

ePortfolio Pedagogy: Stimulating a Shift in Mindset

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Abstract

As digital pedagogy and instructional strategy, electronic portfolios (ePortfolios) help educators organize instruction, facilitate teaching, and enhance learning. When students develop their ePortfolio projects in online spaces, they build a community where they learn to overcome challenges with the technology and to embrace the pedagogy that promotes learning. Decades-old research shows that the ePortfolio development process enhances knowledge production, makes visible knowledge application, and capacitates knowledge mobilization. ePortfolio technology promotes interaction, fosters reflection, and encourages both analytical thinking and the questioning of assumptions related to learning online. As multipurpose tools (assessment, accountability, collaboration, curriculum), ePortfolios are part of a movement that aims to reimagine the way we teach and learn in internet spaces. ePortfolio pedagogy, undergirded by interaction and reflection, integrates authentic learning episodes in digital spaces and enables practitioners to engage in democratizing and mobilizing knowledge. ePortfolio pedagogy is inclusive, embraces equity, and encourages the sharing of stories, beliefs, and ideas that result in appreciation of self and others. As students engage in idea generation in terms of choice of platform, layout, content, and artefacts, they experience a shift in mindset that capacitates a can-do attitude toward learning potential and project completion in online spaces.

Keywords: ePortfolio pedagogy, mindset, community, knowledge production, knowledge mobilization



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Introduction

ePortfolios may be described as multipurpose technological tools that capacitate the showcase of student achievement (showcase ePortfolio); inclusion of learning goals; attainment of course competencies (learning ePortfolio); assessment of learning to date (assessment ePortfolio); engagement in a deeper level of learning; and critical reflection (process ePortfolio). As digital pedagogy and instructional strategy, electronic portfolios (ePortfolios) help educators organize instruction, facilitate teaching, and enhance learning (Yancey, 2019). As students develop their projects, they learn to overcome challenges with the technology and to embrace the pedagogy that promotes learning. ePortfolio technology emerged in mid-1990s with the advent of educational web tools; it includes LiveBinders, Weebly, Wix, WordPress, and Mahara ePortfolio technology, among other platforms. Decades-old research shows that the ePortfolio development process enhances knowledge production (Marcoul-Burlison, 2006), makes visible knowledge application (Johnsen, 2012), and capacitates knowledge mobilization (Whithaus, 2013). ePortfolio technology makes affordances for interaction and reflection (Eynon et al., 2014) and encourages both analytical thinking and the questioning of assumptions related to the process of learning in online spaces. ePortfolios may also be regarded as a passageway for demonstrating how knowledge acquired in academic spaces can be applied in the workplace (D'Angelo & Maid, 2013). As multipurpose tools (assessment, accountability, collaboration, curriculum), ePortfolios embody what it means to learn and teach effectively in internet spaces. ePortfolio pedagogy, undergirded by interaction and reflection, integrates authentic learning episodes in digital spaces and enables practitioners to engage in democratizing and mobilizing knowledge (Weis et al., 2002). ePortfolio pedagogy is inclusive, embraces equity, and encourages the sharing of stories, ideas, and beliefs among members of a community. The process of developing ePortfolios helps foster a community of learners and promotes digital creation of cultural and historical knowledge (Weis et al., 2002) from different perspectives. In online spaces, students rely on interaction to develop their projects and to strengthen the community in which they learn (Zuba Prokopetz, 2021a). As students engage in idea generation in terms of choice of platform, layout, content, and artefacts, they experience a shift in mindset that capacitates a can-do attitude toward their learning and project completion.

Global Application and Research

Since mid-1990s, ePortfolio application, implementation, and research have been gaining momentum in the United States, Australia, Canada, Ireland, and other nations. In north America, both the United States (U.S.) and Canada have experienced steady growth in ePortfolio practice and research in various disciplines in post-secondary education (Barrett, 2004; Batson, 2015a, 2018; Cambridge, 2010; Eynon et. al, 2014; Eynon & Gambino, 2017; Hoven 2014, 2020; Kuh, 2008; Penny Light et al., 2012; Watson et al., 2016; Zuba Prokopetz, 2019a). Ireland has strong proponents who have contributed to scholarship and knowledge mobilization in various formats (Farrell, 2019, 2020; Farrell et al., 2021; Scully et al., 2018). Australia has a vibrant ePortfolio community of practice with scholars contributing to research and scholarship on a myriad of topics that include digital ethics (Slade & Cicchino, 2021) and student feedback (Bowker & Slade, 2021) among others (Martin & Summer, 2020; Slade et al., 2020). Current research shows that reflective learning and student agency align with ePortfolios (Whitney et al., 2021; Zuba Prokopetz, 2021a, 2022a)—a digital pedagogy appropriate during a time of change in the institution of education.

