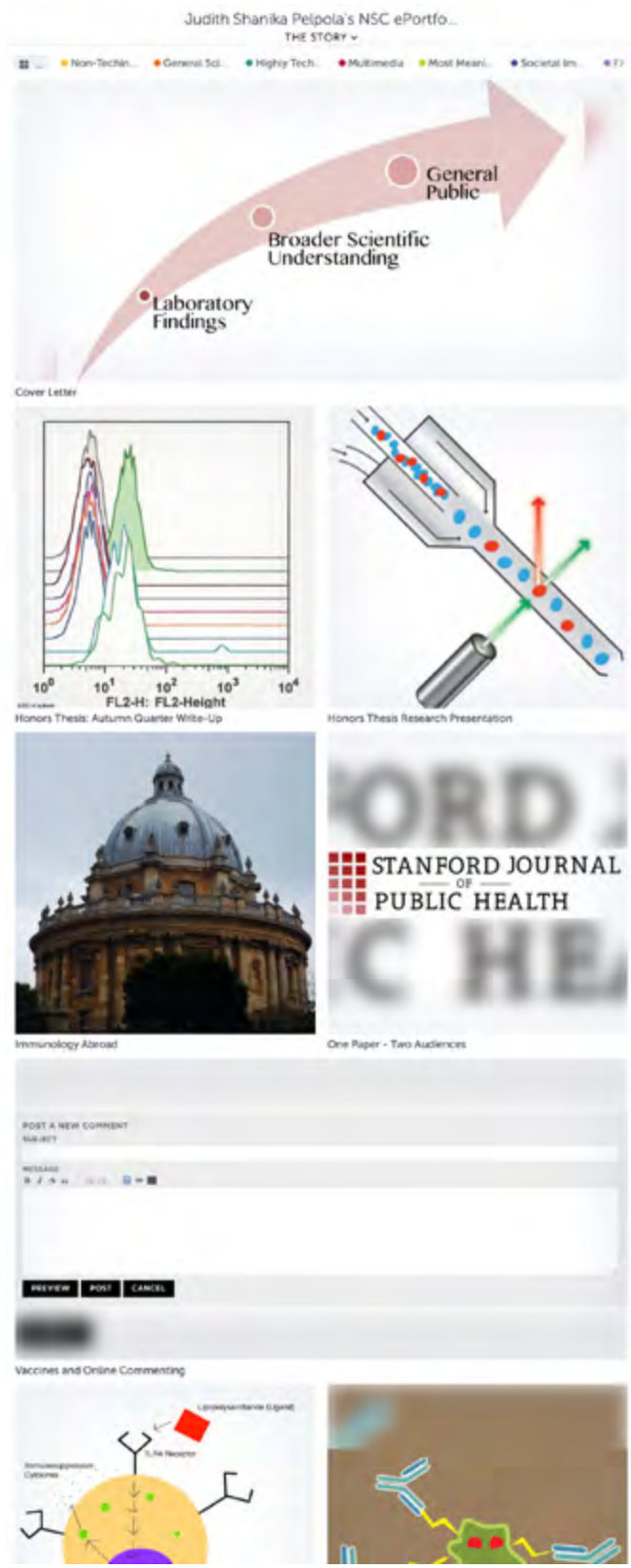

Figure 1A Sample Pathbrite ePortfolios Showing Different Approaches to the Platform

Figure 1B. Sample Pathbrite ePortfolios Showing Different Approaches to the Platform

Our Experiences Testing ePortfolio Platform Solutions

Within the Notation in Science Communication program at Stanford, we've explored deploying ePortfolio pedagogy within four platforms. We've detailed our historical experiences with each of these platforms in this section, specifically focusing on how the platform choice itself shaped the curricular and pedagogical choices we made for guiding our students through creating a capstone, showcase ePortfolio. We end this section with the platform we're using as of this article and will look ahead to further implications of our teaching experiences from there.

Pathbrite [2014-2015]

Our program initially chose to have students build their ePortfolios in Pathbrite, an ePortfolio platform developed by educational publisher Cengage. This platform was designed to privilege a visual user experience as artifacts were represented on the main portfolio page by images (see Figure 1A). Clicking on an artifact image showed the viewer both the artifact and reflection side by side, allowing students to provide necessary context and describe how the artifact tied into their overall learning. Privacy settings allowed students to make their portfolios public, private, or shared with select individuals, giving students control over the visibility of their work to outside audiences. Additionally, Pathbrite provided a learning management system (LMS) that we used to distribute activity instructions and handle assignment submissions for the two portfolio courses.

However, Pathbrite provided limited design choices for students. While students were able to tag artifacts, there was no easy way to organize them or add hierarchy to the main portfolio page. This resulted in users navigating the portfolio either completely linearly — from first artifact to last in the list — or by picking and choosing artifacts from the list. However, several students found creative inspiration from this constraint. One student used placeholder images such as "In Service" or "In Education" to group artifacts into categories (see Figure 1B). Another student took a similar approach but structured the ePortfolio like a scientific paper with short reflections titled "Abstract," "Background," "Methods," and "Conclusions" to add additional context on the artifacts that followed.

Given Pathbrite's emphasis on a visual user experience and integrated artifact reflections, our early curriculum included lessons on choosing images to represent artifacts, best practices for Creative Commons image licensing, and strategies for writing individual artifact reflections. There was less focus on overall site design and arrangement of artifacts since these elements were not prioritized by the platform. These curricular choices ultimately emphasized visual design and individual artifacts over deeper reflections by students on their learning and growth throughout the program.

Overall, during this time period the curriculum went through multiple iterations as the program grew and learning goals were more clearly established. Ultimately, institutional pressures led to a change in platform choices. We coordinated closely with the Registrar's Office to launch our program, and, as part of this partnership, they wanted to include a link to the ePortfolio along with the notation designation on the transcript. To do this, we needed to archive the ePortfolios in Stanford's archive of student work, the Stanford Digital Repository (SDR). However, we were unable to archive Pathbrite ePortfolios in this repository because the platform did not allow for designs built within Pathbrite to be exported to standard file forms like offline HTML files or even static PDF files.

Given our program's interest in helping students create an ePortfolio that would demonstrate what they learned throughout their Stanford experience, we valued the ability for class projects to be comprehensively archived in a space as stable as our campus library's digital repository. The inability to maintain the integrity of the students' work outside of the Pathbrite platform was, therefore, a major limitation and, as a result, we chose to change platforms after

the first cohort of students graduated from the program.

Classic Digication [2016-2017]

After Pathbrite, our program switched to using Classic Digication at the suggestion of the Registrar as Digication would support exporting the ePortfolio's content and design assets in a standard file form that could be archived in our institutional repository. Plus, Classic Digication opened up design choices around grouping artifacts, including menus and page hierarchies, which students had been trying to do in Pathbrite. However, students felt limited by the available design options because all Classic Digication users had to use a set menu structure with defined hierarchies. Only background colors could be modified, and there was a basic suite of font choices. Additionally, while archiving in the SDR was possible, it still required significant technical troubleshooting.

The program switched to Classic Digication in the middle of the academic year, and learning the new platform was a collaborative effort between the instructor and students taking the capstone course, PWR 99B. Throughout the quarter, some class time was devoted to informal sessions where students could share their work and/or knowledge of the platform with one another. For example, during one of these sessions, a student demonstrated how she had learned to edit the Cascading Style Sheets (CSS) to modify Digication's standard font and color choices. This skill was quickly picked up by her peers, allowing students to customize their ePortfolios away from the standard template. The original student had also adopted a particular header style for her ePortfolio — color blocked, sans serif font, with a picture of herself — that ended up being widely emulated by her peers (see Figure 2). By sharing her knowledge with the class, this student also provided a design model for her peers to emulate, effectively becoming a "portfolio influencer" for her cohort.

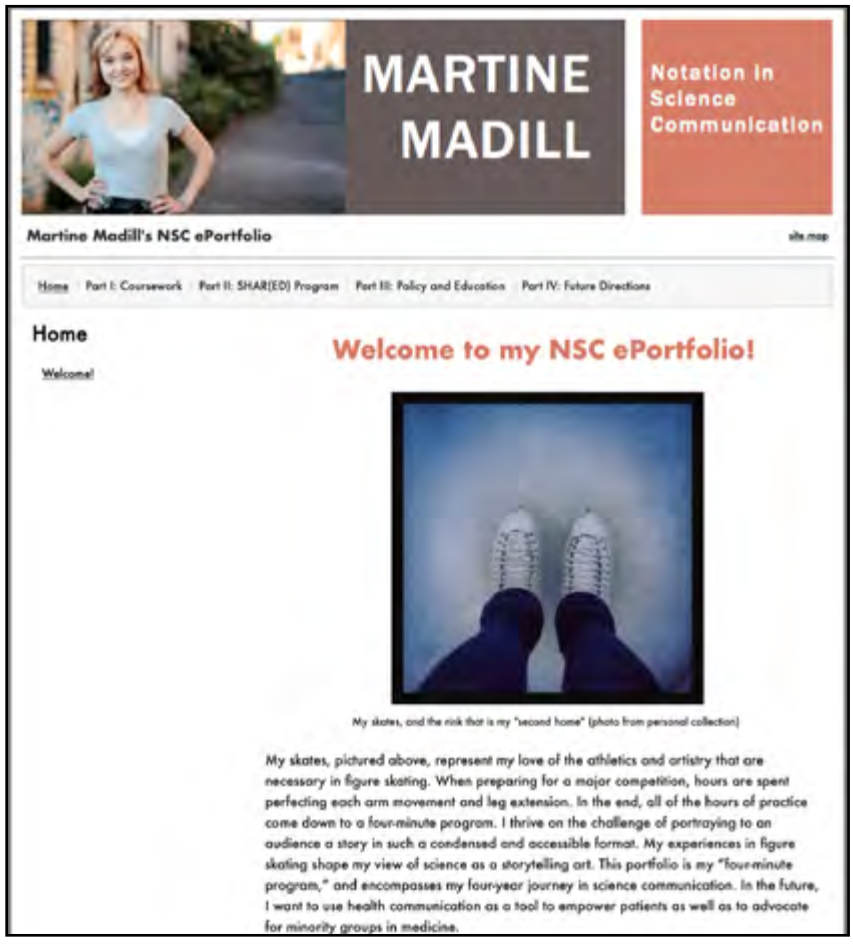

Figure 2. Classic Digication ePortfolio Illustrating the Common Style Adopted by Students

The new layout options provided additional creative and reflective inspiration for students. Students appreciated the ability to easily group sets of artifacts, and most students grouped artifacts in their final ePortfolios. However, as they worked with this new layout, students realized that they needed to write additional reflections to give context and meaning to artifact groupings. In doing so, students made deeper connections between different elements of their learning across the program and were able to make better connections to the program learning outcomes. For example, students commonly

grouped artifacts into those communicating to technical audiences and those communicating to non-technical audiences, which represent two of the program's learning outcomes. Many students also chose to include a "future directions" page, where they reflected on applying what they had learned in the NSC to future academic or professional contexts. Ultimately, these additional reflective categories that students had developed through experimentation with the new platform were adopted by the program and built into the curriculum.

Overall, students appreciated the expanded organizational options of Classic Digication over Pathbrite, but they still felt the design choices were limited. As a program, we were open to other options that would both improve student engagement with the platform but would also better serve our archiving needs.

Spotlight [PWR 99A Only, Spring and Fall 2016]

Through meetings with the Stanford Library archiving team, we learned about a new platform option, Spotlight. Originally designed to create curated online exhibits of digitized library collections, Spotlight was a homegrown website-building tool developed by the Stanford Libraries, and it seemed like the platform might be appropriate for student ePortfolio production. We were excited about the option to build on a platform that we thought we'd have more control over since it was a local operation. We also saw potential for student developers to work on the platform and for students with the technical savvy to contribute to the ongoing, in-house production and development of the tool.

Similar to Pathbrite and Classic Digication, Spotlight did not require that students have any experience with coding or web development. The platform was "drag-and-drop," but with some additional flexibility around fonts, color choices, and images. Like Classic Digication, there was a set menu structure that students had to use, and each Spotlight portfolio had a default header image with Stanford branding (see Figure 3A). Additionally, since the platform was designed for use with the SDR, students would be able to pull their ePortfolio artifacts from the SDR itself; there was no need to host the students' content on outside servers to then back-up the content in the repository again for archiving purposes.

However, students still had to work within a menu of choices, many of which constrained the ways in which they conceived of the hierarchies, relationships, and connections among their artifacts. Many felt frustrated that they couldn't modify design components like the body text's font size or color. While students could "drag-and-drop" elements, they couldn't modify the site's CSS in the way that they could in Classic Digication. And while Spotlight was an "in-house" solution, our librarians often did not have the capacity to support our students on-demand in the way that a company with technical support specialists could offer 24/7 technical support.

To support the integration of Spotlight into our courses' curriculum, we collaborated closely with the library, specifically the librarians who built Spotlight, to create "How To" activities and to help students understand the value of the platform. Given that this platform was still in beta, even within our institution itself, we constructed formal surveys and evaluations to collect student perceptions of it. We learned from these surveys that students often found Spotlight constraining in terms of its design limitations and that few students fully saw the value of the integration with the library's services. Even though a platform like Spotlight provided our institution and our program with benefits that were visible infrastructurally, these benefits did not necessarily translate to our students and their needs or interests.

