Using Faculty Feedback to Inform Improvements in an Education Program ePortfolio Initiative

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The success of an ePortfolio initiative is dependent on the willingness of departmental leaders and faculty members to collaborate in the design of ePortfolio curricular and programmatic policies. This qualitative research study examined faculty members' perceptions of an ePortfolio initiative designed for preservice teachers within a community college education program. By incorporating the perspectives of those faculty members directly involved in the pedagogical practices of ePortfolio development, improvements can be designed on a formative level in order to enhance learning outcomes for students. The results of this research study point to the need to refine the ePortfolio development process in order to allow for a more student-centered experience. Fostering flexibility and reflective practices through a dedicated ePortfolio course can provide students with intrinsic motivation needed to create a meaningful showcase of their professional learning and growth.

This qualitative research study examined faculty members' perceptions of an ePortfolio initiative designed for preservice teachers within a community college education program. The study aimed to discover how faculty members perceived the purposes for students' development of an ePortfolio, as well as their perspectives on the initiative's strengths and areas in need of improvement. The findings derived from this study are intended to inform future programmatic policy and curriculum development for ePortfolio implementation in institutions of higher education. This study can assist higher education stakeholders in designing programmatic improvements that will support students in their ePortfolio development process. Departmental leaders and faculty members can utilize the findings of the study to redesign their ePortfolio programs in order to best meet the students' needs. Additionally, the perspectives of faculty members shared through the questionnaire can foster deeper communication and collaboration between colleagues. The success of an ePortfolio initiative is dependent on the willingness of departmental leaders and faculty members to collaborate in the design of ePortfolio curricular and programmatic policies.

Educational Context

This study was implemented at an urban, two-year community college in the northeast region of the United States. The college serves a highly diverse student population, representing more than 140 different countries. It responds to the needs of its diverse community by offering high quality, affordable, innovative, student-centered programs of study that prepare graduates for transfer to a senior college and the workforce. The college strives for equity and seeks to provide each student with the appropriate resources and support to foster success.

Each year, approximately 500 students enroll in the community college's education program. The ethnicity of the students enrolled in the education program (29.2% White; 28.1% Black; 28.3% Hispanic; and 14.4% Asian/Pacific Islander) is even more diverse than the college's general population, and with a greater percentage of Hispanic students. Reflecting national trends, education program students are much more likely to be female than the college population and over half of the population are eligible for Pell funding. It is consistently recognized for providing open access for under-represented populations, including low-income and minority students, those with disabilities, and immigrant students. Most of these students are the first generation in their family to attend college.

The education program began piloting its ePortfolio initiative with two introductory courses in the fall of 2011, with full programmatic implementation beginning in the spring of 2012. The initiative was structured following Friedman's (2012) guidelines for ePortfolio organization, which provided a selection of multiple templates for students to structure their work in order to illustrate the learner's development as an educator. The template for this initiative was chosen by the education program leaders, with input from faculty members. The home page of the ePortfolio template included a biographical section containing an introduction, statement of educational philosophy, and résumé. The template also contained a section for students to upload their course assignments organized by content area. The students were required to hyperlink their assignments to the corresponding NAEYC's (2009) Professional Preparation Standards, along with a rationale linking the assignment to their growth toward meeting those standards.

After examining students' perceptions of their experiences with ePortfolios, it was determined that improvements related to increased student ownership and level of faculty support and buy-in were necessary steps in order to achieve the intended outcomes of the initiative (Farrelly & Kaplin, 2019). Students felt as though expectations for their ePortfolio assignments differed across course sections and were dependent on the level of investment by a particular faculty member, as opposed to unified programmatic expectations. They also failed to see the value of an ePortfolio beyond course assessment and job placement purposes. Faculty members have the ability to influence students' attitudes toward ePortfolios and showcase their function as a tool for growth and learning through social pedagogy (Rajendra et al., 2013). Therefore, it was imperative to understand faculty members' own attitudes and perceptions regarding the purposes for creating an ePortfolio within the education program.

Review of the Literature

Over the past 10 years, ePortfolios have increasingly been utilized as an effective teaching and learning tool in both undergraduate and graduate programs across diverse disciplines (Gordon, 2017; Munday, 2017). They provide students with a vehicle to showcase and personalize their learning (Penny Light et al., 2012) while practicing a wide range of technological, social, and critical literacy skills (Bacabac, 2013). Through the creation of an ePortfolio, students are able to gain necessary understandings pertaining to their specific career field, and the finished product can enable potential employers to get a sense of students' abilities (Haskins et al., 2018). Due to the rapid growth of implementation and its research-supported impact on enhanced learning, ePortfolios have been declared the 11th high-impact practice in increasing student retention and engagement (Eynon & Gambino, 2017).