Less than a decade before the pandemic, ePortfolio proponents began to adjust their theoretical and philosophical positioning to better align with a digital environment that necessitates a modified curriculum (Batson, 2015b). As part of technology-enabled curriculum design, ePortfolios include many stakeholders who can benefit from the “learning that is being documented” in student projects (Penny Light et al., 2012, p. 21). ePortfolio creators (learners and educators) immerse themselves in a meaningful personalized documentation of learning to date. Educators who experience these evidence-based learning episodes learn “to address not only today’s learners but also the complex problems faced by our ever-changing society” (Penny Light et al., 2012, p. 23). As a form of organized instruction and guided learning, ePortfolio curriculum design embraces the process of artefact creating, selecting, designing, composing, and assembling (Yancey, 2019).

Learning Modality

Conventional pedagogical ways in a pre-digital era at both universities and colleges commonly included “a series of slides and faculty members in various disciplines who would lecture their student audience” (Zuba Prokopetz, 2021b, Conclusion). When the world suddenly shifted to an online learning modality due to an upheaval caused by COVID-19, the immediate response to the crisis was to rely on what was available and to transfer existing content to the online platform for continuity of subsequent lectures. However, since lecturing and teaching ought to be viewed differently (Ramsden, 1992), and as we have learned to appreciate, modality does matter in terms of course structure, content format, knowledge transfer, and instructional approach. As Anderson et al. (2001, p. 3) points out, teaching that occurs “in online courses is an extremely complex and challenging” endeavour. In a technology-mediated learning environment, educators necessitate a concerted effort to focus their teaching on student learning rather than on content lecturing. Courses designed for blended and online spaces rely on pedagogical tools, use multimodal knowledge dissemination, and contain customized resources that foster student interaction during knowledge production (Cleveland-Innes & Wilton, 2018; Vaughan et al., 2013)—as experienced by learners and educators in well-structured courses aligned with ePortfolio pedagogy (Vaughan et al., 2017). Achievement of course outcomes are evidence that in order to support and guide student learning at a distance, there is a “need to go beyond capricious blending of face-to-face and online activities” (Vaughan, et al., 2013, p. 3). Ongoing peer-to-peer activity afforded by courses that include ePortfolio projects is an affirmation that, as postulated by Oyarzun et al. (2017), the level of student “satisfaction and motivation is often influenced by the interactions that happen in the online environment” (p. 107). In order for online instructional activities to generate meaningful and ongoing engagement, they require purpose (completion of a reflective project, for example) and access to pertinent resources. Once institutions conduct their analyses of instructional needs in the early days of the pandemic, they may detect underlying issues that go beyond the use of technology. The crisis presented an opportunity for the institution of education to establish new processes to improve pedagogical conditions and make sustainable plans moving forward. Future research is needed to quantify the similarities (or dissimilarities) between the decisions made by administrators worldwide in comparison with the actual needs of practitioners as related to course structure, content, workload, student engagement, and much more. As Veletsianos (2021) suggests, educational actors wish to “carry forward” some of the lessons learned rather than simply return to what once was considered “normal” for them before the disruption (para. 2). Normalcy, however, has taken a new meaning since what was available (and considered to be the norm) pre-pandemic may not be ideal post-pandemic teaching and learning conditions. In order to rebuild better as we move forward, we need to recognize that

there were problems in many academic practices even before the upheaval caused by the pandemic (Veletsianos, 2021).

During the Spring 2020 pandemic disruption, technology and connectivity became the main foci. Educational institutions (like all other sectors) saw an immediate need to include technology-mediated communication for staff meetings, classroom instruction, and on-demand training sessions. The initial emphasis was on assisting stakeholders (staff, faculty, students) learn how to use webconferencing tools—technology was the main priority then. These efforts diverted attention off endeavours that required guidance of professionals with experience in both education (face-to-face, blended, online) and distance education—the only option throughout the pandemic. In consequence, pedagogy began (or continued) to be neglected, as the disruption entered its second and even third year. Gradually, it became apparent that technology is what was needed to connect educators and learners even though, as we soon learned, “pedagogy is the driver with student learning at the center” (Fullan, 2013, p. 51). As a result of this realization, there was a surge of support for educational consultants to offer advice related to professional development and curriculum design that aligned with the new digital landscape.