Returning to Digication, Adopting New Digication [2017-Present]

Responses to student surveys and individual student experiences with Spotlight compelled our program to move back to Digication as an ePortfolio platform in 2017 so that students could have the option to control the visual

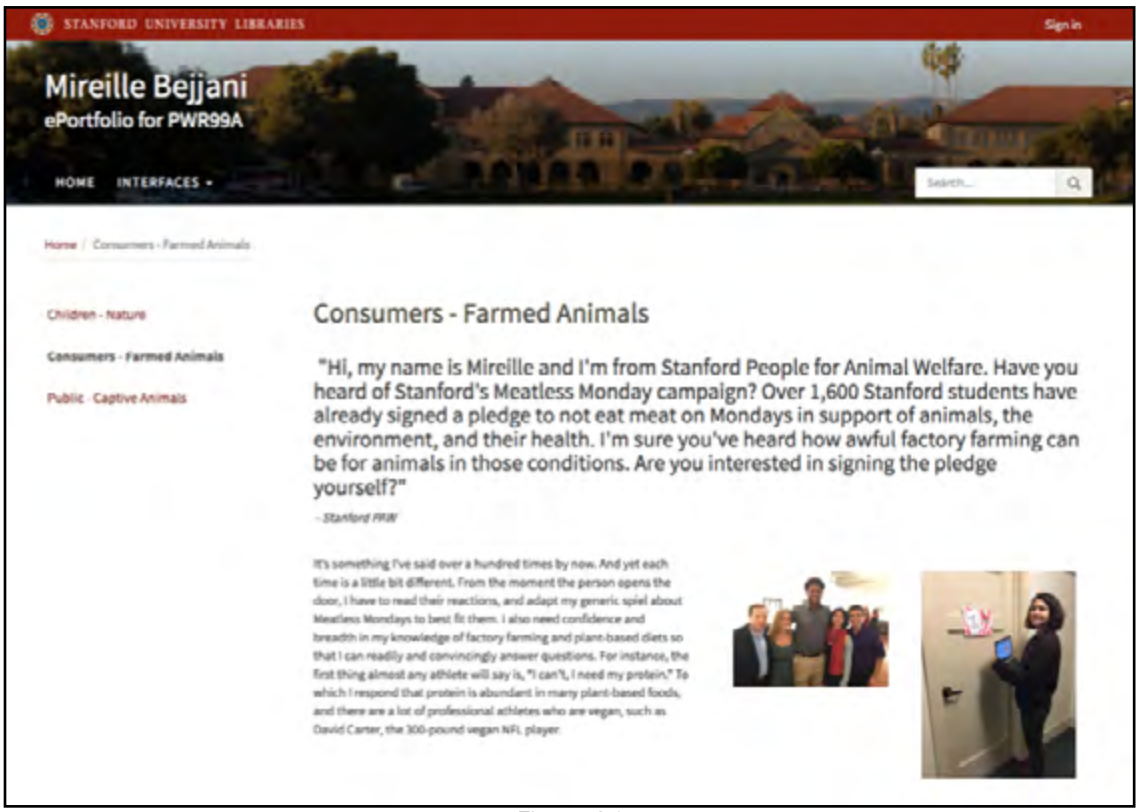

Figure 3A

Figure 3B. Sample Page Created by a Student in Spotlight (A) Compared to Nw Digication (B)

appearance of their ePortfolios more easily. During this transition, our program discovered that Digication had updated their platform to accommodate an even more flexible visual design than its former layout had allowed. Specifically, the New Digication platform was a drag-and-drop ePortfolio design platform where students could create and design their content in in a parallax scroll layout. A parallax scroll is a website design where information is navigated by scrolling through a page rather than clicking through menus. While the new Digication pages still had a set menu at the top of the page, students could create visual slides or sections of information where different components, like text, visuals, and multimedia, were part of a dynamic long scrolling layout (see Figure 3B).

In Classic Digication, creating an exportable version of the ePortfolio was technically challenging, but we discovered that the designers of the New Digication had developed an easy way for students to export their ePortfolios on their own by selecting a "download" button, which created a zip file with the static HTML versions of their ePortfolio available to access. The zip file generated from the New Digication platform could then be easily uploaded to the Stanford Digital Repository to ensure the long-term archivability and access to the students' capstone projects.

The New Digication seemed to offer much of what we were looking for from our ePortfolio platform: a space where students could customize their ePortfolios to individuate their work without needing to learn coding skills and adjust their privacy settings so that their work would either be visible to the public or simply private within the university community, while also allowing them to archive and export their content easily. The major limitation we faced in our pivot back to Digication in 2017 was that the new platform was in beta when students first began to adopt the platform again. As a result, students encountered frequent bugs and technical challenges at the beginning of the process. While students were resilient in the face of technical challenges, we saw that making a programmatic change at the same time a platform was making its own internal changes was a challenge. The frequent technical hiccups changed the conversations that occurred with students to be more about technical troubleshooting than about the reflective work we really wanted students to engage in during the ePortfolio design process.

Riding out the technical details ultimately proved worthwhile, for once we settled on using New Digication, we finally had platform consistency across the various sections of our two courses, Program in Writing and Rhetoric (PWR) 99A and 99B. Knowing that all of our students would use New Digication for their portfolios moving forward rather than working with students across Spotlight, Classic Digication, and even Pathbrite, we could pivot the focus of our classes to be about creative and reflective portfolio development rather than solving technical issues or errors. As instructors, we could engage students in activities about site design, creating visuals, and implementing multimedia communication, knowing what the limitations and strengths of the platform were. In other words, we could invite students to engage in reflective work not only at the level of text-based written reflections but also at the level of multimodal design.

Given our two-course structure, we decided to adopt a more scaffolded approach to portfolio development as well. When our students were working in Classic Digication and Spotlight, we asked students to complete a full draft portfolio from scratch in the first of the two courses. However, when we moved to New Digication, we decided to make the first course sequence's end project a portfolio built from a Digication template so that students could focus more on the reflective process than on the design components. By the time students enrolled in the second course of the sequence, they could then take their template as the foundation and customize it to become their own original work. This sequence allowed our students to foreground the reflective work in the first course

and then to see the reflective and the design work as paired in the second.

We noticed that within our portfolio development courses, students copied and emulated design choices more frequently when there was platform consistency across our courses. We appreciated this design emulation, as it suggested to us that students were collaborating to form a community of inquiry that involved the sharing and remixing of knowledge (Garrison et al., 2000). We saw design emerge as a component of social engagement. Even as their writing and reflective work was individual, the shared portfolio platform created space for students to form a community of portfolio practice. While some students resisted using a platform with design constraints, like Digication, we noticed that when students worked within a shared platform, they could more easily problem-solve and overcome challenges together, allowing a collaborative production spirit to emerge.

As of this article's writing, we've found that New Digication remains our best solution for three reasons: students have agency to decide how visible their ePortfolio is, students have design flexibility within productive limits, and students can store a static version of the ePortfolio easily within our institutional library's digital repository. While covering the institutional costs of Digication remains a challenge for our program, we continue to advocate for its use in order to help our students meet our program's learning outcomes.

Student Choice Platforms [2018 and 2020]

Even though Digication is the platform we explicitly teach within our courses, some students make special requests to choose a different platform. As instructors, we assess the students' request for an alternative and grant it depending on the students' justification. Students who choose a platform beyond Digication typically have technical skill in web design that they'd like to showcase as a component of their ePortfolio or feel strongly that they'd like to use their ePortfolio for an audience that would find a portfolio designed in a private, proprietary platform, like Squarespace or WordPress, more legible.

When students decide to move outside of Digication, we are unable to support their technical challenges at scale. With Digication, we can rely on the platform's technical support team, but we can also troubleshoot concerns with our own instructors and student community in-class. While students who choose options beyond Digication tend to be less concerned with technical support, we help them understand that they will largely be troubleshooting or problem-solving on their own. Students' individual troubleshooting efforts tend to limit their engagement in the class community problem-solving, reducing their collaborative engagement.

Depending upon the platform that students choose, archiving evidence of the students' work is a bit more challenging. In the case of a student's hand-coded ePortfolio in 2018, we unfortunately did not take proper archiving measures with the student who built her website on a Stanford domain. Since the student graduated from Stanford, she lost access to her domain space, and we were unable to get back in touch with her after graduation to get access to the files she coded to re-host them. For students working in a proprietary platform like Squarespace, exporting the design and the content is often not possible, especially since proprietary platforms often want to "own" the design (especially when students use pre-designed or pre-purchased templates). The templates and designs within proprietary platforms run into challenging intellectual property issues insofar as private, non-educational platforms may not want students to store or archive copies of designs that students may not have originally created. As of this article's writing, we have not yet fully addressed these challenges for maintaining proper archives of ePortfolios created within third-party platforms. However, our solution for the future is to ask students working outside of Digication to create screen-capture videos walking through their ePortfolio as it exists at the time of their graduation so that

there remains some evidence of what their ePortfolio was like at the time of development.

The biggest impact of having students work outside of a shared platform is the inability to participate in the shared class community around technical problem-solving or collaborative design sharing. As instructors encouraging portfolios as a means both of cultivating self-reflection and community building, we prefer that students use a shared platform, but we also recognize the importance of giving students flexibility to work within a platform of their choice if they have a compelling reason to do so. Given how important students' digital work is towards building a digital presence, we respect the need to give students agency over what they produce for their ePortfolio capstone projects.

Conclusion

As institutions consider adopting ePortfolio platform pedagogy, it is important to acknowledge the immense administrative and instructor labor involved not only in choosing a platform but also in assessing it within the context of the student experience. While there are numerous technical factors around privacy, accessibility, and technical support that rightfully influence decision-making about ePortfolio platform adoption, the curricular ramifications have tremendous impact on the success of ePortfolio adoption. If the platform does not meet student needs or is poorly aligned with the goals of the ePortfolio program, then ePortfolio pedagogy cannot thrive. We cannot think of ePortfolio platforms as invisible containers for student work. Rather, we have learned to consider ePortfolio platforms a key component of advancing effective ePortfolio pedagogy. An informed institutional platform choice considers how the platform's affordances and constraints impact curricular execution.

In our experience of using four ePortfolio platforms over four years of ePortfolio pedagogy at Stanford University, we've determined three key factors that contribute to successful ePortfolio platform and pedagogy alignment: collaboration, continuity, and agency. Encouraging collaboration among students on learning how to use an ePortfolio platform is pivotal to successful ePortfolio platform adoption and curricular integration (Alberts & Keller, 2016; Clark, 2010; Wang, 2009). Although a proprietary ePortfolio platform, like New Digication, may not allow for full creative freedom, like a third-party website building tool, the platform's constraints created useful learning moments for our students. Students within our classes worked together to find solutions for the limitations they perceived and, as a result, created a supportive class community to help one another advance their goals for expressing their ideas and learning within the ePortfolio. This collaboration may have been formed with more flexible platforms as well, but we found that having students start with the same experience, and then have room to customize and individualize their work within that shared experience, was an ideal balance of leveling the technical "playing field" and giving space for creative expression.

It was valuable for our program to assess different platforms over time, but picking one platform and maintaining continuous use of that platform had tremendous pay-off in terms of a stronger curriculum and a more valuable student experience. The longer that our program stuck with one platform option – in this case, New Digication – the wider the array of examples we accumulated and the more inspiration students could glean from seeing prior years' examples. When we taught cohorts of students who had all used different platforms, we saw that there was greater confusion about not just what the end project for the ePortfolio should look like but also what its purpose was and what it was intended to accomplish. Once our student cohorts all used the same ePortfolio platform, from their first portfolio preparation course experience to their final production of their ePortfolio, we noticed that students had a clearer understanding of the task at hand and could create stronger reflections and better-curated collections of artifacts as a result. Platform continuity contributed to

better student learning outcomes as evidenced by stronger ePortfolios produced within our program.

Finally, giving students some agency in the design and visibility of their ePortfolios is key to successful adoption. Proprietary ePortfolio platforms may not give students as much flexibility as a hand-coded portfolio, but some ePortfolio platforms, like New Digication, give students options for making design choices on the front-end that may matter to them most: choices about layout, visual design elements, and navigation. Proprietary ePortfolio platforms have the even greater benefit of making it clear to students where and how they can make their platforms visible. Given the reality that producing digital work contributes to students' digital presences in a variety of long-lasting ways, it is important that the platforms we choose give students clear choices about who will see their work and for how long. Our students make themselves tremendously vulnerable when cataloguing their learning experiences in ePortfolios, so it is all the more important they understand clearly who can see their work. Choosing a consistent platform with clear privacy protections for our students gives our students the agency to determine how they present themselves and to whom.

Determining an ePortfolio platform is not an easy task, and not all ePortfolio platforms are equally as valuable for specific institutions' goals, needs, and students. Recognizing that the platform is not simply an invisible container, but rather an influential change agent that can have long-lasting ramifications on an ePortfolio program's success is a first step towards making choices that help you and your students practice reflective and creative thinking.

About the Authors

Jenae Cohn writes and speaks about digital pedagogy and online teaching and learning. She currently works as the Director of Academic Technology at California State University, Sacramento, and has held prior roles at Stanford University and the University of California, Davis. A trained writing instructor, Jenae has taught online, hybrid, and face-to-face composition courses and supports faculty in the development of courses across modalities. She offers workshops on topics related to online instruction, humanities pedagogy, and digital literacy.

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Technology-infused ePortfolios Empower Lifelong Learners Through SUNY #EmTechMOOC

Authors: Roberta (Robin) Sullivan, Cherie van Putten, Christine Marchese, & Nicole Simon
Review Editor: Julie McCarroll

ePortfolios are expanding in scope, practicality, and popularity. One program that supports the creation and implementation of ePortfolios is a Massive Open Online Course (MOOC), created and managed by the State University of New York (SUNY). This course, Exploring Emerging Technologies for Lifelong Learning and Success (#EmTechMOOC; (http://suny.edu/emtech), is a voluntary online learning opportunity that has been embraced by participants from around the world.

#EmTechMOOC is targeted at college students, faculty, current and career-seeking professionals, and anyone from across the globe who is interested in keeping pace with the constant evolution of digital technology. The MOOC enables participants to build lifelong learning skills and develop their mastery of the 4Cs of 21st-century learners: *Communication, Collaboration, Creativity,* and *Critical Thinking*. Participants learn about the value and implications of using freely available emerging technologies for both personal and professional growth. An ongoing activity in the MOOC is the creation of an ePortfolio that features artifacts developed through hands-on Discovery Exercises as participants explore freely available emerging technology tools.

