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ePortfolio traditions that are ready to be broken and new ones ready to be established

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Abstract

Although ePortfolio practices have been with us for a good 20+ years, in some form or another, the options that students and staff now have to represent their professional experiences have expanded over recent years. This is largely due to the plethora of online platforms that allow a user-friendly and templated experience, giving students freedoms they have not previously had, unless they had website development skills. This paper will report on a study of current ePortfolio platform options provided by institutions in Australasia, highlighting a divergence in, and opinions around, what constitutes contemporary good practice. It is fair to say that what was once seen as the responsibility of an institution to provide a dedicated ePortfolio platform for their students has started to fracture and that many institutions are now opting to mediate third-party and/or discipline-relevant options for their students. This paper will look at the pros and cons of these options, but also some emerging trends brought on by the advent of Generative AI, that institutions can now take advantage of.

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Introduction

Although ePortfolio practices (pedagogy) in higher education have been slowly and consistently advancing over recent decades, it appears the promise of this practice has not yet been fully realised by many institutions (Ciesielkiewicz et al., 2024). This is despite the options and systems that students and staff now have at their disposal to represent their professional experiences, which have increased over this time. Fundamentally, the systematic process by which an ePortfolio platform can help a student to self-assess and reflect on their learning achievements is both its major strength and its limitation as a pedagogical tool (Rusiňáková, 2023). Limitation, in the sense that it takes quite an effort for students (or staff) to deliberately and meaningfully reflect on their learning (Ciesielkiewicz, et.al., 2024), and to then make the emotional connection between that learning and the acquisition of competencies (skills) over the full life cycle of their degree, which could span 3-5 years (Ciesielkiewicz, et.al., 2020). The major strength, on the other hand, is that,

> *'when students know that their [e]portfolio will reflect their growth or skill development over time, they are more focused. They become more rigorous self-evaluators and set goals for their own progress…Within the portfolio process, students become active agents in the acquisition and exposition of their knowledge (Rusiňáková, 2023, p.41)'.*

Importantly, there are now a large number of online tools and platforms that institutions can provide or point users towards to allow for a very user-friendly and templated experience, giving students freedoms they have not previously enjoyed unless they had website development skills. Moreso, there are also choices that now need to be made around 'where' one represents oneself. For example, of the many options, these are systems either hosted by an institution for and on behalf of their students and staff and linked to the individual's identity at that institution or hosted independently (of the institution) on a cloud service on the web. Each of these options has its own benefits and drawbacks, and although these are important to understand and will be addressed in this paper for completeness' sake, that is not the focus of this research.

This paper will report on a study of current ePortfolio platform options provided by some 49 Universities in Australasia, and the changes in practice between 2017 and 2023. It highlights that there is a divergence in, and opinions around, what constitutes contemporary good ePortfolio practice in higher education. It is fair to say that what was once seen as the responsibility of an institution to provide a dedicated ePortfolio platform for their students, this notion has started to fracture, and many institutions are now opting to mediate third-party and/or discipline-relevant options for their students. This paper will look at the pros and cons of these options. It will also do this with one eye to the future, with a specific focus on some of the more recent affordances or opportunities ePortfolio practice can now offer in the light of Generative AI and the associated challenges to academic integrity.

By way of extension

The author first started developing an ePortfolio in the year 2000, when working at the University of Southern Queensland (Figure 1). At the time, ePortfolios were generally a series of simple

hyperlinked pages of text and images that were mostly hand-coded in HTML: and probably more akin to an online CV, though a bit prettier. Thus, what is being addressed here is not a new phenomenon, rather it is one, like many other things to do with the internet, has become a lot easier to construct with the advent of Web 2.0 and WYSIWYG (what you see is what you get) editors from about 2003 on (Donaire & García, 2011).