In response to the crisis, educational institutions relied on technology to “help usher in a new model, a new way of delivering higher education” (Staley, 2019, Introduction: On innovation in Higher Education). What many failed to notice was that a major threat that “those of us working in colleges and universities face isn’t video lectures and online tests [tech tools per se]. It’s the fact that we live in institutions perfectly adapted to an environment that no longer exists” (Clay Shirky as cited in Alexander, 2020, Introduction). In the mid-1990s, the number of technological tools available for instruction exploded, thus making it possible for online learning to flourish even before educational institutions thought of possessing—or using—a learning management system (LMS). Sadly, many in academia then seemed as unprepared—for this shift of seismic proportions regarding the technology (Richardson, 2010, p. ix)—as in the beginning of the pandemic. Looking back, the turmoil caused by the COVID-19 crisis may have been less disruptive had a greater number of organizations (including educational institutions) acknowledged a few years prior the transformation in the pedagogical environment. Shirky (n.d.) argues that “old systems get broken before people know what’s going to take their place” (para. 3); he used the music industry as an example (vinyl, cassettes, CDs, digital downloads). On a more positive note, educational leaders in institutions once unfamiliar with online learning began to devise a plan of action. The initial focus was on targeted professional learning that aimed “to avoid the excessive demands and tensions that come from adopting things quickly” (Houlden & Veletsianos, 2020, Established familiarity, para. 5) The need for a different instructional approach to enhance learning in digital spaces was now apparent.

Innovative Pedagogy

The ePortfolio as an innovation in pedagogy gained momentum in 1990s and initially surprised many (Danielson & Abrutyn, 1997) as research was not yet available (Cambridge, Cambridge, & Yancey, 2009) on this technology-enabled form of instruction. It began positioning itself in a new educational movement (Batson, 2015a; Cambridge, 2010; Eynon & Gambino, 2017; Ravet, 2005) since students began to express attitudes that reflected values related to their learning. In addition to enriching student learning, ePortfolio pedagogy connected practitioners with their daily practice of teaching students and facilitating their learning (Eynon & Gambino, 2017). During an ePortfolio project development process, students think back, reflect on the experiences, and articulate their learning during the alignment of core competencies. In courses

that include ePortfolios, students view themselves as community members; they rely on one another and seek ways to share what they have to offer by giving and receiving feedback on their ePortfolio pages. This line of thinking aligns well with the new pedagogical landscape. Institutions in the 21st century aim to graduate professionals who are able to internalize a certain value related to the learning that has taken place (Lynch et al., 2009).

Quality in Online Learning

The notion that online learning has taken a step backwards due to the pandemic is a sentiment shared by scholars like Diana Laurillard, Tony Bates, and others (Bates, 2022a; Nichols, 2019, 2020). Empirical evidence supports the belief that the emergency remote learning (ERT) modality is fostering a practice that greatly differs in quality from what online learning or distance education once was (and ought to be): research-based and theory-underpinned instruction mediated by technology and facilitated by experienced educators. Two years after COVID-19 caused a sudden shift in learning modality worldwide, there are members of the academy who still lack “the time and support needed to adequately prepare students” (Slade & Cicchino, 2021, p. 2) to acquire the necessary skills to learn online. In a blog post within the first months of the pandemic, Laurillard (2020) highlights how the disruption had changed higher education and how it would impact future plans globally related to access and quality. Accessibility in terms of connectivity and adaptability of course content and resources are crucial in all aspects of education. Quality in online learning encompasses more than course design and current resources; it includes learning experiences that foster, as Moore (1989) has suggested, interaction with one another, instructor, and course content. It also shows evidence that the course is inclusive (participants have a chance to equal participation); engaging (students take interest in the learning of one another); and interactive (feedback giving and receiving are embedded in the course). ePortfolio project development fosters a sense of community and acts as “an enabler for increasing meaningful personal contact” (Feldstein & Hill, 2016, p. 26) in online environments. Technological access and pedagogical quality as well as a focus on equity and inclusion may bring institutions a step closer to becoming democratized. Further involvement in critical work and scholarship are some of the requirements toward developing “scenarios for the future of higher education as a way to address current challenges [equity, inclusivity, flexibility, quality] and work toward desirable outcomes” (Veletsianos, 2020).