EmTech is an online discovery learning opportunity to explore and reflect on innovative and creative uses of emerging technologies. This project is a strong example of how technology expands the scope and vision of ePortfolios. It introduces tools and technologies to enhance existing skill sets as well as build new ones. There is no cost to participate, but a Coursera certificate is available upon completion for a small fee.

EmTech is an online discovery learning opportunity to explore and reflect on innovative and creative uses of emerging technologies.

EmTech consists of two associated parts: #EmTechMOOC and EmTechWIKI. #EmTechMOOC is a Coursera-based MOOC that provides a supportive online learning community and guides the participants through learning modules covering 21st century skills. EmTechWIKI is a socially curated collection of freely available tools, tutorials, and resources. The wiki supports the Discovery Exercises in the MOOC and can be referenced as a lasting resource after course completion.

As part of the learning experience, participants complete hands-on Discovery Exercises to

explore established and emerging technology tools and resources. Within each module, participants select a technology tool or resource from the wiki that aligns with the module's topic and with a specific learning objective that aligns with their needs. They then create and share a digital object as an artifact and write a personal reflection that they post within their ePortfolio.

The #EmTechMOOC is structured around five modules. The modules follow the themes of lifelong learning and the 4Cs mentioned previously. Although the Coursera MOOC platform requires that the names of the modules be Week 1, Week 2, etc., participants are encouraged to follow a timeline that works best for them. A participant could complete the course in a single sitting, or they could take longer than five weeks. In general, it takes about an hour to complete a module; however, if someone deeply explores the wide variety of resources that are available or they get deeply entrenched using the technology tool or resource they selected, it is not uncommon for participants to spend much more than an hour in each module.

The creation of an ePortfolio is a driving factor within the five modules of the MOOC. In the first module, which goes into depth about lifelong learning, an introductory page is created to share information about the ePortfolio creator. In this first module, participants are also required to complete the first of four Discovery Exercises. The following three modules are based on the 4C's of 21st century skills. Module 2 combines communication and collaboration followed by Module 3 on creativity and Module 4 on critical thinking. The tool/resource that they explore in each unit needs to relate to the module theme, but they are able to select any technology tool or resource, either from the EmTechWIKI collection or the Internet, that fits the theme. An ePortfolio page is created for each module, and these pages will contain a short text reflection and a visual artifact that relates to the tool or resource. Optimally, the artifact is a digital object (e.g., audio file, video, infographic) that is created using the tool or resource explored. Minimally 2 of the 4 artifacts need to be something that the portfolio author created. Peer-review activities provide participants with actionable feedback on how they can improve their ePortfolio about halfway through the course and in the fifth and final module of the MOOC.

Peer-review activities provide participants with actionable feedback on how they can improve their ePortfolio about halfway through the course and in the fifth and final module of the MOOC.

This article provides a few scenarios drawn from participants' experiences as they experimented with various technology tools. Members of the EmTech team recently published a book chapter that shares how faculty are using the MOOC to integrate emerging technologies into their teaching practices (Sullivan, et al., 2020); therefore, in this article, we focus on non-faculty participants. The following scenarios will inspire others to consider how they might use an ePortfolio, and they provide a glimpse into the deeper experiences of a variety of learners who participate in #EmTechMOOC. This cross-section of participants features ePortfolios, artifacts, and reflections. We will share how this voluntary online learning opportunity has been embraced by participants around the world. The following ePortfolio examples feature an undergraduate student, a graduate student, an academic instructor, and professional staff within and external to academia.

Undergraduate Student

Anarghya is a sophomore at the University at Buffalo who is majoring in Computer Science and Mathematics. He shared that this experience was the first course that he had ever participated in through Coursera. He began reflective summaries with the exploration of a TED Talk video (Figure 1). The video he chose talked about the education system in India. He explained that he was from India, and he has come to the U.S. to continue his education. He hopes to return to contribute to the betterment of the education in his home country. He continued his explorations in the second module through the use of Padlet (Figure 2), with fellow students sharing ideas and making decisions about class projects. For the Creativity Module, he used the Canva graphic design platform to create a flyer, which he posted around his campus to alert others to the events his club was sponsoring. For his Critical Thinking artifact, he used the website WheelDecide to help him decide among the extracurricular activities happening nearby that he would participate in. Anarghya concludes his summary reflection with the following statement: "Learning never ends and this course just made me realize that with proper tools and planning, everyone can keep learning something new each day of their lives."

Anarghya's ePortfolio Page

Click the button above or view Anarghya's ePortfolio at https://opensuny.digication.com/anarghya-das

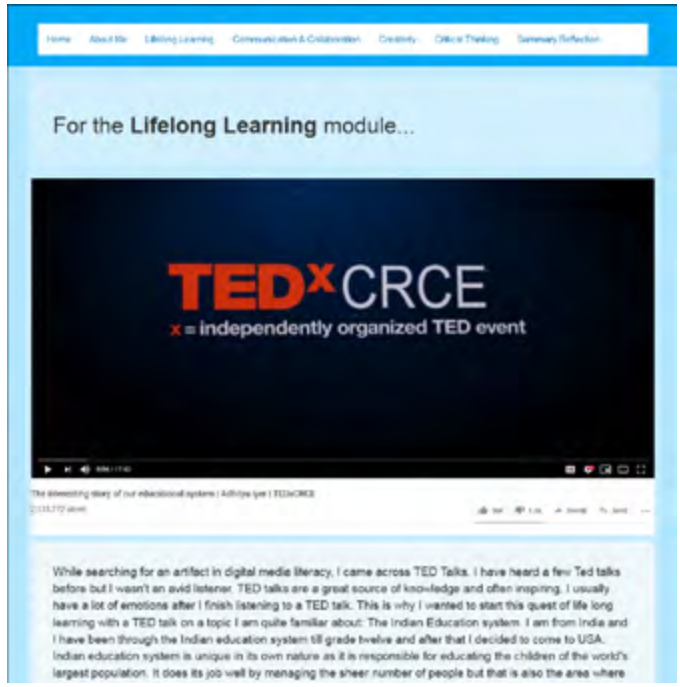

Figure 1. Anarghya's ePortfolio Lifelong Learning Reflection and Artifact About TED Talks

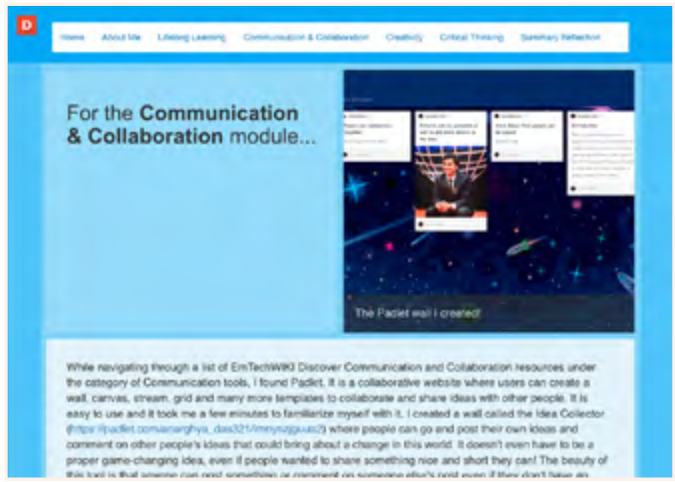

Figure 2. Anarghya's ePortfolio Communication and Collaboration Reflection and Artifact About His Use of Padlet

Graduate Student

SCOTT is one of the earliest participants. He was inspired to join the MOOC by one of the faculty from the sponsoring university's medical school. Scott is in his final year and has since graduated and moved on to begin his residency. For his exploration of Lifelong Learning he shared the EDUCAUSE Learning Initiative's article titled, "7 Things You Should Know About Creative Commons." For the second module on Communication and Collaboration, he explored Wikiversity. For Creativity, he decided to learn more about gamification and explored a product called Kahoot (Figure 3). In the Critical Thinking module, he shared a journal article and spoke about the video titled, *What the Internet is Doing to Our Brains and How that Affects Our Thinking*.

Scott had participated in #EmTechMOOC at the same time he participated in a second SUNY-offered professional development online opportunity. In follow-up communications with Scott about the two SUNY professional development courses, he said, "You get out of it what you put into it. For me, I certainly learned a lot. I felt like both courses taught principles and behaviors that I could incorporate into my future career as a learner and an educator."

Scott's ePortfolio Page

Click the button above or view Scott's ePortfolio at https://opensuny.digication.com/scott-ketcham

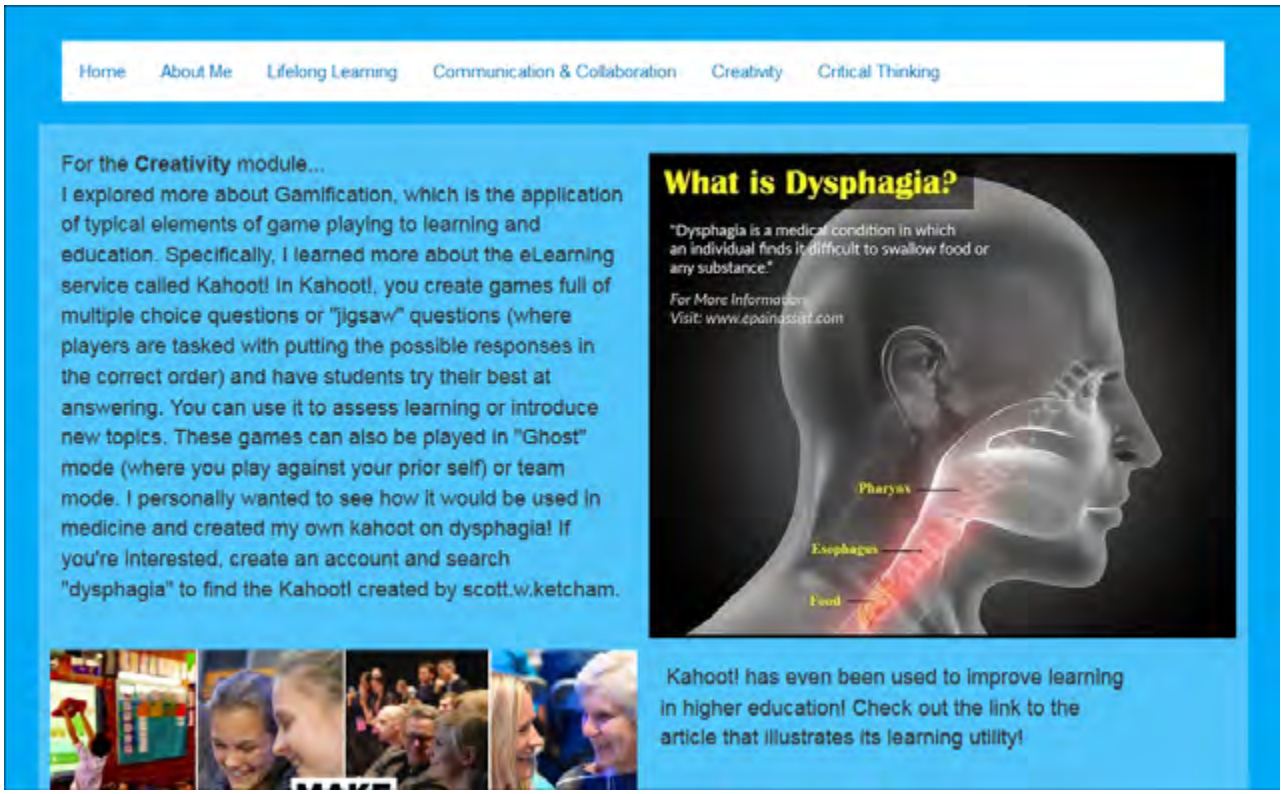

Figure 3. Scott's ePortfolio Creativity Reflection and Artifact About Using Kahoot for Gamification

Academic Instructor

DANIELA is a high school chemistry teacher from Romania. She mentions in her ePortfolio that she participated in the MOOC to add to her knowledge base about new technology tools to make herself a better teacher (Figure 4). Her original artifact involved the creation of a poster using the Canva graphic design platform (Figure 5). She initially created her poster in her native language. In response to feedback, Daniela made her poster available in English, thereby eliminating the need for translation and improving understanding of her portfolio. She gladly made the additional version to help the global participants view and appreciate her work. Her artifact for the Communication and Collaboration Module included a reflection about her use of Wordwall to create games and tutorials for her students. She also talked about how she used Padlet in her teaching. She also created an animation using PowToon, which was a task outside of her prior experience.

Daniela proudly shares her #EmTechMOOC digital badges that she earned on her ePortfolio and within the social media channels connected to the MOOC to showcase and demonstrate her accomplishments. After completion of the course, she has volunteered to become a Mentor to provide participants with support, encouragement, and advice as they build their ePortfolios. She continues to add new artifacts and reflections to her ePortfolio, and she has also taken additional steps to contribute new resources to EmTechWIKI. Daniela describes the process of participating in EmTech as a learning opportunity that takes participants out of their comfort zone and motivates them to discover new things. Daniela reflected on the #EmTechMOOC badges she earned by saying, "Each of them came with the emotion of recognizing a sustained effort that I made to complete a demanding course and, at the same time, full of satisfaction. I came to appreciate this capacity for self-analysis exposed in a language less comfortable for me."