Figure 1

The Author's Original ePortfolio from 2003 (then two years old) from: https://web.archive.org/web/20031128031103/http://www.usq.edu.au/users/sankey/

However, it is important to appreciate that the portfolio practice and, more recently, the ePortfolio practice has a long and proud tradition in education, particularly in higher education, as a means by which students and staff can create a professional identity for themselves (Torres & McKinley, 2023). This has primarily been to allow one to focus on their academic practices and achievements, rather than on a commercial self-promotional, a rendering more commonly associated with the Internet.

Literature review

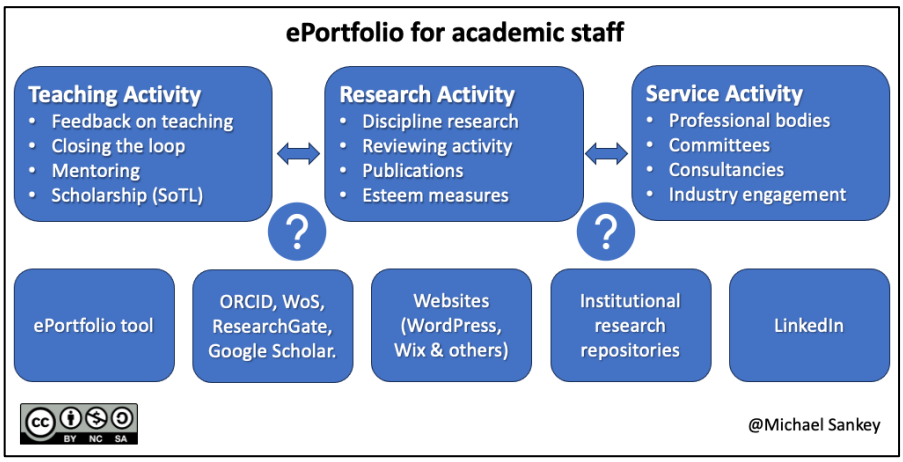
Although ePortfolio practices for university staff and students have been with us and well-studied for 20+ years, in some form or another (Ospíšilová & Rohlíková, 2023), the options that staff and students now have to represent their professional experiences and/or learning have expanded exponentially. Take for example 20 years ago, when ePortfolios were really the only option to have a web presence associated with one's university studies, unless one had web development skills. LinkedIn and WordPress were both in their infancy (both starting 2003), there was no ResearchGate (2008) or ORCID (2009) and institutional research repositories and information systems were rudimentary at best until 2013 when Pure was released by Elsevier (Elsevier, 2013).

Fast forward to 2024, and Figure 1 represents some of the current options that academic and professional staff need to choose from in this space, particularly when looking to represent their

academic practice, but not necessarily to fulfil learning, teaching and assessment activities, which may require the use of some other/further features, that may be seen in Figure 3.