While responding to the crisis mode, institutions found comfort in relying on in-house course packs in their search for ways to manage the abrupt disruption to instruction. As time passes by, however, many educational actors are still unable to “examine the assumptions of teaching” associated with online pedagogy; many are still unsure of “the practices common to all teaching” and that new roles for learners and educators have emerged during the blending of face-to-face and online instruction (Vaughan et al., 2013, p. 15). Quality in teaching, regardless of the modality, requires adherence to theoretical principles in courses that are properly designed with learning activities that are innovative, interactive, and conducive to reflection. As Bates (2022b) suggests, although quality standards are required in all modes of teaching, quality is less about the delivery mode and more about the teaching itself. As digital pedagogy and instructional strategy, ePortfolio projects help educators organize course instruction, facilitate online teaching, and enhance student learning (Yancey, 2019). Promotion of student interaction with course content, peers, and instructors as well as encouragement of learner self-directedness albeit at a distance (Moore, 1989, 2007) is evidenced by observable communication among ePortfolio creators during the development of their projects. This psychological and communication space (transactional distance) manifests in behaviour patterns on the part of the

students and instructors (Moore, 2007) and is evident in online courses that incorporate ePortfolio projects—they are well planned and structured, and properly aligned with learning outcomes. When learners are engaged, they cross a space that is observable by instructors in the online learning process; in consequence, there is a reduced instructor presence while still maintaining teaching presence (Moore, 2007) by members of the online community. The concept of “independent studies,” used by Michael Moore to refer to the space and separation between instructors and students (Boyd & Apps, 1980), focused on learner agency. Students “at a distance” made choices and expressed their autonomy as they engaged in a transaction (a form of interaction) with their instructor. In communities that include ePortfolios, there is a transaction (ePortfolio project) and meaningful interaction (peer-peer feedback); the instructor sets the stage for the main actors—the students themselves.

The ePortfolio process is successful because it brings together key elements of online pedagogy as demonstrated in peer-to-peer online interactions in a community of ePortfolio creators. Students learn to appreciate the process of self-initiated learning during experiences that make affordances for structure, interaction, and autonomy (Wedemeyer, 1981). As a result, the implementation process of an ePortfolio project may help educators who are newcomers to the online teaching modality experience how to guide and support learning episodes in a technology-mediated environment. As posited by Cleveland-Innes in her resource written in collaboration with Wilton (2018), there are differences in how we facilitate quality instruction in-person and online. During the asynchronous learning episodes, the authors suggest, the “[q]uality of [student] engagement depends on facilitator skill” (p. 56). Therefore, online experience of course facilitators continue to be of great importance. Now that we are entering the third year of the pandemic, we need to concern ourselves with the quality (or lack thereof) of instruction as we move forward in a landscape that has changed forever. Blended learning – a combination of in-person and online learning—will enter the picture as the new form of instruction, and “this form will [most likely] become the standard” (Cleveland-Innes & Wilton, 2018, p. 9) for institutions worldwide. In order to ensure “quality blended learning experience, the content and activities” of both modalities—face-to-face and mediated via technology—need to be integrated (Cleveland-Innes & Wilton, 2018, p. 2).

Ongoing professional learning, a requirement for quality teaching – now includes learning to learn online—so educators can become familiar with online pedagogy. In an effort to avoid taking a step backwards in terms of quality, teaching staff require adequate “training in how to involve students in online discussions and facilitate their deeper understanding of taught material ... [as well as to understand] how to best teach with technology and make the most of online learning” (Houlden & Veletsianos, 2020, para. 4). Faculty will need to rely less on quick adoption as they deal with bigger issues at hand. In education, it is not uncommon for practitioners to apply what they know about a concept before the availability of research findings (Bryant & Chittum, 2013). Prior to implementing new technological tools, educators need to ensure that sound digital pedagogy is in place to prevent their initial enthusiasm from translating as a “silver bullet” or a quick fix (Bryant & Chittum, 2013; Watson, 2012). Therefore, it is beneficial to reach out to experts that can provide pedagogical structure to new or existing courses in digital spaces. Purposeful learning activities – such as an ePortfolio project – is among the instructional strategies that help enhance online learning experiences for both educators and learners. Research-based evidence shows that an ePortfolio project helps not only enhance student learning but also connect practitioners with their craft as facilitators of learning (Eynon & Gambino, 2017). Data show that “the ePortfolio process is conceptually and theoretically sound”

(Eynon & Gambino, 2017, para. 4). ePortfolio projects are grounded on theories of learning, encourage co-construction of knowledge, promote reflection, and help make visible quality of online instruction.