Daniela's ePortfolio Page

Click the button above or view Daniela's ePortfolio at https://opensuny.digication.com/danielas-first-eportofolio

Figure 4. Daniela's ePortfolio Homepage

Figure 5. Daniela's ePortfolio Communication and Collaboration Reflection and Artifact Using Canva

Professionals Within Academia

HEATHER has taught World History as a visiting instructor for undergraduate students at the Singapore Institute of Management Global Education, which is affiliated with the University at Buffalo. Since her participation in EmTech, she has returned to the United States and begun a new position as an instructional technologist and instructional designer with the newly launched SUNY Online initiative. In her ePortfolio, she shared a variety of strategies for learning how to make instructional videos. In the first module, she explored a variety of tools. She reviewed the web resource titled, "The Ultimate Guide to Easily Make Instructional Videos" and decided to focus on the processes of script-writing and storyboarding (Figure 6). In later modules, she created animations using Explain Everything and iMovie to compile and edit her videos (Figure 7). She even used GarageBand to create music for her video. She posted her video on YouTube and also took steps to learn how to add captions to make her videos accessible. In the Critical Thinking Module, she talked about the video, "Paywall: The Business of Scholarship," created by Clarkson University professor Jason Schmitt. She describes the documentary as highlighting the challenges that relate to open-access and scholarship and reflected on some of the ideas that were presented in the video.

Heather's ePortfolio Page

Click the button above or view Heather's ePortfolio at https://opensuny.digication.com/hlbennett

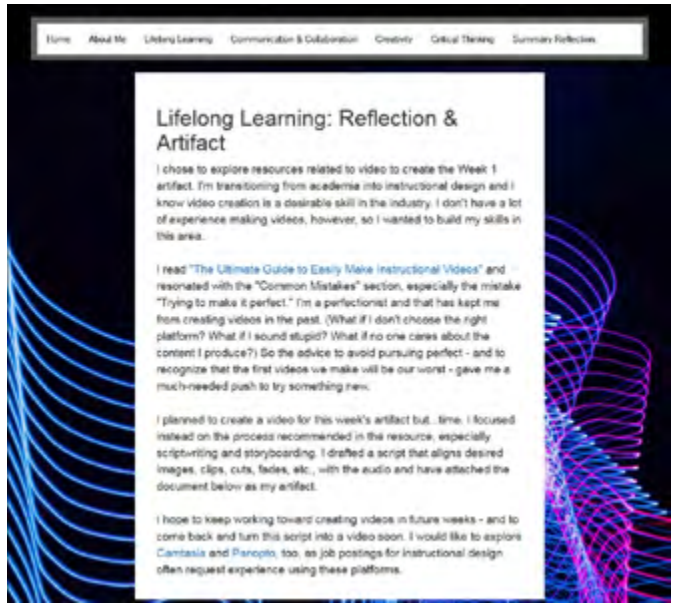

Figure 6. Heather's ePortfolio Lifelong Learning Reflection and Artifact About Reading the Article Titled "The Ultimate Guide To Easily Make Instructional Videos"

Figure 7. Heather's ePortfolio Communication and Collaboration Reflection and Artifact About Using Explain Everything

MARI is a professional staff member at SUNY Oswego. She is an accomplished self-published book author. Mari's experience in EmTech was a journey through the exploration of media. Whereas most participants post text-based reflections, Mari shared her first reflection using video. She shared a reflection about her lifelong learning and how the MOOC provided a challenge and had given her motivation to continue. In her video reflections, she shared insights about personal health as well as how she used video to communicate with family and friends scattered across the country. She continued exploring video options and recorded a vlog (a blog delivered via video) and podcast (Figure 8). Mari stated that she had not taken a course in almost thirty years, and she commented, "That did not stop me from learning on my own. For me, it's not a chore to learn new things. It is an adventure." Mari proudly displays her #emTechMOOC badges in her ePortfolio (Figure 9). The mindset that she displays through her portfolio clearly demonstrates the principles of being a lifelong learner.

Mari's ePortfolio Page

Click the button above or view Mari's ePortfolio at https://opensuny.digication.com/mariminiatt

Figure 8. Mari's ePortfolio Critical Thinking Reflection and Artifact Where She Talks About Wikipedia Research She Conducted for a Podcast She Is Working on

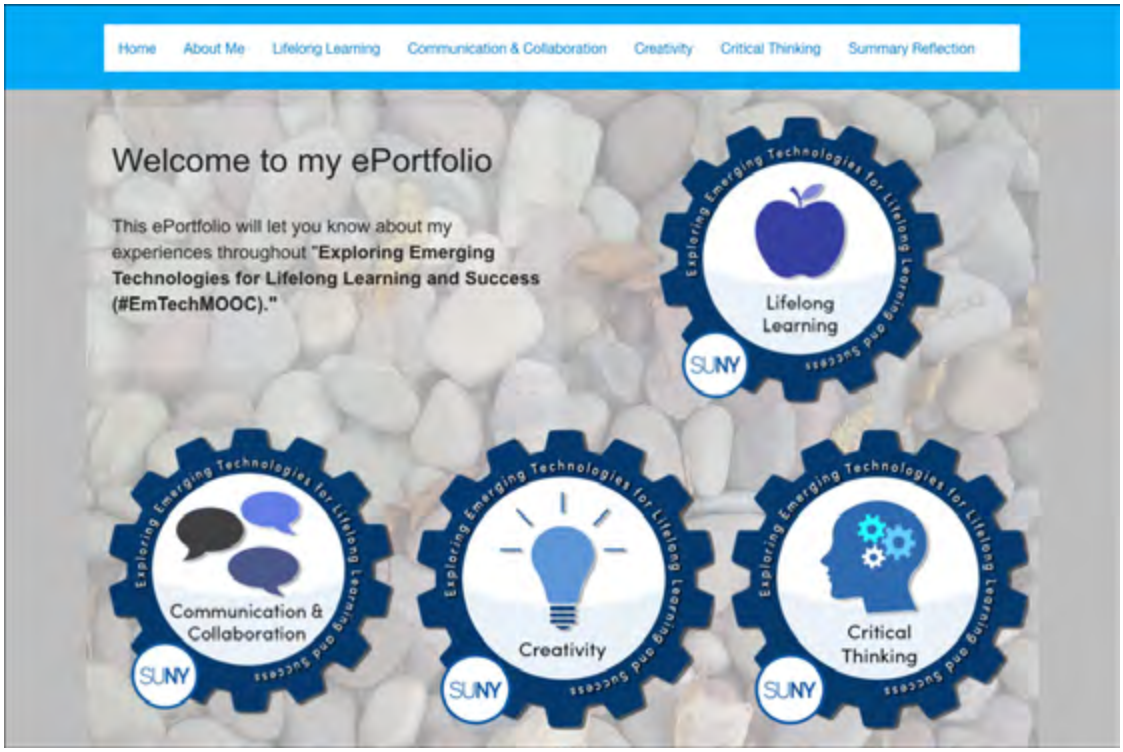

Figure 9. Mari's ePortfolio Lifelong Learning Reflection and Artifact About Reading the Article titled "The Ultimate Guide To Easily Make Instructional Videos"

Christina is a Staff Assistant at the University at Buffalo's Educational Opportunity Center. She explored resources about the importance of a professional digital identity/footprint. The resource from EmTechWIKI that she reviewed for the Lifelong Learning Module was a video titled, *Four Reasons To Care About Your Digital Footprint*, created by the Internet Society. She describes the video as an overview of why you should care about your digital footprint. This video also entices viewers to learn the proper precautions to protect their digital footprint and explore additional resources provided through their website. As a part of her Discovery Exercise artifacts for the Communication and Collaboration module, she created a webpage using Strikingly for her and her sister to share stories based on their travels and experiences. She mentions that they had planned on doing something like this for quite a while. Her reflection in the Creativity section of her portfolio shared information about Adobe Spark and how this platform would assist her to create simple projects and presentations (Figure 10). In the Critical Thinking section of her portfolio, she shared her exploration about using different calendar tools for different purposes: both her work and personal needs (Figure 11). Christina recognizes the value of being able to adapt to new and emerging technologies. She states that this is not just crucial in a work environment but also within every aspect of life. She reflected that "this program has definitely reignited my passion for lifelong learning."

Christina's ePortfolio Page

Click the button above or view Christina's ePortfolio at https://opensuny.digication.com/exploring-emerging-technologies1

Figure 10. Christina's Reflection in the Creativity Module Features Her Use of Adobe Spark To Create Projects and Presentations

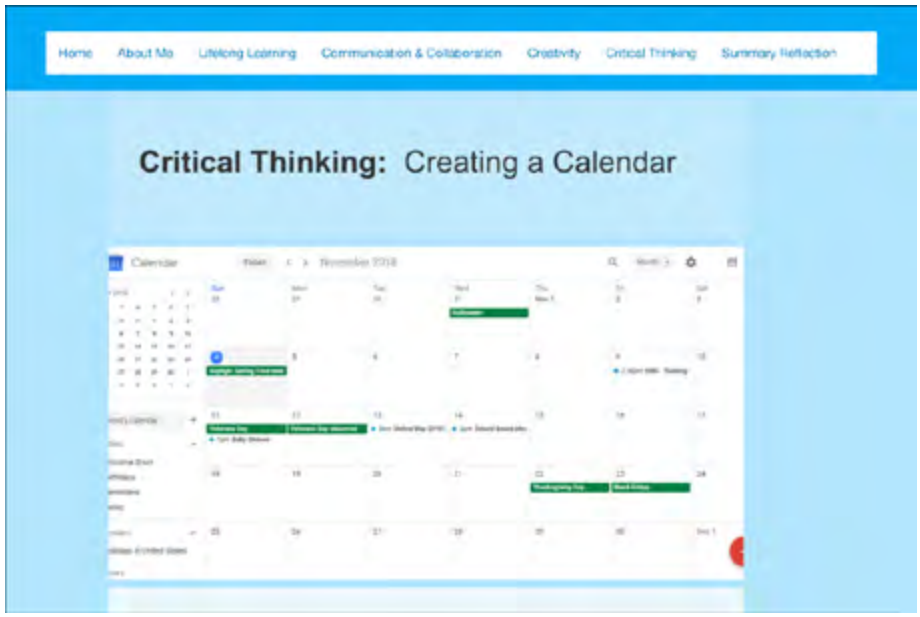

Figure 11. Christina's Reflection for Critical Thinking Focuses on the Use of Different Calendar Functionalities

Professionals Outside of Academia

SATISH is a trainer in the Singapore Civil Defense Systems. He has a background in Mechatronics, which is a multi-disciplinary engineering and mechanical system combination of robotics, electronics, and computers. Therefore, this participant comes into the EmTech learning environment with what might seem to be a very technical mindset. He shares a reflection about TED Talks, where he located a few that were relevant to his specific areas of interest. Another technology that he learned about and shared is Telegram. Telegram is similar to WhatsApp, a messaging platform for sending messages, video chats, and other forms of communication (Figure 12). He also explored the Bubbl mind mapping app.

There have been many enrolled participants who are trainers for the Singapore Civil Defense Force. This robust cohort activity shows that a learning opportunity shared among colleagues within an organization causes others to engage, enroll, and participate. Coursera currently participates in a partnership with the Singapore Civil Service College aimed at providing resources and support to develop and implement a cohort training model.

Satish's ePortfolio Page

Click the button above or view Satish's ePortfolio at https://opensuny.digication.com/s-satish

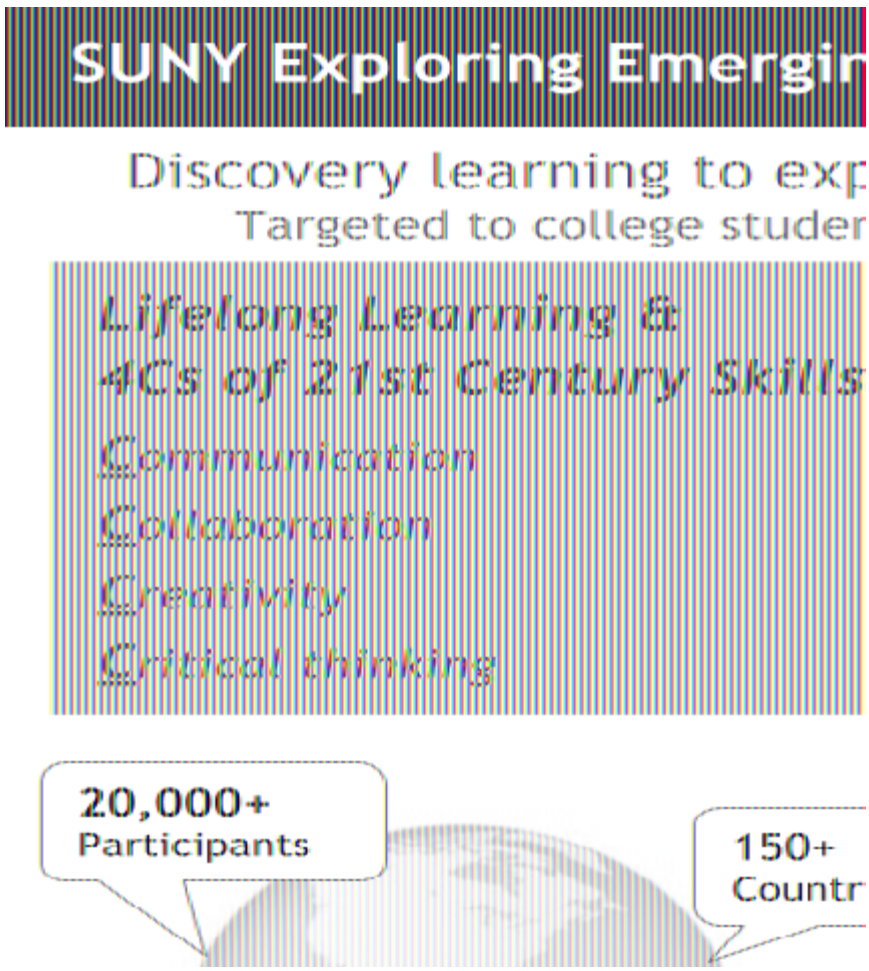

Figure 12. Satish's Reflection in the Communication and Collaboration Module Compared the Telegram App to WhatsApp

Phyllis is a personal banker who helps people with their online bank accounts. She describes herself as a person with a growth mindset. In the Communication and Collaboration Module, she created a WIKI, using it to manage projects and share files with her work team members. She describes the importance of tools that facilitate both real-time and asynchronous project work with colleagues who are located in different geographic locations. In the Creativity Module, she created a story using Pix-Stori. She described her experience using digital art, which is in contrast to traditional methods of self-expression, such as writing, art, music, and dance. She stated that "self-expression encourages innovation, helps process feelings, and builds connections between people." Phyllis's artifact for the final Critical Thinking Module was created using a Blogger account where she added her commentary about several additional tools and resources she explored through EmTechWIKI. Phyllis, like many of the participants who earn digital badges through the course, proudly features the badges that she earned in her ePortfolio. Below is an image of Phyllis's revised homepage that clearly displays her #EmTechMOOC Mastery Badge (Figure 13.)