Figure 2

The Many Options Now Available to Academic Staff Representing Their Practice

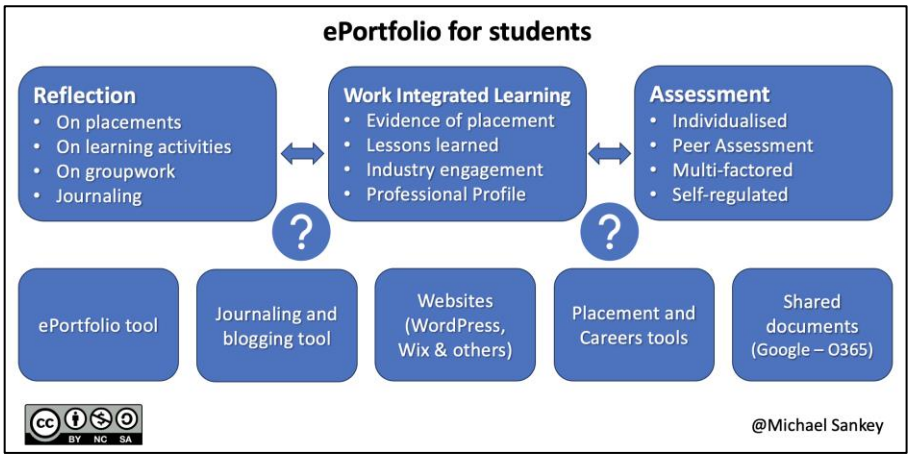


Today, there is a large range of online platforms that allow for a user-friendly and often templated experience, giving staff and students options that a single institutional platform may not provide (Torres & McKinley, 2023); for example platforms such as Wordpress, Wix, Weebly, etc. These can serve a purpose for certain disciplines but do not necessarily fulfil all that an institution may require when looking to navigate the broad range of needs their staff and students require. When the institutional aim is to help them (students and staff) secure a representation of their learning and skill acquisition to prepare for their future employment (Todeschini & Sollberger, 2023), one needs to consider that students will have a requirement to share content privately. While on the other hand academic staff require a platform to promote their practice associated with the institution (Rowley & Munday, 2018).

For students, more so, we are talking about providing platforms that allow them to contextualise their learning towards their desired profession and collating the evidence to support this goal (Ferns & Comfort, 2014). However, Figure 2 indicates also a different and expanding mix of technologies that might be applied to meet this goal for an institution, and different to those seen in Figure 1. But are these mutually exclusive or can there be synergies for an institution?

Figure 3

Some of the Many Options Available to Students to Represent Their Learning



Of note is that what was once seen as the responsibility of an institution to provide a dedicated ePortfolio platform to meet the needs of their students and staff may not be achievable or even desirable moving forward. This is because many institutions are now opting to mediate third-party and/or different discipline-relevant options for their students, and some actually offer multiple tools, where they had previously only provided one. As mentioned, this review will look at some of the pros and cons of these options and report on the current mix of systems used across the sector.

Before we look at this though, we must first look at the re-emerging or imperative to take another look at ePortfolio practice with fresh eyes (Torres & McKinley, 2023). Not the 'tools' that can house an ePortfolio, which will come later, but the types of practices that define a good use of an ePortfolio platform what would be called ePortfolio pedagogy (EPP), one that is firmly based in multimodality and the sociocultural theory of learning and now linked with the emergence of Generative AI (Lee & Jerelyn, 2023) and increasingly being seen as longitudinal or program focused.

TEQSA and Program-wide Assessment

Late last year (November 2023), the Australian higher education quality regulator TEQSA (Tertiary Education Quality and Standards Agency), after much consultation with the sector, released a paper entitled 'Assessment reform for the age of artificial intelligence' (Lodge, et.al., 2023). In this paper it looks at the emergence of generative artificial intelligence (AI), acknowledging that this presents both new possibilities for learning and teaching, while at the same time challenges to assessment. One of the key considerations in the paper was that of institutions providing the opportunity for '…a systemic approach to program assessment aligned with disciplines/qualifications' (p.4). More specifically it states:

> A systemic/programmatic approach to assessment provides multiple means for educators to make judgements about student progress, without losing the emphasis on feedback and dialogue. These judgements can be captured or tracked over time as student knowledge and skills develop. This in turn promotes the trustworthiness of the overall

> award rather than relying on a series of singular, uncoordinated judgements. This type of approach becomes a core consideration in ensuring appropriate credentialing due to the emergence of generative AI. (Lodge, et.al., 2023, p.4).