Overcoming Challenges and Shifting Perceptions

Learning to deal with change and attempting to use new technology were viewed with a certain level of resistance in pre-pandemic academia due to a fixed mindset among conventional practitioners. Learning how to apply educational technology was not only perceived as too challenging but also deemed unnecessary at the time. This line of thinking changed when the global crisis “contributed to, and probably accelerated, the roles that the internet and digital technologies play in our lives, thrusting large numbers of people and organizations online” (Wavrock et al., 2022, p. 2). As a result of the lockdown in Spring 2020, educational institutions worldwide had to shift instruction to video conferencing platforms forcing educators to rely on “digital transformation technologies” to perform their craft (De et al., 2020, p. 2). A pre-pandemic mindset may have been among the key contributing factors in one’s failure to see (years before the pandemic) innovative ways to teach and learn that had been accessible since early-1990s. Even when web tools were available (Wikis, Blogs, online platforms), many continued to be oblivious to the power of online communication and instruction. Peter Drucker once stated that with rising costs and little improvement in quality, many university campuses would “be relics” (Lenzner & Johnson, 1997, p. 15). Even with the availability of technological innovation, many institutions, argued Bates (1995), seemed to have neglected to embrace technology and flexible forms of learning. This sentiment helped perpetuate a “collective inability to recognize a ‘tectonic shift’ in the way” learning occurs (Richardson, 2010, p. ix). This institution-wide lack of technological knowledge and experience around the globe became apparent when the world pivoted to distance (now commonly referred to as remote) learning. Before everyone was forced to rely on technology to continue with their craft, the general assumption was that digital tools were unnecessary and unrelated to the process of learning and program outcomes. In consequence, the traditional method of knowledge transmission persevered—instructor-centric lectures and paper-based resources. Educators, who continued to rely on their blissful ignorance to justify their fixed mindset, were complacent toward the seismic shift in education, as Richardson (2010) has suggested. This was a time when ePortfolio creators (educators and learners) and their purposeful projects for assessment, employment, reflective learning, or professional development (Butler, 2006; Chang, 2001; Wade et al., 2005; Zuba Prokopetz, 2019b) were gradually becoming a patchwork of communities in spaces of the internet.

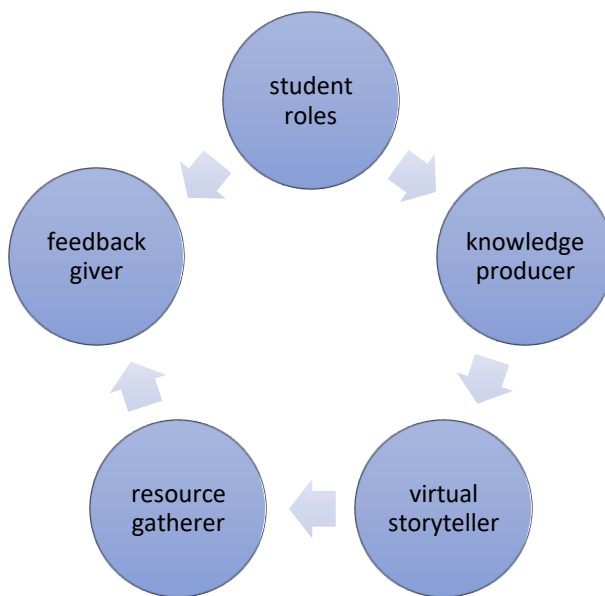
Affirmation of Self in ePortfolio Communities

As multipurpose technology-mediated tools, ePortfolios are a platform for instruction; a tool for authentic assessment of learning to date; a hub that makes knowledge production visible; and a locus for reflective passages that align with core competencies. ePortfolios are both a product (the technology) and a process (the pedagogy) that enable learning and instruction. ePortfolio projects enable students to showcase their achievement (showcase ePortfolio) and instructors to assess learning (assessment ePortfolio). The learning ePortfolio, also referred to as the process ePortfolio, includes peer-peer interaction, learning goals, and evidence of attainment of course competencies. ePortfolio pedagogy fosters a deeper level of learning and critical reflection facilitated by feedback interaction among members in the learning community. Formed in different spaces and for various reasons, communities are comprised of actors who share a mutual interest and engage in purposeful activities like the development of an ePortfolio project. Members of an ePortfolio community share common goals, and they engage with each