Phyllis's ePortfolio Page

Click the button above or view Phyllis's ePortfolio at https://opensuny.digication.com/eportfolio-of-phyllis-behrens

Figure 13. Phyllis Predominantly Displays Her #EmTechMOOC Mastery Badge on the Homepage of Her Portfolio

Conclusion

These ePortfolio examples highlight the wide variety of people who have found value in #EmTechMOOC to support their personal, professional, and academic growth. The tools and platforms that participants chose show how each person is on an individual path and even while participating in the same course, they chose very different ways to reach their goals. The breadth and scope of the tools selected and how they have been applied by the participants shows that the MOOC is applicable to the field of education and beyond. Although the creation of ePortfolios is still not widely adopted throughout academia and within peoples' personal and professional lives, these examples show that once people understand the value and application of ePortfolios, there is tremendous potential to support serious lifelong learners.

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Nicole Simon, PhD, teaches General Science Studies courses in the Engineering/Physics/Technology Department at Nassau Community College. She holds a doctorate in Educational Technology Management and Instructional Design. Her research has focused on the uses of technology within the scientific disciplines and the use of virtual experimentation in laboratory settings. Nicole authored several articles on science and technology. She also is an avid user of ePortfolios in her courses for projects and assessment of capstones for program assessment. Nicole additionally is an Assessment Fellow who routinely publishes on the use of technology for assessment and critical thinking both in the STEM areas and through international education.

Cherie van Putten, MEd, Adult Education from Penn State University, is an Instructional Designer for the Center for Learning and Teaching at Binghamton University. She facilitates workshops for faculty and serves as a resource for faculty who want to pursue online and hybrid courses. Cherie holds a Master's degree in Adult Education from Penn State University. Her areas of interest include faculty development, creating learning communities, non-traditional learners, and distance education delivery. Cherie has served as co-PI on both the Tools of Engagement Project (TOEP): On-demand Discovery Learning Professional Development and #EmTechMOOC (Emerging Technologies for Lifelong Learning and Success). Cherie is the recipient of two SUNY Faculty Advisory Council on Teaching and Technology (FACT2) Excellence in Instructional Support Awards and two Open SUNY Effective Practice Awards.

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Be-ing, Doing and Knowing: A Speculative Care Through Constellations Model for ePortfolio

Authors: Brian Martin, Kathryn Coleman, & Tyne Sumner
Review Editor: Russel Stolins

Introduction

What if we told every graduate researcher that most of the skills they need for future employment (either inside or outside of academia) were already intrinsic to their research degree? Would they believe us? Probably not. These invaluable capabilities often include project management, critical thinking, technical skills, and the ability to conduct analysis, all sought after in a wide range of jobs. Yet despite this, the career pathway for graduate researchers is as nebulous and shifting as the constellations in Figure 1 (Dieterich, 2016).

Figure 1. Constellations near the Milky Way

Graduate researchers are currently not afforded a digital ecosystem that meets their personal, social, and career needs. We have identified that there is a gap to fill by helping graduate researchers discover, understand, and experience the skills they are developing (and would like to develop) throughout their degree. Providing this guidance becomes an act of care as well as a supporting and evolving digital ecosystem: "care through constellations."

We propose an aspirational digital ecology to support the professional learning and practices of graduate researchers during and post-candidature that mirrors the dispersed stars of a galaxy, one that is agile, relational, and dynamic. Post-Covid new normal education will need to be responsive but different. New maps and places need to be explored, contemplated and understood to showcase the intellectual and social fabric of the graduate researcher experience. Charting this constellation should be an act of care, provided in the interests of the "other" where the web of digital platforms weave, resolve, and reform around "be-ing." A digital ecology visualizes multiple career options and pathways simultaneously and tells a compelling story about an individual's be-ing, doing, and knowing. This speculative care through constellations model affords new ways of fostering engagement through wayfinding and belonging in digital places.

New Horizons in Graduate Portfolios

This speculative futures idea began in the AAEEBL Shark Tank. Mid-winter in Australia during the height of the Melbourne pandemic lockdown, we pitched our concept. We proposed a care through constellations model for ePortfolio in graduate education as a space for wayfinding and wayfaring (Coleman, 2018)

Figure 2. AAEEBL Shark Tank Pitch Slide

for the researcher as they traverse new digital sights. Digital placemaking provides graduate researchers with recursive opportunities to cite artifacts of practice and engagement while building a digital map of their travels across research and employment spaces. Our pitch is supported by a belief in ethical, agentic, and relational values in digital methods. This belief centers digital portfolios as sites of and for be-*ing* and be*coming*. The constellation model we propose is a public pedagogy (Sandlin et al., 2010) of care that unlocks the opportunity for connections to be drawn rhizomatically among multiple spaces, artifacts, and evidence of practice in varied and authentic data sites via placemaking (Coleman, 2017; Martin & Sumner, 2020).

We want to think about a new horizon of graduate research that moves away from the singular idea for ePortfolio in the researcher journey and instead toward one of multiplicities: the portfolio as constellation. We believe this model would connect the digital parts (Daly & Beloglovsky, 2015) of graduate research through playful, creative, sustainable, agile, responsive, and supportive learnings over time. We build on Nakata's (2007) cultural interface, presenting a digital turn that prioritizes the need for the intersection of different knowledge systems and systems of thought to develop new practices and pedagogies in graduate research programs. As Nakata (2007) suggests, the online environment has reconstituted the balance between visual, oral, and textual modes of knowing and presenting information in a way that supports cultural perspectives and enables the sharing and telling of stories as knowledge.

The AAEEBL Shark Tank (see "Swimming with the Sharks" in this issue) offered space to explore this speculative model of care through the telling of stories that position knowledge as a public pedagogy. Our pitch slide, Figure 2, Mapping the New Horizons and Digital Ecologies (Dieterich, 2016) was co-presented in a generative forum in which to further our curiosity about the connections that many graduate researchers develop as they encounter fragmented digital sites during their years of re-search, often graduating with systems locked away, lost to expired emails or disconnected in

different platforms. The AAEEBL Shark Tank was itself a space of care, a place to pitch an aspirational model to support the professional learning and next practices of and for graduate researchers.

Care: New Horizons and Digital Ecologies in Practice

One way of theorizing this ecology of cosmic proportions is through imagining the experience of be-ing-a-post-graduate-researcher, one where be-ing in this world with past selves, current cares, and potential futures leads us to the aesthetic experience of occupations as ways of *"be-ing, doing, and knowing,"* which causes "items of information to fall into order with one another" (Dewey, 1916, p. 362; Quay, 2013, p. 184). As we discover, the many cares of graduate researchers may peer through the void and begin to cluster into a web of digital platforms through which they experience and narrate their occupations as seen in Figure 2 (Gregory, 2000).

Throughout a graduate researcher's candidature, multiple occupations are undertaken, for example: teacher, consultant, project manager, editor, data specialist, among others. However, these distinct occupations and the skills acquired during them are not always apparent to a graduate researcher at the time. Therefore, our role as educators becomes one that helps graduate researchers to discover occupations of "significant interest" by shifting the narrative of outcome-focused research to a meaningful ontological experience, one that foregrounds "being-a-possibility" (Quay, 2013, p. 172 & 179).

This is an ecology of care in which the aesthetic experience matters as a public pedagogy. Dewey (1934) describes the character of be-ing as an aesthetic experience of totality where experiences of being, reflection, and the projects we undertake as learners can never be dislocated from one another within consciousness. We speculate that a constellation model explicitly asks graduate researchers to reflect on their past, current agency, and autonomy as a re-searcher and to imagine occupations that they might inhabit that provide portals to their imagined futures: possible, preferable, and plausible. We believe this model provides opportunities for care to flourish as graduate researchers are invited to reflect upon, curate and build the skills they need for future employment (either inside or outside of academia) through connecting disparate sites and sights. Moreover, our model builds emotional engagement through the mechanisms inherent in Dewey's (1916) definition of occupations where interest, self, and effort are inseparable. The emotionally engaged graduate researcher is likely to have feelings of belonging, experience flow states, and exhibit high "personal … interest directed toward a particular activity" (Fredricks et al., 2004, p. 63).

The care through constellations speculative model would be designed for graduate researchers to experience upon entering their higher degree program. By engaging in their research through an occupational lens, they learn to connect the loose parts of their experience; therefore, the model co-constructs an ontological space for graduate researchers to inhabit. Then, each phase from enrollment through candidature aligns to and foregrounds an element while recognizing that they exist simultaneously and cannot be decoupled – "in other words, knowing cannot be dissociated from be-ing and doing" (Quay, 2013, p. 191). Therefore, ontological shifts among being, doing, and knowing are continuously in play as the graduate researcher problematizes their occupation and negotiates their learning through re-search.

Conclusion

Twenty years ago, Seely Brown (2000) suggested that we needed a learning ecology model that is dynamic, diverse, self-organizing, adaptive, and conscious of the fragility of digital ecosystems. A digital ecology and curation culture that honors the fluid nature of be-ing and knowing in a trans/cross-disciplinary space is reified by our proposition. As such, we propose a digital portfolio ecology of authentic multiple sites, connected and responsive to futures

— possible, preferable, and plausible — to develop and support multiple professional sites and identities. Our care through constellations model speculates that the graduate researcher assumes an occupation(s) (chosen from provided personas or created) that is meaningful and aligned with their current cares. It positions the graduate researcher to reflect upon where they have come from, why they are here, and to make tentative explorations as to how their occupation(s) may open doors to unimagined futures. In doing so it draws together notions of care through inviting the graduate researcher to experience, from a phenomenological standpoint, the experience of experiencing throughout their candidature.

Acknowledgement

We acknowledge that we work on the lands of the Wurundjeri people who have been custodians of this land for thousands of years and acknowledge and pay our respects to their Elders past and present. We thank AAEEBL and the judges of the AAEEBL Shark Tank for providing space to explore this speculative wondering to build a model of care for digital portfolios through the telling of stories as knowledge as a public pedagogy.

About the Authors

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Constellation Image embed code

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Swimming with the Sharks: Ideas and Feedback from the Annual Meeting

Gail Matthews-DeNatale, Helen L. Chen, Candyce Reynolds, Kevin Kelley, Tracy Penny Light, Samantha J Blevins, Brandi Gilbert, Amy Powell, Roberta Sullivan, Cheri van Putten, John Turner, Lisa Donaldson, Allison Miller, Megan Mize

It was Spring 2020,

and — like the rest of the world — higher education was in the midst of an upheaval. AAEEBL needed to make some tough decisions about its July conference. Should we skip this year or go virtual? In the end, we decided to go all-in. A fearless team (Kevin Kelly, Tracy Penny Light, Candyce Reynolds, and Helen L. Chen) transformed the original 3-day conference into a month-long event. Each week featured a theme related to the idea of "Doing ePortfolio Right" that included kick-off conversation videos, synchronous and asynchronous participation opportunities, and the generation of a gallery of resources hosted in MERLOT.

With the conference underway, Helen began to mull over opportunities for creatively engaging participants in conversation with more experienced leaders in the ePortfolio and technology-enhanced learning community. In conversation with Gail Matthews-DeNatale, the idea of *Shark Tank: AAEEBL Edition* was born.

What was the intent of Shark Tank, beyond having pun-filled fun? Shark Tank provided participants with an opportunity to consider how they might put what they were learning during the conference into action in their local contexts, with the benefit of timely feedback from experts who have first-hand experience with the challenges and affordances of portfolio practice. In designing the event, Helen and Gail built on the work of others who have experimented with Shark Tank sessions.

In addition to fostering participant-expert dialogue, the purpose of Shark Tank was to help participants consider how the conference might inform their local practice. The event application form included questions that prompted and seeded thought about conference-to-practice transfer, for example, "How is your idea informed or inspired by what you learned at this conference?"

Seven people submitted applications to pitch an idea to the sharks, and two Shark Tank "dives" were scheduled at different times of the day to make the opportunity available to people in a wide range of time zones. All Shark Tank contestants received a gift certificate to Stylus Press, and the most compelling pitches from each of our dives were awarded an AAEEBL membership.

The emcee, panelists, and presenters went all out on the Shark Tank Dives, replete with puns and sharks galore on display in the Zoom backgrounds. Sessions were as fast-paced as a feeding frenzy, with participants having only 3 minutes to give their pitch, followed by 2 minutes of feedback from each Shark expert panelist. The contestants were:

- Samantha J Blevins, Radford University
- Steven Bookman, Pace University
- Kate Coleman, Brian Martin and Tyne Sumner, University of Melbourne, Australia
- Brandi Gilbert, Indiana University–Purdue University Indianapolis (IUPUI)
- Amy Powell, Indiana University–Purdue University Indianapolis (IUPUI)
- Roberta (Robin) Sullivan and Cherie van Putten, State University of New York
- John Turner, High Point University
- Elize Hellam, University of Puget Sound.

Following is a recap of the pitches, along with participant and panelist reflections.