Process vs. Product ePortfolio

ePortfolios can be developed through a process or a product approach, each with their own benefits and challenges. Process, or integrative, ePortfolios are generally focused on students' learning, growth, and reflection across courses and over time, with assessment primarily administered through formative feedback (Barrett, 2009; Meyer & Tusin, 1999). Product, or outward-facing ePortfolios, on the other hand, are designed to showcase students' competencies for future employment, and are therefore created with presentation in mind (Meyer & Tusin, 1999). Product ePortfolios are generally assessed through a summative approach. A blended approach that incorporates both the process and product aspects can improve learner engagement and professional development processes (Barrett, 2009; Ring et al., 2015; Marshall et al., 2017; Zaldivar et al., 2008). It is the responsibility of the program to decide on the goals

and expected outcomes of the ePortfolio program before implementation (Zaldivar et al., 2008).

Clarity of Purpose: Programmatic Continuity and Cohesion

The initial design of a successful ePortfolio program requires faculty members to come to collective agreement on the purposes and priorities of the initiative and clearly communicate those goals with their students. This programmatic cohesion can enable students to perceive the ePortfolio process as an intentional, authentic learning and assessment tool (Reynolds & Patton, 2014; Zaldivar et al., 2011; Haskins et al., 2018). Decisions regarding the types of artifacts to be included (formal/informal, formative/summative assessment, reflective, curricular, research), as well as the level of mastery needed for inclusion of artifacts, should be discussed with those implementing the program prior to its inception. Otherwise, students can receive mixed messages from faculty regarding their ePortfolio design (Farrelly & Kaplin, 2019).

ePortfolio Professional Development for Faculty

A whole program approach with full faculty investment enables students to see their learning progression across their course sequence as a complete picture rather than separate and disconnected blocks of learning (Pelliccione & Dixon, 2008). Faculty should be encouraged to incorporate learning content and assessments appropriate for ePortfolio inclusion, such as demonstrative artifacts and reflective writing, throughout the programmatic course progression in order to provide students with a rich bank of artifacts from which to draw (Haskins et al., 2018). Introductory professional development and follow-up support for faculty related to the incorporation of ePortfolio pedagogy as part of their teaching practices is an important step in the planning process (Making Connections National Resource Center, n.d.). Professional development opportunities that scaffold course redesign, shifting the focus from information transmission to more holistic learning processes such as reflection and metacognition, are an essential component in an ePortfolio program design. Research has shown that this type of faculty development has a significant impact on student pass rates, retention, and average credits earned (Getman-Eraso & Culkin, 2018).

The Role of Motivation in ePortfolio Development

Fostering student motivation throughout the ePortfolio development process is a crucial factor in attaining favorable learning outcomes (Mobarhan et al., 2014). Research has demonstrated connections between students' intrinsic motivation to utilize ePortfolios and their perceptions of the value, relevance, and usefulness of the platform (Klampfer & Köhler, 2015).

A number of factors have been reported to influence students' motivation level surrounding ePortfolio usage. Factors such as student buy-in for using ePortfolios, their perceptions of the ePortfolio's level of value related to career application, as well as struggles with usage and time commitment can all influence a student's motivation to develop an ePortfolio (Tosh et al., 2005). In the absence of motivation, students can have a difficult time meeting the full potential of the ePortfolio learning outcomes.

Fostering Reflection Through ePortfolios

Reflection is a critical component of the ePortfolio process as it enables students to view their body of work while considering their own growth through the creation process (Wakimoto & Lewis, 2014). Without reflection, the ePortfolio is relegated to a collection of artifacts with no narration or demonstration of thought. The artifacts and reflective writing pieces are intended to work in tandem to establish the learner's story (Haskins et al., 2018). From a career standpoint, the reflective component of an ePortfolio has the ability to benefit the student as they prepare for the interview process (Whitworth et al., 2011). Through habitual reflection, students will be better prepared to speak to the nature of their development within the career field.

Methodology

Twenty-two full- and part-time faculty members teaching ePortfolio-inclusive education courses within the previously described community college were invited via email to complete an electronic questionnaire pertaining to their experiences working with students on their ePortfolios. Access to the faculty email list was obtained due to the researcher's position as a faculty member in the program. Faculty members were given a four-week window of time to respond to the questionnaire. The response rate was 50%, with a representative sample of seven full-time and four part-time faculty members responding.

The faculty questionnaire consisted of three open-ended questions in order to engage faculty members in the process of considering the purposes and strengths of the ePortfolio initiative, along with suggestions for needed improvements. As the inquiry process is inherently embedded in the process of change, it is up to the change agent to articulate questions

that evoke stories from stakeholders, thus shaping the future of the organization (Priest et al., 2013). The open-ended questions fostered appreciative inquiry principles by focusing on a positive image of the program (Cooperrider et al., 2008), as follows:

- 1. In your opinion, what is the main purpose for having students create an ePortfolio?
- 2. In your opinion, what components of the ePortfolio program are working successfully?
- 3. What suggestions do you have for improving the ePortfolio program?