other as a form of motivation toward project completion. Even though initially, ePortfolio activities were not always designed to support the instructional process, they were an effective planning and management tool that helped inform and support the process of instruction in a number of creative ways (Sherman, 2006). In addition to assessment, learning, and reflection in virtual spaces, online activities underpinned by ePortfolios help foster a sense of self-affirmation (during feedback interaction) and self-awareness (while writing reflective passages) at different phases of the development process (Zuba Prokopetz, 2021c). A study that included ePortfolios as a form of mindset intervention revealed that college students “who completed ePortfolios were more likely to describe themselves as having a growth mindset” (Singer-Freeman & Bastone, 2017, p. 151). This assertion underpins the ontological view of student ePortfolios as a space where “learning is about living life through a search that has meaning for oneself and others” (Nguyen, 2013, p. 135). During the project creation, students begin to sense a shift in their responsibilities once they become part of a learning community that has a purpose (completion of the projects), structure (ePortfolio platform), live resources (exemplars from peers), and meaningful interaction (peer feedback). This innovative learning environment empowers students to “assume more of the agency for their own learning” (Batson, 2011, p. 112). In consequence, gradually, they reveal their capabilities as producers of knowledge and story tellers (an affirmation of self) as well as gatherers of resources, and givers of feedback (a contribution to the community). Figure 1 diagram displays my emergent realizations based on how I conceptualized what was happening with students in my own practice at various stages of the ePortfolio development process before and during the pandemic. In these ePortfolio community gatherings, members presented themselves in their roles as researchers, contributors, and both co-creators and disseminators of knowledge in order to bring strength to the community.

Figure 1

Contribution to an ePortfolio Community



In these asynchronous online communities, interaction among educational actors necessitate significant role adjustments since “the student must assume greater responsibility to match the increased control that comes with online learning” (Garrison et al., 2004, p. 63). Members of online learning communities establish themselves socially as they demonstrate their potential to “identify with community [members] ... and develop inter-personal relationships by way of projecting their individual personalities” (Garrison, 2009, p. 352). Sentiments related to relationship building, trusting environment, and purposeful communication are illustrated in the Community of Inquiry (CoI) framework (Garrison, 2009; Garrison et al., 2001; Garrison et al., 2004; Garrison & Cleveland-Innes, 2005; Vaughan et al., 2013).

Community of Inquiry: Fortifying Online Communities

The three CoI elements—social, cognitive, and teaching presences—overlap during online collaboration and align well with ePortfolio pedagogy. The framework provides guidance to online educators (novice or otherwise) and helps in the creation and maintenance of a learning environment that is more interactive, collaborative, and meaningful for all stakeholders. Experience-based observation in various iterations of courses that include ePortfolios as a capstone project (in a graduate program and also in language classes) shows that learners have been receptive to the inclusion of aspects of a CoI model as they complete their projects (Zuba Prokopetz, 2021b; Zuba Prokopetz, 2021c). During the creation of the projects, the pages of the students’ ePortfolios become the focal point for knowledge production (cognitive element) which result in increased student connection (social element) and peer-feedback interaction (teaching presence). Fortifying the community is “open communication and collaborative learning” which underpin the sense of identity and cohesion among its members (Garrison, 2009, p. 353). In an online community of learners, the value of undergoing an ePortfolio project is far reaching. When the development process is experiential, it impacts many levels – academic, personal, professional. As ePortfolios are reflective in nature, they make affordances for introspection, foster awareness, and stimulate a shift in mindset in one’s assumptions about learning capabilities and, to some extent, perception of instruction in virtual spaces.

Shift in Mindset

An individual’s mindset shapes the way they think and act; therefore, it greatly influences how success may be interpreted and how achievable (or unachievable) it may seem to be at any given time (Dweck, 2016). Throughout life, we experience different mindsets in our connections with teachers and elders, and our perceptions of information from the media in general (literature, newscast, media platforms). Literature shows that individuals with a fixed mindset feel judged and those with a growth mindset have an urge to understand as they enter each new experience (Dweck, 2016). Relatedly, one’s mindset also alters as a result of how learning is experienced in internet spaces. As Bateson (1979, 1972) has suggested, the mental processes of a learning mind are interconnected and underpinned by information exchange and transformation. Therefore, quality of interaction greatly impacts the outlook community members may have during vulnerable learning moments (discussions in the forum) and collaborative group work (iterative and interactive ePortfolio projects). As a group, ePortfolio creators engage in idea generation in terms of choice of platform, layout, content, and artefacts which leads to a shift in mindset that capacitates a can-do attitude toward project completion. A teaching presence – ongoing assistance from both course instructor and participants – leads toward favourable outcomes more often than not. Research studies underpinned by the CoI model throughout the past decade illustrate the importance of instructor presence in asynchronous online courses; study findings show the positive impact of teaching presence on student