The Contestants

Samantha J Blevins, Instructional Designer and Learning Architect, Radford University, Radford, VA

Pitch Overview: The Center for Innovative Teaching and Learning at Radford University hosts several Innovator Café communities per semester, providing a space for our faculty and staff to explore new and innovative ideas to inform their teaching and researching practices. We would like to enhance the Café process by building in opportunities to write down, think about, and integrate takeaway ideas into their practice.

Inspired by the Conference: Portfolio processes provide learners with opportunities to synthesize ideas and consider implications for practice. This could also be beneficial for faculty.

Desired Feedback: What materials will be engaging for faculty and "hook" them into participating. In the past the group has read *Small Teaching, Small Teaching Online, The Spark of Learning, and Learner Centered Teaching*.

Reflections: My hope from participation in the AAEEBL Shark Tank was to inquire about both the design of the Faculty Innovation Café (FIC) program and to gain ideas regarding how we could help our participants capture their own reflections on what they are learning and applying from the FIC experience. The sharks were most complimentary of the program and gave many great tips for encouraging participants to be reflective throughout the experience, including group and individual post-it note exercises during group discussions, reflective time set aside after each discussion for capturing the experience, and a capstone type project where participants put their thoughts and ideas into action.

Figure 1. Blevins Pitch

Brandi Gilbert, Director of the Life-Health Sciences Internship Program at IUPUI

What can I include?: Coaching Conversations Around Sharing Internship Work

Pitch Overview: Sophomores and juniors engage in on-campus internships with health/life science departments and campus-affiliated hospitals. Internships involve research, and students need to determine what is appropriate to include in their ePortfolios about their internship experiences.

Inspired by the Conference: The digital ethics sessions helped us continue to refine our thinking about the ethical considerations of what to include in a public portfolio, especially research that is proprietary and/or not yet formally published.

Desired Feedback: How can one person bring ePortfolio ideas such as ethics to scale across departments and internship placements? What can we do to help interns ask the right questions? How can we engage with faculty to help them also grapple with those questions and help students determine the best answers? How do we address the tension between less-formal reflective writing and technical writing — especially when both forms of writing are in the same ePortfolio?

Reflection: To stay organized at scale, the Sharks recommended we include a checklist of common ethical issues interns may face as part of each month's prompts. They also recommended crowdsourcing discipline-specific ethical considerations with the internship supervisors and suggested collaborating annually with the supervisors and interns to refine the prompts and checklists. Lastly, they shared ideas for increasing feedback from supervisors to interns throughout the year and providing examples of effective and ineffective writing practices to help interns understand when they should write technically instead of in a less-formal reflective tone.

The sharks were able to identify tangible steps we can take this year and additional changes to consider for the future. They were mindful of our staffing limitations and offered ideas that can be reasonably done while using the collective wisdom of our 60+ internship sites. Some feedback reinforced what we were already doing and gave us ways to improve in quality and efficiency. My big picture takeaway is to involve the internship supervisors more often. Their contributions to program requirements and content are important, and they can provide a new perspective when invited to give feedback on intern reflection work.

We have already integrated an ethical issues checklist in the monthly prompts for fall and covered general ethical considerations in ePortfolios and social media as part of intern orientation. We also shared the showcase link from the spring with supervisors and plan to create and share brief videos highlighting examples of intern ePortfolios from spring as they are planning final projects for their interns. We are considering our overall feedback plan and have a few opportunities to add supervisor feedback.

It was helpful to have the time and space to consider what changes I would make based on new knowledge and to test ideas against a panel of experts. It is easy to leave a conference with vague, general plans that never happen. Doing this pitch gave me the opportunity to integrate and apply what we discussed during the conference. I also feel accountable for what I proposed, and the timing of the conference made it easier to integrate ideas and feedback from the sharks into our planning for the year.

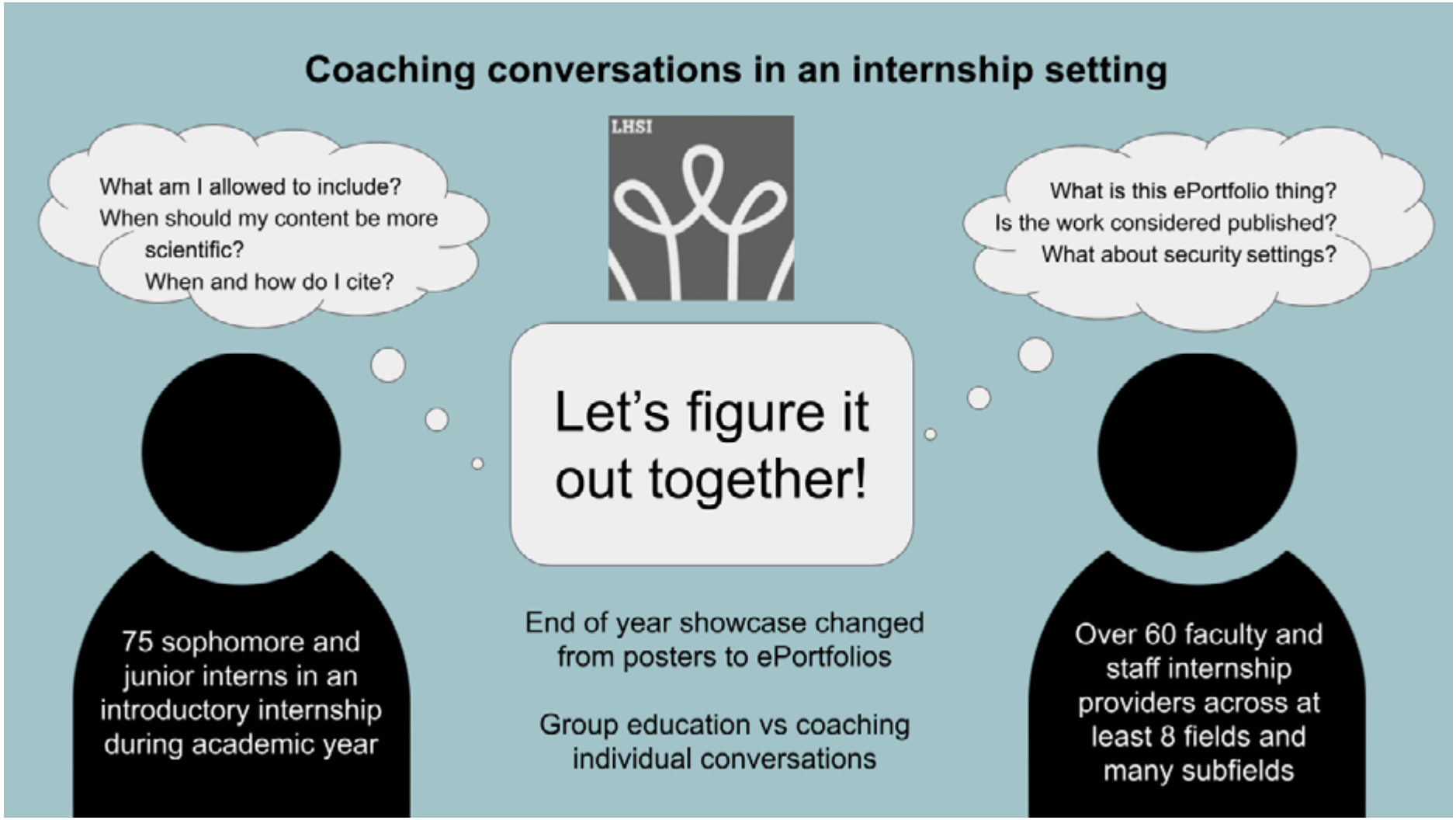


Figure 2. Gilbert Pitch

Elize Hellam, University of Puget Sound

Pitch Overview: The University of Puget Sound takes an opt-in approach to ePortfolios, with no established requirement. While we have strong, structured use of ePortfolio in many of our programs and courses, we want to encourage authentic, self-driven ePortfolio use as well. To support the development of individualized ePortfolios (both process and showcase), we have sought to minimize barriers by providing robust resources. We built a template library, hosted workshops, offered individual consultations, developed support documents, and collaborated with Career and Employment Services.

Inspired by the Conference: In this conference, presenters and attendees have shared the idea of being "in-practice" with their ePortfolio use. We want to model that reflective ePortfolio practice as well as invite students, faculty, and staff to join us in that practice. We are also drawing on the conference to consider how we support students in sharing their stories in showcase ePortfolios, balancing privacy, equity, diversity and other ethical considerations.

Desired Feedback: How to get students, faculty, and staff to use ePortfolio resources toward self-directed goals? There is also the consideration of ethics and whether we should take a more structured approach to ePortfolio development, for example through a course or workshop series.

Reflections: Taking the plunge and preparing a pitch for the Shark Tank event required a leap of faith, faith in the kindness and encouragement of the organizers, faith that I had ideas worth sharing, and faith that the feedback process would serve to refine and improve the plans I presented. Preparing my proposal forced me to organize my thoughts on the ePortfolio work we are currently doing on our campus, what we hope to do, and the underlying purpose driving those efforts.

I would summarize my experience with the Shark Tank feedback in three words: validation, inspiration, and motivation. When I expressed uncertainty about how to foster intrinsic motivation for ePortfolios and reflective practice, the Sharks' response was, "I think you're asking the 64 million dollar question." I felt an incredible sense of validation because these experts in the field also expressed that this was challenging work. I was not the only one who had not totally figured out the "right" answer. The Sharks encouraged the ways that we use templates and focus on reflection and choice. Feeling grounded and encouraged in what we are already doing helped me focus on how to go forward.

From the Sharks' suggestions and comments in the chats, I heard recommendations like hosting a contest, encouraging more forms of creative expression (beyond written reflection), encouraging student advocates of ePortfolio and events to share stories and elevate student voices, and continuing to honor the process and not just the final product. I was inspired by their ideas and able to return to my team with creative suggestions that we could build on. We were motivated to revisit plans we had considered too challenging (like an ePortfolio contest or event) and to reimagine opportunities like workshops on storytelling and creative expression through images, videos, and audio. I walked into the new school year excited about new possibilities.

Figure 3. Hellam Pitch

Amy Powell, Executive Director, ePortfolio, IUPUI

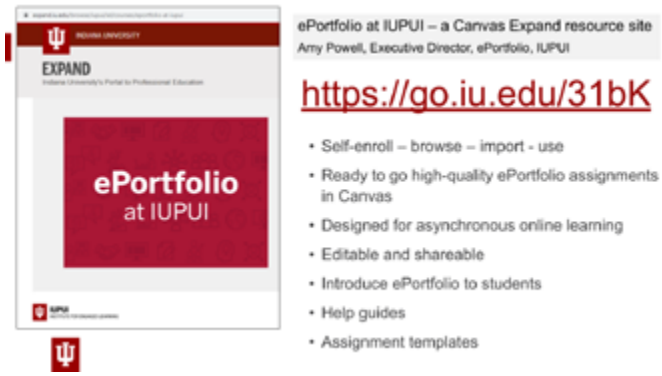


Figure 4. Powell Pitch

Pitch Overview: "Canvas Expand" is a course site that any faculty and staff instructor can self-enroll in, browse assignments and activities to use with their students, and import any of the resources into their own Canvas site to use. The "ePortfolio at IUPUI" expand site is designed for online courses, but the activities can also be adapted for face-to-face and hybrid courses. The purpose of the site is to remove barriers to faculty adoption of ePortfolio, especially in the context of pivoting to online teaching. See the following link for a site preview: https://go.iu.edu/31bK

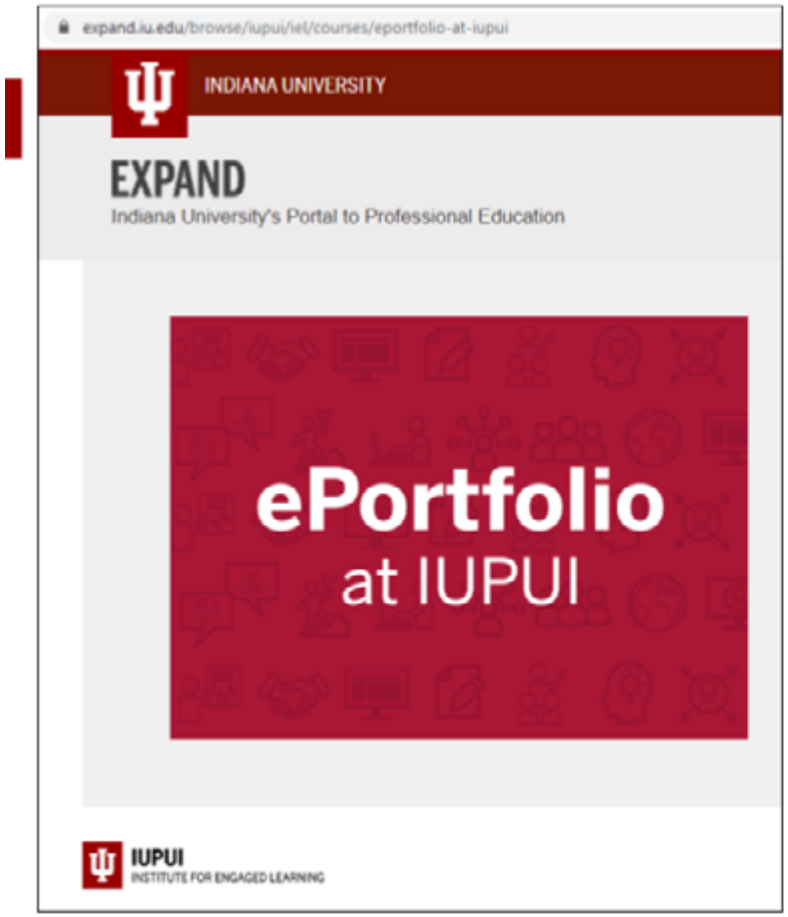
Inspired by the Conference: Designing for online learning requires clarity of thought, clear articulation of outcomes, tasks, and criteria (TILT model), and designing/delivering high-quality online learning leads to an increase of quality of in-person teaching.

