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Exploring ePortfolio Practice in Health & Education: A Need for Digital Ethics Guidelines

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Exploring ePortfolio Practice in Health & Education: A Need for Digital Ethics Guidelines

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University health and education courses often use ePortfolios as a tool for assessing students' learning from workplace learning placements. It is necessary for these students to collect evidence of learning involving vulnerable groups (e.g. patients/clients and children). There may be unintended consequences involved with the collection and sharing aspects of ePortfolios that need to be better understood and managed. Current ePortfolio literature discusses ethical issues, such as privacy and protection of data in an online environment (Poot & Austin, 2011). However, discourse about privacy, repurposing, consent and confidentiality of secondary use of students' and others' data is limited (Slade et al., 2018). In this paper, we will share the findings from our research across seven Australian universities with an aim

1. To understand current practice across institutions and related challenges, and
2. To identify intended and unintended outcomes of ePortfolio practice relating to vulnerable groups.

Keywords: ePortfolio, digital ethics, privacy, confidentiality, data security

Introduction

The ePortfolio fills the need for a safe space university students can use to demonstrate proficiency in the profession to which they are being inducted. In the health and teacher education professions, ePortfolios are used to record learning, demonstrate competencies of professional standards, record reflections on professional placement experiences and gain feedback on performance (Nagler, 2009). However, despite many students' use of the online environment for social networking, they are not well-versed in all online technologies and may accidentally share information that is potentially sensitive (Hagel, 2015; Kift et al., 2007).

We live in a dynamic time where the online spaces in which we operate require us to change our ways of thinking because the "networked and public nature of the internet requires the capacity of thinking more abstractly about the effects of one's actions on unknown others' and communities" (Flores & James, 2012). Communication and information technologies have rapidly changed over the last decade (Kaye, Whitley, Lund et al., 2015), but the implications for practice on the use of these digital technologies has only recently started to gain attention. In order to safeguard clients and practitioners, ethical standards need to be defined to ensure that the implications of technology are fully understood (McAuliffe & Nipperess, 2017). This implies that students undertaking health and teacher education courses will need more guidance on digital ethics to frame their decision-making as we guide our students in building and maintaining their online presence as they enter their professional field.

In the current digital and employability climate, students create their own personal branding online to influence their future career pathways. EPortfolios provide a rich source of evidential content for students to use in developing their brand, such as formal assessment task responses, reflections and work placement experiences. Students are also encouraged to develop an evidential repository from informal learning sources. However, they do not always

realise the ethical implications of reusing this data collected from other groups, such as patients, clients and children, in online contexts. When information is posted on social media, for example, students do not always have control over the audience. Similarly, digital interactions in blogs, webinars and even email, puts a student on display to others, thus requiring a solid understanding of, and application of eprofessional ethics. Unlike the older idea of 'netiquette' rules to manage online behaviour, eprofessionalism is a much broader construct, involving one's values, attitudes and actions when engaging online (Sowton, Connelly & Osborne, 2016). The ability to apply ethical principles to new online contexts and scenarios is increasingly important for students.

The aim of this paper is to share the findings from our research across seven Australian universities where we investigated digital ethics in ePortfolio practices. This paper is an overall summary of the project to-date, adding to the previous Australian ePortfolio paper on problem definition and awareness building. Brown-Wilson, Slade, Kirby et al. (2018) found there was a dearth of literature regarding guidelines and policies. Although students were provided a consistent message regarding consent in respect to images, limited direction was provided regarding how to address online secondary use of data.

This paper presents a brief synopsis of the findings around two central aims of the research project, which are:

1. To understand current practice across institutions and related challenges, and
2. To identify intended and unintended outcomes of ePortfolio practice related to vulnerable groups.

Research Context

This unfunded project grew out of professional conversations that began at the 2014 ePortfolios Australia Forum in Perth. Several practitioners needed to address concerns around the privacy and confidentiality of vulnerable populations (e.g. children and clients) in their university student ePortfolio use. In 2017, research team members from seven Australian universities received Human Ethics approval to begin our project to refine ePortfolio implementation across Health and Education faculties in Australia.

Limitations of the Work

The current study possesses a few limitations. First, our study sought the perceptions of current ePortfolio practice from students and staff in seven universities. All measures were self-report only. Secondly, our sampling method was purposive and convenient, which may result in sample bias since our participants may not have been a truly random sample, given the small sample size across the seven universities. Additionally, results are self-reported. As a result, this may hinder the generalisability for our findings, especially as they may relate to other settings.

Research Methods and Sampling

A Mixed Methods design was employed to survey staff and student participants recruited at the partner institutions, as well as focus groups and interviews of staff to identify participant experience and beliefs pertaining to privacy and security of ePortfolio content.

We used purposive sampling with this project because we were looking for educators who have experience using ePortfolios with their students (Etikan, Musa, & Alkassim, 2016). Survey data was collected from 23 educators and 41 students via online survey from Education and Health faculties across the participating seven Australian universities during 2018. Survey questions included "How proficient do you perceive yourself to be when working with e-portfolios" to a Likert-type scale response to questions around usage like "Overall, I found the e-Portfolio interface easy to use", "I intend to use the ePortfolio as often as possible", "I like the idea of using an ePortfolio system", and "Using the ePortfolio improved my course performance". Qualitative data were managed and analysed using SPSS (version 21) to compute frequencies and descriptive statistics. In addition, nine educators who had experience with ePortfolios participated in either a semi-structured focus group or a semi-structured interview lasting anywhere from 25 minutes to an hour. These were completed in four of the seven participating universities. We used content analysis for the qualitative data to identify the ways in which ePortfolios were being used and to determine how students were prepared to begin their ePortfolio journey.