performance and satisfaction (Borup et. al, 2012; Garrison & Cleveland-Innes, 2005; Ngubane-Mokiwa & Khoza, 2021; Oyarzun et al., 2017; Stafford, 2022). This form of targeted guidance in a purposeful manner (project completion) helps actors in online communities focus on possible ways to deal with not knowing how to learn online – an element that may have been disregarded during the sudden changes to the status quo in March 2020. In terms of technology, the institution of education made it possible for educators to work from the comfort of their bricks-and-mortar spaces. Pedagogically, however, the challenge of knowing how to do so effectively still remains.

As members of the National Council for Online Education (2022) posted in a blog, courses for online learning are intentionally designed for the online environment with carefully chosen technological tools that support educational objectives. These courses are successful because “faculty receive professional development and support to succeed in this modality” (para. 6). They further suggest that “high-quality online learning is the result of faculty trained and supported in online pedagogy,” among other key aspects (para. 10). As educational institutions proceed, they need to consider the implementation of research-based digital pedagogies and frameworks that align with a 21st-century teaching and learning mindset; an element that seems to be still missing in academia. A report that provides a profile of 21st-century learners emphasizes the need for learners to be passionate and resilient (AASL, 2007). Dweck (2009) suggests that educators need to “foster the growth mindset in [their] students” (p. 9) to enable them to acquire, apply, and disseminate their knowledge in innovative ways.

Although the academy experienced uncertain times with the shift in teaching modality, there is evidence to suggest that students in courses with ePortfolio projects were comfortable embracing their new role in online spaces. As aligned with ePortfolio pedagogy, co-construction of knowledge was visible in the class forum where students “received feedback ... [and] would question and/or validate comments provided by their instructor and peers” on their submissions (Zuba Prokopetz, 2022b). Course participants, guided by the course facilitator, relied on the ePortfolio pedagogy to engage in feedback interaction. Comments made on the ePortfolio pages needed to be acknowledged (attentiveness) and/or incorporated (responsiveness). By justifying their perspective on the feedback received, students expressed agency. At times, opinions differed pertaining to, for example, layout of page design – there was (more often than not) a display of divergent thinking which was embraced and accepted. This back-and-forth interaction led to reflection and a gradual movement toward convergent thinking, thus helping shift mindsets – one community member at a time. It appears that vulnerabilities inherent to ePortfolio development process foster a sense of acceptance of self and others and brings forth the notion of equality and equity. The ePortfolio development process embraces elements of cognition (the learning) and affect (the feeling). In consequence, it facilitates an emotional interpretation of knowledge related to both project content (composition) and also to one another (acceptance) (Huitt & Cain, 2005). ePortfolio pedagogy is fair (the final product receives a pass or provides a chance to resubmit), interactive (students engaging with one another), and inclusive (a learning community of ePortfolio creators). The feeling of inclusivity is overtly displayed in a learning community that is cemented by meaningful peer-peer connection (Feldstein & Hill, 2016). The process of developing an ePortfolio embodies inclusivity and acceptance of differences among group members. It embraces mutual appreciation, self-awareness, and the importance of diverse contribution. By engaging in introspection and reflection, ePortfolio creators begin to question their sudden realizations pertaining to their learning and the achievement of competencies in their course or program. In an ePortfolio

problem-solution project in a professional engineering program, perception of student self-assessed achievement correlated with student perception of the usefulness of the project in their effective achievement of course objectives (Michael, 2019). ePortfolio project efficacy continues to be the subject of research studies around the globe with findings that show “evidence of their effectiveness in fostering deeper learning, reflection, and ownership of the learning process” (Honor, 2021, p. 109).