Desired Feedback: I would appreciate guidance on ways to increase use of the resources. What's missing? What other resources could be created to complement the site? What are your ideas about using the resources to support high-impact ePortfolio practice on campus?

Reflections: The Sharks had fantastic suggestions to help improve the user experience with the "ePortfolio at IUPUI" Canvas Expand resources. The resources have quite a bit of text, and finding places to insert videos or other media was a great suggestion for humanizing the materials and modeling the types of content to include in an ePortfolio. Usability testing of the resources and providing models and exemplars of ePortfolios with the completed assignments were suggested to address the varying levels of comfort with ePortfolio and to help faculty envision how they would use assignments as well as demonstrate to students what to expect. Lastly, the Sharks had suggestions for professional development, including offering workshops that highlight faculty who are using the materials and interviewing students on their best experiences with ePortfolio.

Since the Shark Tank, several of the Sharks' suggestions have been put into action. I have been working with both students and faculty across campus to test the assignments. During professional development sessions I have begun working with faculty from different disciplines to share examples of how they have customized the templates to meet their learning goals. I am working with a student to develop an exemplar "demo" ePortfolio site with content from several of the modules from the "ePortfolio at IUPUI" Canvas Expand site. Having a model student ePortfolio has greatly increased the efficacy of classroom ePortfolio kickoff sessions as students can see an example of what they will be creating during the semester.

The feedback from the Sharks was incredibly valuable, and the clear themes that came out of the feedback made it easy to form an action plan. Each step of the process from preparing the pitch, connecting to ideas from the conference, receiving and reflecting on the feedback, applying the feedback resulted in positive changes, and I'm grateful to have had the opportunity to participate.



ePortfolio at IUPUI – a Canvas Expand resource site

Amy Powell, Executive Director, ePortfolio, IUPUI

https://go.iu.edu/31bK

- Self-enroll – browse – import - use
- Ready to go high-quality ePortfolio assignments in Canvas
- Designed for asynchronous online learning
- Editable and shareable
- Introduce ePortfolio to students
- Help guides
- Assignment templates

Figure 4. Powell Pitch

Roberta (Robin) Sullivan, Teaching & Learning Strategist, Educational Services Team, University Libraries, University at Buffalo, State University of New York and

Cherie van Putten, Instructional Designer, Center for Learning and Teaching (CLT), Binghamton University, State University of New York

Figure 5: Sullivan and van Putten Pitch

Pitch Overview: Our team is currently composed of faculty and professionals with a history of collaboration from across the SUNY System. We would like to build new collaborative partnerships for the State University of New York (SUNY) Exploring Emerging Technologies for Lifelong Learning and Success < https://suny.edu/emtech >, otherwise known as EmTech, and extend this work into a self-sustainable global learning opportunity. It is a discovery-based online learning opportunity for exploring and reflecting on innovative and creative uses of freely available emerging technologies, targeted to college students, faculty, current and career-seeking professionals, and anyone from across the globe interested in keeping pace with the constant evolution of technology. EmTech consists of two parts, the EmTechWiki and #EmTechMOOC. Through the modules of the MOOC, participants create an ePortfolio that contains artifacts created through hands-on Discovery Exercises along with personal reflections about their learning.

Inspired by the Conference: To effectively function in our society's connected environment, individuals need to be technology and media literate. They need to be able to use information technologies as comfortably and seamlessly as most people are able to read and write. Everyone must be able to communicate across time zones and geographic locations, interact visually and creatively, AND know that information they share and find is truthful and accurate.

Desired Feedback: We are looking for ways to continue to improve the project and to acquire new collaborative partners interested in investing their efforts to help grow this valuable resource.

Reflection: The objective of the EmTech team's participation in the Shark Tank opportunity was to build new collaborative partnerships. We desired advice from the expert panel to gain actionable feedback to grow the project into a self-sustainable global learning opportunity to evolve EmTech into a widely-available resource for all learners. Some of the feedback that was shared included suggestions to highlight ePortfolios and participant testimonials more prominently on the site's homepage. The Shark Tank experts also suggested avenues for seeking potential Mentors for the EmTech community.

As a result of the Shark Tank event, a new section was added to the EmTech project website which lists various ways to get involved, including how to become a participant, resources for sharing info about EmTech with others, options about how to become a Mentor, and most importantly, information was added about how to connect with the EmTech team to encourage new partnerships to seek out collaborative grant funding and conduct further research.

It was a difficult challenge to provide a complete overview of the project in just three minutes. However, the Shark Tank experience was very beneficial to help enhance the project's goals. The recording from the EmTech Shark Tank presentation is highlighted on the project website. We hope that by participating in the Shark Tank activity, we will acquire new partners who are interested in investing their efforts to help grow this valuable resource.

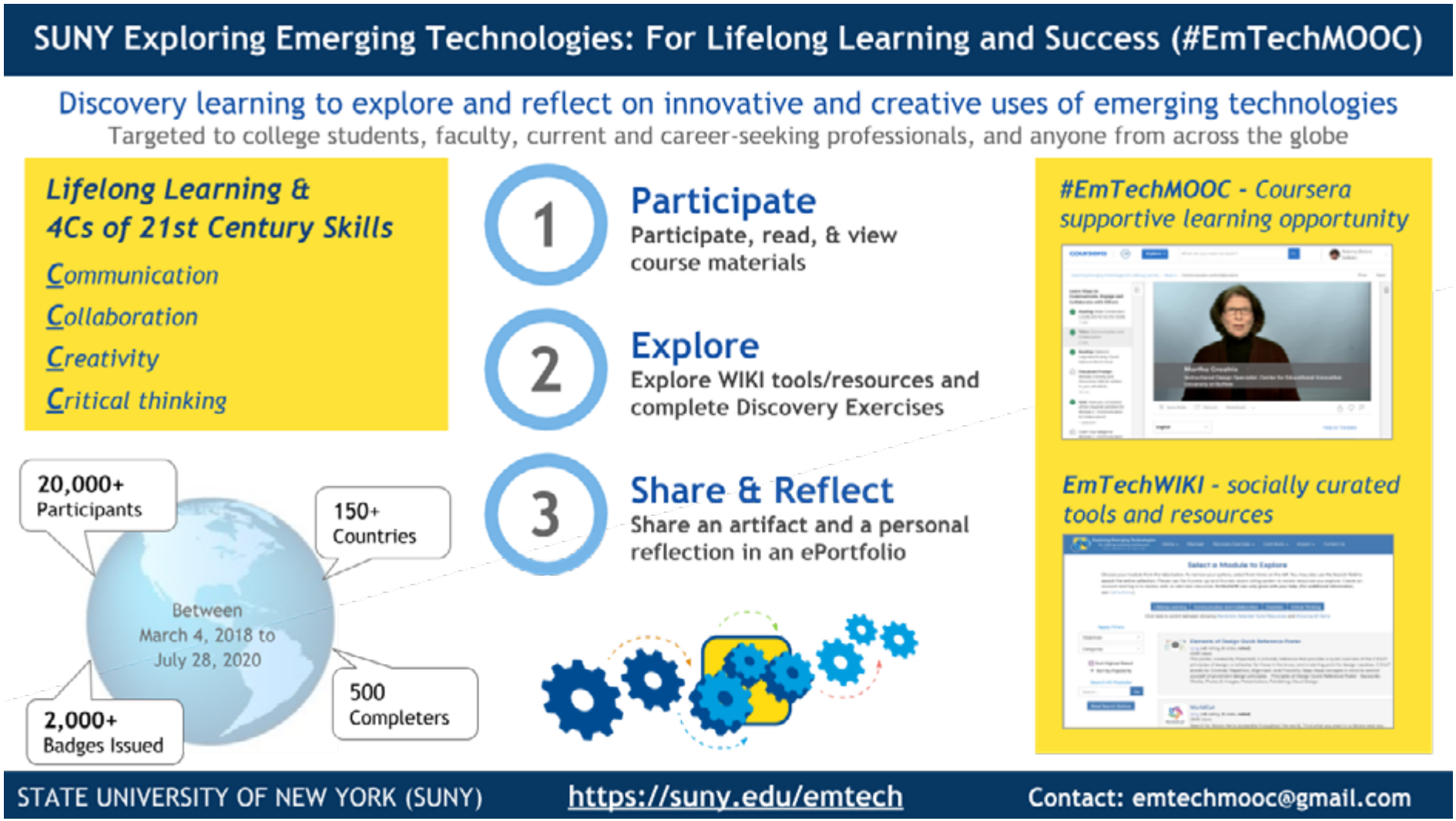


Figure 5: Sullivan and van Putten Pitch

John Turner, Highpoint University

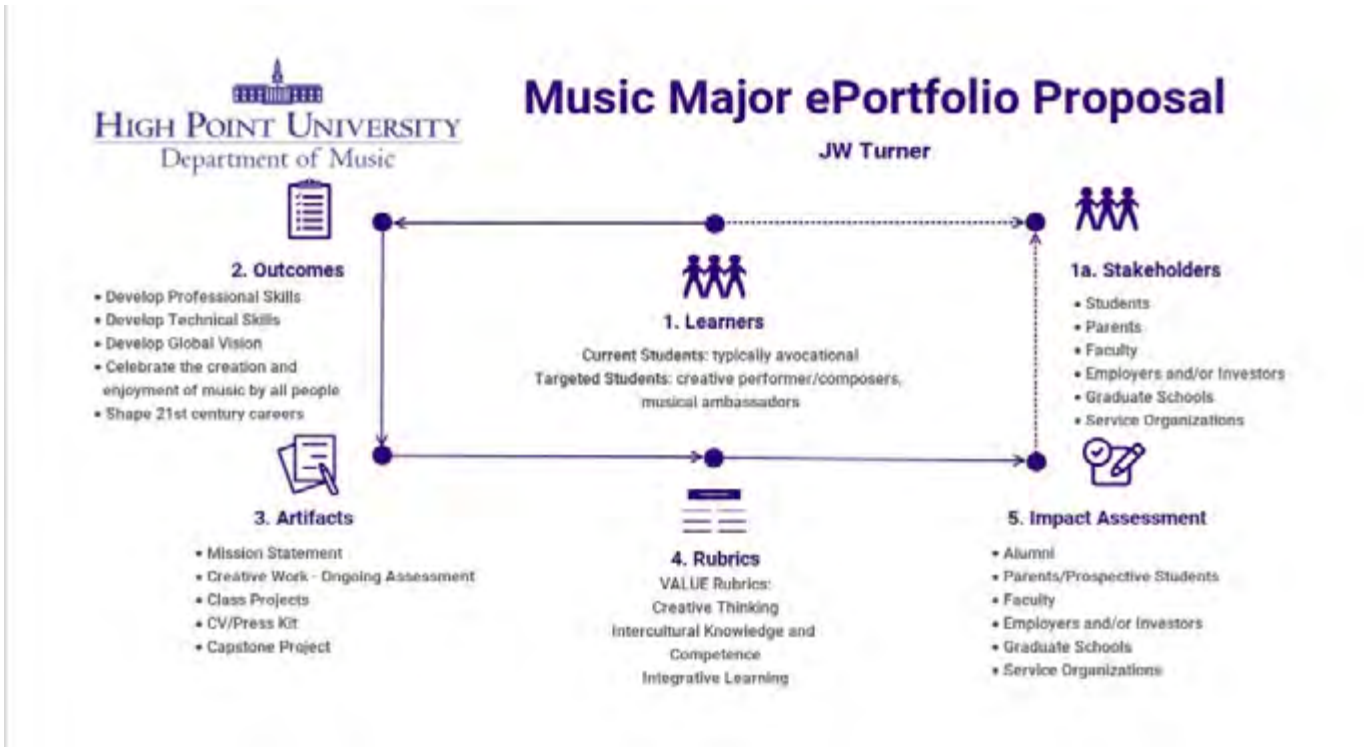
Figure 6. Turner Pitch

Pitch Overview: The music degree at High Point embeds ongoing assessment of students' musical performances within a comprehensive musicianship curriculum (integrating music history, theory, literature, and aural skills). An upcoming revision of the curriculum presents an opportunity to involve students in intentional curation of and reflection on the artifacts of their learning.

Inspired by the Conference: It is hoped that the act of assembling a curated portfolio will engage students more deeply in critical thinking about their work and progress.

Desired Feedback: Faculty engagement and stakeholder involvement, how much structure to impose from the outset (e.g., rubrics), integrating digital ethics.

Reflection: I am relatively new to the ePortfolio community, and I was grateful for the opportunity to build this ePortfolio program with input from experts in the field. Even though my project was quite modest in comparison with the others, the Sharks were very encouraging and supportive. Taking their advice, I implemented a pilot test of the project with my sophomore musicianship students and three of the applied instructors. The semester has presented several challenges. While the university was committed to maintaining face-to-face instruction, the merry-go-round of students going in and out of quarantine sometimes made it difficult to maintain consistent momentum. Furthermore, the students' constant anxiety about the pandemic was exacerbated by their exhaustion as the semester dragged on with no holidays or breaks. In spite of these, however, there is some evidence that the project is already enhancing the students' critical thinking and self-reliance. I am curious to see the impression these ePortfolios will make on the assembled applied faculty in the End-of Semester Evaluations, but so far all the feedback has been positive.



INTRODUCING OUR SHARKS...

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Megan Mize
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The Sharks

We wanted the Shark Tank AAEEBL edition to be fun but to ultimately be helpful to the contestants. The Sharks were deliberately chosen from faculty and professionals who have been using ePortfolios in a variety of contexts. The cumulative knowledge from these experts provided rich and detailed feedback to the contestants. The sharks participated in the fun part too and dressed the part. The Sharks included

- Lisa Donaldson, ePortfolio Ireland
- David Hubert, Salt Lake Community College
- Megan Mize, Old Dominion
- Gerry Handley, MERLOT
- John Ittleson, CSU Monterey Bay
- Allison Miller, ePortfolio Australia
- Eddie Watson, AAC&U.