Results and Discussion

1. Understand current practice across institutions

Educators reveal that current ePortfolio practice has a positive influence on student learning, as use of the ePortfolio encourages deeper thinking, learning and reflective practice. Many students use ePortfolios to map and track their progress on competencies and/or attributes.

Students and educators from the universities involved in this study reported using a variety of ePortfolio platforms including Mahara, Pebblepad, Blackboard, Mahara, and Thinkspace (a version of WordPress), or students could choose their own platform. Educators used ePortfolios with their students mainly for assessment. Educators also had their students use the ePortfolio to store material and artefacts over time to demonstrate development of professional specific skills, knowledge and attitudes. Storing experiences and artefacts relating to authentic industry-based placement was seen by students and educators as a powerful way to showcase skills and competency development over time.

Guidance reported

One point of interest was the mismatch between advice students are given around what is and is not appropriate to post in their ePortfolios and what the educators report. Educators report written and verbal instructions are given to students in relation to the use of client information in the ePortfolio. Examples of guidance include blocking out faces, de-identifying text and using pseudonyms. While several students take great precaution with their ePortfolio data through password protecting their USB drive and not working on the ePortfolio while using public Wi-Fi to keep files and information secure, 30% of students reported that they received little to no guidance to ensure privacy and confidentiality of patients and/or children whilst on placement.

Challenges experienced

Challenges include maintaining confidentiality of vulnerable groups, issues with various ePortfolio platforms, lack of institutional support and lack of uptake from academic colleagues. That most educators in our study do not use ePortfolios for their own development was noticed

by some students, which could indicate that authenticity on behalf of educators could be important in enabling student use and uptake of ePortfolios. It would seem that better communication and support by the university and/or faculty, is one way to move forward to gain more users on board in building more of an ePortfolio community. Too, clear principles to guide students' ethical decision-making processes would support students' development of their online personas as they transition from a pre-service to in-service professional. The need for this suggests that some students have difficulty in understanding the full implications of potential ethical errors online and may need further support in how to apply eprofessionalism in online environments.

2. Identify intended and unintended outcomes of ePortfolio practice relating to vulnerable groups.

More than half of the educators surveyed reported the fact that their students were required to collect data from vulnerable groups that included storing images or text about patients and children particularly when undertaking industry placements. Educators are seeing student learning and how it has grown over time via the ePortfolio. It is the right tool to capture evidence of skill development, acquisition of knowledge and changes in attitudes.

As discussed above, one of the challenges is working with students to ensure that confidentiality and privacy of vulnerable groups is maintained. One of the unintended outcomes of practice is that students are not always aware of professional norms and rules. This is highlighted especially when students accidentally share materials because of an unfamiliarity with the ePortfolio platform tool and/ or an unawareness of privacy requirements. Further, students simply may not follow instructions or share information on unsecure or open sites and/ or not de-identifying industry sites that could lead to identification of patients or children.

Conclusions

The purpose of this project was to consider how ePortfolios were used and the potential unintended outcomes when students were in practice with vulnerable populations. Findings from this project suggests that current approaches to supporting students in the online environment is lacking. This may be due to the fact that many educators are adapting guidance developed for secure online assessment alone and therefore do not take into account the complexity of the unsecured digital environment. It is exactly in these types of environments where our students need to make ethical decisions about using others' data from their student ePortfolios. From this, one could conclude that students require more support in considering the nature of eprofessionalism and how this concept might be applied to safeguard the privacy of vulnerable populations in a digital world. Scenario or case study stimulus is one beneficial way to explain possible new situations that students might confront, strengthening the application of their eprofessionalism, and supporting educators as they guide their students.

Future research in this area should include an examination of the ways students do make decisions about how to develop and display their online personas as they develop into professionals. Additionally, preliminary results from this study suggest that many students do not yet see the value in the ePortfolio on their course performance, and thus seem closed to engaging with ePortfolios in the future. This is concerning given the affordances of the tool in supporting a student's learning journey over time.

As staff and students worldwide continue to find value in using ePortfolios as part of their classes in university Health and Education faculties, the tool is not going away. Our challenge in Australia is to continue to support our colleagues and press our institutions to assure support of the digital tools they have adopted to support students' learning.

Connection to the Forum Theme

Inspiration for this research arose from an idea posed by a University of Canberra staff member to a group of university teachers who **reflected** on the unexpected digital privacy issues that arose when secondary data was shared. If private images relating to patient care were inadvertently **connected and accessible** via students and staff digital records, such as evidence contained in an ePortfolio to a third party, even if they were originally meant to be used for a different purpose, this group of across university researchers realised that there was a gap in digital privacy guidelines and procedures. Once this digital ethics issue identified, the researchers realised they needed to conduct research with staff and students to investigate why this occurred, **reflect on findings** which would inform how this digital privacy dilemma could be addressed.

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