Based upon the knowledge that a clear purpose had not been formally established at the onset of the initiative, it was hypothesized that faculty members' perspectives on the purposes of student ePortfolios would vary. As students shared previously that there were varying ePortfolio assignment expectations among faculty members, it was hypothesized that faculty members' opinions on strengths and weaknesses of the initiative would also vary based on the areas that they emphasized in their coursework and grading policies.

Data Analysis & Findings

Through the open-ended questionnaire, faculty members were given the opportunity to share their insights about the ePortfolio initiative. Qualitative responses were analyzed using thematic coding with the purpose of looking across the data to recognize key topics and themes (Richards, 2015). Using an inductive analysis approach, several themes emerged for each question that gave insight into the faculty's perspectives of the ePortfolio initiative. The themes were as follows:

- Diverse ePortfolio Purposes
- Professional Development
- Intrinsic Motivation
- Reflective Writing
- ePortfolio Course

A separate file was created for each theme, and relevant statements from the questionnaires were added into each corresponding file. This coding system enabled a clear organization for the analysis of faculty members' thoughts, ideas, and opinions.

Diverse ePortfolio Purposes

Faculty participants often viewed ePortfolios as repositories for assignments, where students could store and organize their assignments for future use. One participant stated, "the ePortfolio is a repository for illustrative products from the students' coursework in education" while another shared, "students create an ePortfolio to corral works from their educational studies." Some faculty members felt that ePortfolios were used primarily for students to showcase their pedagogical knowledge and abilities to four-year colleges and potential employers. One faculty member in particular commented, "students create an ePortfolio in order to show potential employers the skills and competencies they've developed during their time as a student." In terms of professional development, faculty members felt that the purpose for developing ePortfolios was to enable students to monitor and demonstrate their growth as educators through the use of artifacts and reflections. As noted by another participant:

It can serve as a way for them to monitor their own professional growth along a continuum of skills and content. Ideally, one would hope the students could then share their reflections about that growth with prospective employers and offer their ePortfolios as evidence.

The ability to organize, view, and showcase their growth as learners in the education program were the primary purposes shared by most faculty participants.

Monitoring and Showcasing Professional Development

When asked what components of the ePortfolio program they felt were working most successfully, faculty members described many benefits that the program brings to students. They perceived the ePortfolio program as a means for providing students the ability to demonstrate their professionalism, work samples, and reflections as evidence of their learning and growth. One faculty member noted, "during the field classes, the ePortfolio can provide students with satisfying, educative evidence of all that they've learned and of their growth over time." The faculty member stipulated that this would be a best-case scenario, with the assumption that the course instructors consistently and strongly scaffolded the development process.

Additionally, participants stated that the ePortfolio program enabled students to build upon ideas between courses through the process of assignment revision, providing them with opportunities to monitor their growth over time. As stated by one faculty participant, "the ePortfolio

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can be a link for students from one course to the next, through creating a statement of educational philosophy and, hopefully, updating it." The faculty member described a vision for the best of what can be if all of the program's processes are functioning optimally.

Many participants highlighted the value of uploading visual media such as photographs and video from workshops and field placements for providing students the opportunity to "showcase themselves as professionals." Several participants noted that the technical components of the program were particularly beneficial to students. The training sessions, lab technicians, open lab hours, and logical ePortfolio template were specified as important supports for students' development process.

Intrinsic Motivation

Although faculty members noted many benefits and successes of the ePortfolio program, several programmatic issues were revealed when suggestions for improvement were requested. Two faculty members in particular felt that the program should be eliminated completely as they considered the system to be ineffective. They cited a lack of student and faculty motivation, investment, and unreasonable time commitment as reasons for their dissatisfaction with the program. An infringement on academic freedom was noted, as ePortfolios were perceived to be a forced course component, rather than a collective effort by the program. It was suggested that if the program were to be kept in place, the process should be modified to be as straightforward as possible, with students simply posting an artifact along with a contextual description.

Other faculty members felt that the ePortfolio program should continue but be improved upon by building intrinsic motivation for students through a clarification of the purposes and value of creating an ePortfolio. One participant suggested shifting the ePortfolio's purpose from a requirement or an outcomes assessment to a process-driven learning tool. This would enable students to see it less as an assessment or course requirement, and more as a vehicle for learning and reflection. The participant stated:

Right now, it is my general impression that in most, if not all courses within our program, the work is done/presented in class, feedback (peer/instructor) is provided in class, and after that process it is uploaded to the ePortfolio, making it more product-oriented rather than process-oriented. The ePortfolio as it stands in the courses with which I am familiar is a requirement of the course where the

work that actually measures the outcomes of the course is external to the ePortfolio itself.