Below are reflections from a few of the Sharks about their experience.

Lisa Donaldson, ePortfolio Ireland

As a new AAEEBL Board member, I was surprised and delighted to hear that a Shark Tank concept was to be part of the Annual Meeting 2020. Hailing from Ireland, it initially had to be explained to me that it was the equivalent of our Dragon's Den, so I jumped at the chance of being a Shark. The opportunity for ideas to be pitched to others in the field and to receive feedback which may help bring them to reality is a type of (very brief) mentoring that is not often found, certainly not at industry conferences. Clearly, there are risks to raising your head above the parapet to pitch an idea on behalf of the Shark Tankers: you are allowing yourself and your idea to be publicly vulnerable, but the benefit of informed feedback to shape or progress an idea outweighs that I believe. It can also be nerve wracking to be a Shark — to be considered an expert and to deliver an informed and insightful opinion on pitches is pressure! The format and process of receiving outlines of the ideas in advance allowed time for considered thought, which was very beneficial and mitigated a lot of this Shark's nerves. In honesty, the pitches were extremely well thought out and needed little advice! While the Covid-19 pandemic has thrown the education and ed tech worlds into turmoil, it is fantastic to see challenges turned into successful new opportunities to connect, learn, and work together. We can but hope for a return to normal in the future, but let's also remember that adversity has fueled innovative mindsets and new spaces for us to work within — some even underwater!

Allison Miller, ePortfolio Australia

The AAEEBL Shark Tank sessions were a great idea and great fun to be a part of, with so many great watery-puns. This fresh approach allowed people within the ePortfolio community to not only share their amazing work but to also reach out to get input and feedback on their practices. The four presentations I saw were very professional and showcased a broad range of ePortfolio practice.

The concept of "pitching" ideas to the Sharks also allowed for a very succinct synopsis of each person's/group's current practice which people watching the sessions could benchmark or learn from. Some were looking to tweak what they were doing, while others were looking to the future, presenting a proof of concept that others could get involved in.

Perhaps for future Shark Tank sessions, the audience could also be encouraged to provide feedback or be encouraged to reach out to the Sharkers to connect with them. Alumni Sharkers would also allow cross-fertilization of ideas between the past and future Sharkers.

I would love to be a part of future events. Perhaps we could have an annual international ePortfolio Shark-off event.

Megan Mize, Old Dominion College

When invited to perform the role of a Shark for AAEEBL's Shark Tank events, I was both excited and surprisingly trepidatious. What if I did not have meaningful feedback to offer? What if what I thought was insightful was commonplace, mundane, and not worth sharing? As an early career academic, I wrestled with a bout of imposter syndrome in advance of the experience. A Shark should be very knowledgeable, confident, and established. The metaphor of a

shark implies dominance. Would I be comfortable occupying this role?

Given that the AAEEBL community is such a generous and welcoming group, I shook off this initial unease. Once I had the opportunity to review the pitches in advance of the event, I felt more confident. I had ideas to suggest! Some of them might even be genuinely helpful! Even better, during the event itself, my fellow Sharks gave similar feedback. What was particularly interesting is that we often keyed into similar factors but had slightly different strategies for addressing them. It's like peer review really works!

In all seriousness, though, one of my takeaways from my experience as a Shark was the reminder of what peer review asks of our students. Strong ePortfolio pedagogy often incorporates peer review throughout the composition process, asking our students to occupy a space of authority as a reader and reviewer that they may not feel they deserve or can fill effectively. It is useful to remember that there is some social risk implicit to peer review and the offering of feedback. At the same time, this experience also reminded me that peer review can be an opportunity to increase one's confidence in sharing a point of view, highlighting the value of the individual's response to content. Finally, this risky performance can be alleviated within a playful framework. Sure, sharks have teeth, but we only showed them when we smiled, offering will-intentioned suggestions.

Summary and Conclusion

The Year 2020 is synonymous with disruption. The first impulse of understandably overwhelmed educators was to use technology to solve problems but make as few changes to their teaching strategies as possible. The emergency response resulted in widespread use of Zoom meetings as a remote substitute for on-ground classrooms. The outcome was a diminished virtual replication of an in-person experience. Education theorist Ruben Puentedura (2014) observes that technology-as-substitute is the first instinct when educators take learning into the digital realm. As we come to understand the affordances of online tools and spaces, there is an opportunity to think transformatively about the possibilities for teaching and learning, currently during the pandemic and hopefully after the pandemic is over as well.

The AAEEBL Committee took a transformative approach to re-envisioning the annual conference, and the value of Shark Tank is an outgrowth of the new format. Instead of cramming sessions into the traditional schedule of ten hours over three days, the month-long distributed online event opened up the possibility for participants to begin to apply what they were learning within their school contexts while the conference was still underway. This, in turn, created an opening for conference conveners to develop the Shark Tank sessions that, while playful, gathered direct evidence of the impact of the conference on attendee practice. It was rewarding to see them take a deeper dive and really sink their teeth into the concepts. Participant pitches demonstrated the meaning that they were making of the conference, their capacity to transfer or apply conference-based learning to their local contexts. This is much more informative and formative than the typical comments about room temperature and the quality of food on conference evaluation forms!

References

Puentedura, R. (2014). Building transformation: An introduction to the SAMR model [Blog post]. Retrieved from http://www.hippasus.com/rrpweblog/archives/2014/08/22/BuildingTransformation_AnIntroductionToSAMR.pdf

Call For Papers

The Association for Authentic, Experiential and Evidence-Based Learning (AAEEBL) ePortfolio Review (AePR) invites you to submit articles and reports covering the broad area of ePortfolio use. We publish articles about pedagogy, research, technical, and organizational issues bi-annually. Our readership includes ePortfolio practitioners, administrators, and students. AePR is an online journal serving the needs of the global ePortfolio community and seeks to promote portfolio learning as a major way to transform higher education.

The AePR is a theme-based journal; therefore, acceptance is competitive. After a proposal has been accepted for a specific issue, the authors are paired with one of our peer reviewers. Proposals submitted for a current issue may be considered for a subsequent issue if they fit the upcoming theme.

Article Types

We're particularly interested in the following types of articles:

- Longer articles (3,000 to 5,000 words) about practical research, administrative reports, or case studies with generalizable results – again, not as peer-reviewed research but as reports.
- Short articles (1,000 to 1,500 words) discussing a case study at an institution/course, offering advice and opinions to other ePortfolio practitioners.
- How-to articles, tutorials on specific tools or approaches (500 to 1,500 words).
- Interviews (500 to 1,000 words) with key individuals directly involved with the use of ePortfolios.
- Announcements (up to 300 words) of items regarding the use of ePortfolios in the field.

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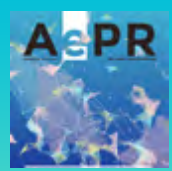

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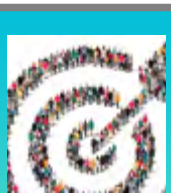

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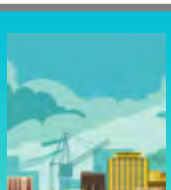

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Editorial Team Biographies

Cindy Stevens / Executive Co-Editor

Cindy is a Full Professor at Wentworth Institute of Technology, Boston, MA, in the Business Management department. She received her Ph.D. in Technology Management at Indiana State University, her Masters in Technical & Professional Communication from East Carolina University and her Baccalaureate Degree in English from Hilbert College. She also just recently completed a Certificate in Facility Management. Her full biography can be found at www.cindypstevens.com. She is also the Executive Co-Editor of AePR, AAEEBL's Online Journal.

Russel Stolins / Executive Co-Editor

Russel Stolins (MA, Educational Technology) heads the Academic Technology department at the Institute of American Indian Arts in Santa Fe, New Mexico. There he evangelizes for ePortfolio practice throughout campus. He also works with faculty on the design and development of distance courses that combine visual elegance with functionality. Russel is the author, co-author, or editor of numerous textbooks on technology over the past 22 years. When he's not working, Russel advocates for youth in foster care as a court-appointed special advocate (CASA).

Barbara Ramirez / Managing Editor

Barbara Ramirez is currently the Director of the Class of 1941 Studio for Student Communication as well as the Assistant Editor for the Journal of Engineering Education. As a faculty member at Clemson, Barbara has taught a variety of English courses and served as the Director of the University's Writing Center where she worked with students and faculty across the disciplines. She also served as the Arts and Humanities faculty liaison for Clemson's ePortfolio Initiative and has been active in AAEEBL, serving on the Conference Planning Committee and helping edit the Field Guide to Eportfolio (AAC&U, 2017).

Samantha Blevins / Editorial Coordinator

Samantha J. Blevins is an Instructional Designer & Learning Architect at Radford University in Radford, VA. She works as part of the Center for Innovative Teaching and Learning, specializing in ePortfolio implementation. She received her doctorate in Instructional Design and Technology from Virginia Tech and has broad teaching and instructional design experiences. Her research focus areas include: diffusion of innovation theory, ePortfolio implementation, and effective faculty development. She also serves as Board Representative for the Systemic Thinking and Change division of the Association for Educational Communications and Technology and serves on the Advisory Board for the Instructional Development Educational Alliance Exchange.

Carra Hood / APA Style Editor

Carra Leah Hood is Associate Provost for Strategic Planning, Academic Programming, and Assessment and Associate Professor of Writing at Stockton University. In her current position, she oversees the Essential Learning Outcomes and ePortfolio initiatives as well as academic program planning and reporting.

Candyce Reynolds / Web & Social Media Content Editor

Candyce Reynolds is a Professor and Chair of Educational Leadership and Policy at Portland State University. She has an A.B. in Psychology and Social Welfare from the University of California at Berkeley and a Ph.D. from the University of Oregon in Counseling Psychology.

Her scholarship is focused on student centered pedagogy, authentic student learning assessment, the role of reflective practice in facilitating student learning, and ePortfolios. She is co-author of a book with Judy Patton entitled: Leveraging the ePortfolio for integrative learning: A guidebook of classroom practices for transforming student learning by Stylus Publishing in 2014 .

Editorial Team Biographies

Deborah Svatos / Copy Editing Coordinator

Deborah Svatos (Debbie to those who know her) is an MFA student and graduate of the Institute of American Indian Arts in Santa Fe, having earned a Bachelor of Fine Arts degree in Creative Writing. She writes fiction, poetry, and creative nonfiction that often blurs the line between genres, finding writing to be one of her life's greatest joys. Previously, she has served as an editor of poetry and fiction in the IAIA Student Anthologies Chrysalism and Celestial Refractions in 2018 and 2019 respectively. Her work has been published in these anthologies, as well as IAIA's 2020 Student Anthology Remembering What We Carry, The Santa Fe Literary Review, Haiku Journal, and The Tribal College Journal–Student website as an honorable mention in its 2020 Student Writing Competition.

Heather Caldwell

Heather Caldwell is a full time graduate student in Somatic Psychology at Naropa University where she is also a Graduate Assistant in Instructional Design. She brings her previous experiences as a full time English faculty member and ePortfolio Strategist at the University of Alaska Anchorage to Naropa University's contemplative education programs. She now focuses on the intersections of contemplative technology, folio pedagogy, and reflective practices to enhance metacognition and transference.

Design and Production

Nami Okuzono / Art Director

Nami Okuzono is the Learning Systems Manager at the Institute of American Indian Arts in Santa Fe, New Mexico. She is also a graphic/web designer who focuses on building websites and brands for artists (artistweb.online). One of her driving passions is to empower individuals by helping them establish an online presence.

Review Editor Biographies

Julie McCarroll

Julie McCarroll is an instructor of English as a Second Language Academic at Carleton University in Ottawa, Canada. In preparing international students for success in their discipline courses, she is interested in the ways that technology can motivate and engage learners to meet learning outcomes. Julie received an Innovation Grant from Carleton University in 2018 for her research on ePortfolios.

Rita Zuba Prokopetz

Rita Zuba Prokopetz (Canada) is a student in the Doctor of Education in Distance Education (EdD) Program at Athabasca University. Her research interest includes eportfolio as a technology-enabled emerging pedagogy.

Christa Van Staden

Christa van Staden is a research fellow in the Department Computer Science and Informatica of the University of the Free State in South Africa. She holds a PhD, MEd (Orthopedagogics), B.Ed (Gifted Child Education) and a BA (Ed) in secondary school education. Her research focus on the use of technology to improve teaching, learning, and assessment. She developed a tool similar to Facebook namely https://Gesels.net to serve as online learning environment for teachers. She is passionate about her family and miniature Schnauzers. She and her husband lived for 18 months in Kazakhstan but moved back to South Africa due to the pandemic. She was a member of the editorial team of the first issues of the AePR and a review editor of many of the papers published in the AePR. She loves the way this journal guide authors towards publication.

Heather Stuart

Heather Stuart is the Assistant Director for Retention and Student Success at Western Kentucky University. In her current role she develops academic support programs for undergraduate students. She was previously the Senior Program Administrator for University Writing at Auburn University, where she facilitated dozens of conference sessions related to ePortfolios, reflective writing, and ethical literacy. Heather received her M.Ed. in Administration of Higher Education.

Adam Wear

Adam Wear currently serves as the Director of the Core for the University of North Texas and is a doctoral candidate in the Higher Education program at UNT. He has served in higher education since 2007, and at UNT since 2013. During that time, he has worked as an Instructional Support Technician, Instructional Consultant, ePortfolio Coordinator and taught both online and face to face. He holds a BS in English, Education, and Education Psychology from Mississippi State University and a Master's in English Literature from the University of Alabama. He lives near Denton with his wife and three sons and hopes to practice and promote an attitude of servant leadership in higher education.