Opportunity for Future Studies

Given that self-affirmation is considered an effective technique “in increasing receptivity to interventions across domains from promoting health behaviors ... to improving academic performance” in underrepresented groups (Falk, 2015, Significance), a future study could focus on effectiveness of deployment of ePortfolio projects as an intervention toward open-mindedness related to more effective personalized learning tasks in online spaces. As a research site, ePortfolios house meaningful information in the chosen platform (Zuba Prokopetz, 2021a) and enable data to be stored and experiences to be storied (Winter, 1988) by students and instructors alike. Educational actors are undergoing a shift in mindset regarding instructional strategies that promote learning and engagement in online spaces; ePortfolio pedagogy makes it possible for “students to humanize their learning” (Mize et al., 2021) and stimulates a change in perspective about what distance education (online or distance learning) entails. Data produced by storytellers in ePortfolios is content rich, promote knowledge transfer, and contribute to the field of research (Ternan, 2018; Zuba Prokopetz, 2021a). As the ePortfolio community continues to grow globally, so does the opportunity for research that will benefit both learners and educators. As an example, a research team in Canada conducted a study on ePortfolio implementation from the perspective of experienced ePortfolio proponents (educational developers, faculty members, instructional designers). Results showed that there was little emphasis on the role of the instructor in the success or failure of ePortfolio integration in a course or program of studies (Hoven et al., 2021). Literature shows that the main focus of research efforts thus far has been on enhancing student learning. The time has come for ePortfolio creators (including course facilitators and educational leaders) to receive proper guidance on how to: use the technology; integrate the pedagogy; engage in constructive feedback interaction; and immerse themselves in a deeper level of reflection. Therefore, ongoing support is needed for “educational reform programs” with “innovative teaching projects” that promote knowledge diffusion—“knowledge about an innovation that gets adopted” (Stasewitsch, 2022, p. 93).

Moving Forward

There is a consensus among scholars that distance education (also referred to as remote, online, or digital learning) may have taken a step backwards during the quick response to the global crisis (Bates, 2022a; Nichols, 2019, 2020). In order to prevent the return to the previous normal, rebuilding post-pandemic requires consideration of not only the existence of issues in pre-pandemic academic practices but also the lessons learned throughout the fluid situation (Veletsianos, 2021). Addressing current challenges necessitates involvement in critical work and scholarship in an effort to reach favourable outcomes (Veletsianos, 2020). Courses that are being (re)designed for either blended or online spaces ought to consider learning episodes that lead to the development of ePortfolio projects. These instructional activities comprise content (what), process (how), and rationale (why), key ingredients to help cement learning in online communities. Nonetheless, myopic efforts to push online education forward may prove to be less effective in the absence of a full disclosure to the stakeholders of existing priorities (training

related to technology and online pedagogy) as well as individual and collective representation of core values (equity, equality, flexibility, inclusion).

Conclusion

Educational experiences that involve ePortfolios capacitate moments of introspection, reflection, and feedback interaction among members of an online community. ePortfolio pedagogy underpins learning at a distance since it fosters the acquisition and application of knowledge among actors who are geographically separated. As digital pedagogy and instructional strategy, ePortfolio projects help students learn to overcome challenges with the technology (product), embrace the pedagogy (process), and question the purpose (rationale) of these instructional tasks in their virtual space. During the development process, there is a phase of awareness (what do I already know?), discernment (how do I align my learning with competencies?), and acceptance (why do I need feedback?) that culminate in appreciation of self and others. As illustrated by the artefacts chosen for the storytelling, ePortfolio creators learn to embrace their bias, assumptions, and diversity of thoughts which leads to a paradigm shift in how they perceive (their) learning in online spaces. ePortfolio pedagogy is inclusive (engaging and inviting), embraces equity (support is personalized), and encourages the sharing of stories that cement learning (alignment of competencies). As students begin to express agency in terms of their choice of platform for the project, page layout, and artefacts to include, they experience a shift in mindset. This line of thinking capacitates a can-do attitude, results in appreciation of their vulnerability as storytellers, and leads to the completion of an authentic project in digital spaces.

Author's Contributions

The author was informed by her analysis of observable communication among ePortfolio creators during the development of their projects before, during, and after the pandemic. The author has been a participant-observer in the development of more than two hundred ePortfolio projects—from ideation, creation, and peer-feedback interaction to the articulation of learning in a final presentation.

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Conflict of Interest

The author of this practice paper does not declare any conflict of interest.

Data Availability Statement

This paper is based on notes from the field resulting from practical experiences and evidence-based observations of an instructor in her practice in blended and online learning spaces. There was no collection of data. The author has taken necessary steps to protect the privacy of course participants.

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