The participant went on to propose an improvement:

An additional reflective component should be included as a part of each course where students consider their movement in their own professional growth as a result of the coursework they have just completed. That may already exist for some courses, but I am not certain that it is consistently framed that way across the program.

Reflective Writing

Greater emphasis on the reflective piece was a common theme among faculty members. Participants felt that too much space was allotted for the assignments with little emphasis placed on the reflections themselves. They suggested clarifying for students the role of reflection as the most meaningful component of the ePortfolio. It was shared that more class time should be devoted to supporting students in developing the substantive reflections on learning, as opposed to technical issues such as uploading and hyperlinking assignments. A faculty participant stated:

Right now I feel that our students, who have such minimal time to devote to academic life as it is, end up stressing over a lot of trivial logistics instead of focusing on the more potentially substantive aspects of ePortfolio. I would also like to see us develop a program policy that would allow for more student autonomy over and input into their ePortfolios.

Dedicated ePortfolio Course

Several faculty participants recommended a dedicated ePortfolio course in order to allow students to have more autonomy over their ePortfolio while providing them with more time to reflect and receive support and timely feedback. One participant described their vision by suggesting:

A one-credit course required for all students that would enable time during a full semester with an instructor that understands the platform to reflect, organize and create something they are proud of as well as something useful to them as they move on.

Participants envisioned a course curriculum that could provide students with much-needed time to attend to quality, reflection, and learning throughout the ePortfolio development process, taught by an instructor adequately trained in the technology. An adjustment to the current template was also suggested, as the current format was described as rigid and inflexible, forcing students to choose one subject area to upload

their lesson plans to when they often followed an integrated curriculum approach. Flexibility and autonomy over the ePortfolio template would be an important topic of discussion throughout the development of an ePortfolio course curriculum.

Discussion

Our prior research findings on students' perceptions and feedback of the education program's ePortfolio initiative indicated that "a more diverse stakeholder sample, including faculty members ... can create a wellrounded picture and help shape programmatic improvements" (Farrelly & Kaplin, 2019, p. 31). This qualitative study focusing on faculty perceptions serves to support the findings of our previous student-based mixed methods research study. Our findings demonstrate areas of similarity between stakeholder groups. Both groups agreed that ePortfolios had the potential to serve as a powerful tool to showcase professional and technical skills for future employers. However, students and faculty members felt that the initiative could be improved upon by showcasing student voices through more robust reflective statements and increased personalization capabilities. The emphasis on the reflective component was a common theme among most faculty participants, as it was stated repeatedly that student reflections should be shifted to the forefront of the learning process. Faculty members believed that while ePortfolios have the potential to enable students to monitor their growth and demonstrate their learning for future employers, the instructors must carefully scaffold the reflective process in order for it to be successful. This is in line with our past study's findings in which students shared a desire to increase their ePortfolio personalization capabilities but lacked the confidence to do so without scaffolded support from instructors (Farrelly & Kaplin, 2019). By supporting the skills development needed for students to personalize their ePortfolio, their motivation and active engagement toward the development process itself is likely to increase (Ring et al., 2008).

While faculty members generally agreed that ePortfolios have the potential to generate strong opportunities for student learning, there was disagreement pertaining to the central purpose within the education program. Similarly, our student research study indicated a lack of clear understanding of the ePortfolio's purpose (Farrelly & Kaplin, 2019). It is suggested that the ePortfolio initiative be improved upon by clarifying its central purpose and working toward shifting the emphasis from the final product to the development process. This shift in purpose may provide students with the intrinsic motivation to include meaningful reflections on their work. Students should be provided the space to develop autono-

my over their ePortfolio through flexibility in format and authentic reflection on their growth and learning.

Faculty members concurred that a dedicated ePortfolio course could improve the outcomes of the initiative by scaffolding the artifact selection process and guiding students in developing their ePortfolio to highlight reflection and formative self-assessment. Our prior research demonstrated students' desire for a more focused ePortfolio learning experience as well (Farrelly & Kaplin, 2019). The ePortfolio course curriculum should incorporate opportunities for the development of technological skills necessary for future in-service teaching, as well as opportunities for personalization and scaffolded reflection on artifacts. With in-depth training in these areas provided by the ePortfolio course facilitator, faculty members can focus on social-pedagogical aspects such as peer review, team-based problem solving, and presentation to external audiences as a way to enable students to make connections within and across courses (Bass & Elmendorf, 2012). As shared by one faculty member, "Our students, who have such minimal time to devote to academic life as it is, end up stressing over a lot of trivial logistics instead of focusing on the more potentially substantive aspects of ePortfolio." The two-prong pedagogical approach described here can ameliorate this issue and create a learning community where students are fully supported throughout their ePortfolio development process.

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