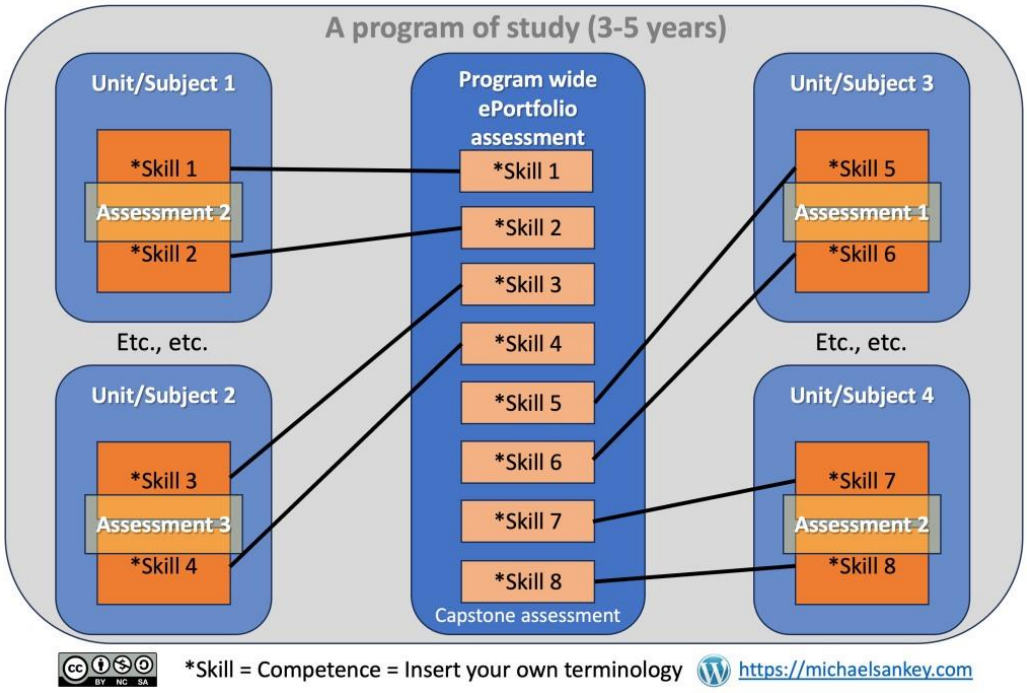
Step in ePortfolio practice, as it has long been held that ePortfolio practice can provide the opportunity to demonstrate cumulative learning, which allows a student to validate their experiences over the life of a program not just through individual units of study that are sometimes (often) have unrelated assessment activities (Basgier, et.al., 2023).

AI and ePortfolio

ePortfolio thinking at a 'program level' is not a new concept, and we have asked students to provide reflections in their ePortfolio, to record their practice and to provide evidence of placements and the like for many years now (Posey, et.al., 2015). It has been particularly popular in Education and Nursing, just to name two disciplines that have put this practice to good use (Tickle, N. et al., 2022). In some cases, we have even asked students to link this to their professional competencies, as illustrated in Figure 4.

Figure 4

Mapping Skills Across a Program of Study Comprises the Skills Learned in Units of Study



What we see with Generative AI, at least at this point in its evolution, is that the tool itself is not great at personal reflection over an extended period of time (Chepinchikj, 2023). It could, if using ChatGPT 4 or one of the other paid versions, do a reasonable summary of all the stuff a student has done, and if it was fed all the diverse elements the student was exposed to, along with a list of the standards \ skills it needed to align these too, it could conceivably make some link between the two, but that would not be a trivial undertaking and student would have to be pretty clued-up to do that effectively. But that is only for one subject for one semester, not for a whole program. Having said that, if someone was to use it in this way, they would learn something about

themselves anyway. But let's presume that they are not prepared to go to those lengths to provide a personal reflection on their learning, which may only be worth 10% in a unit of study (arguably) just so they can make the link between what they have learned to one or more of the professional standards they need to attain. Not that this would be a bad use of Generative AI anyway.

Mapping program-wide assessment

Now, if the faculty has done its mapping, if they make explicit how each assignment might be linked to a professional standard or graduate attribute (if no professional standards exist), then surely, we can ask our students to reflect on this as part of their learning journey through their program. This may only be worth 10% (arguably) in an individual unit of study but it could be used to build towards (articulate too) creating a much larger piece of assessment that could be contained in a final year Capstone Unit, where the student pulls all those pieces of string together to create their professional profile. Arguably this final piece could make up 40, 50, or even 60% of the mark in the capstone unit, but it has been something they have been building towards over the period of their studies. So, the student has not only reflected on each step of the journey but also now has the evidence that they are worthy of registration into their profession.

As stated earlier, this is not a new idea regarding ePortfolio practice, but it is a good case for using ePortfolio practice in a 'program', not just in a 'unit'. Could they use ChatGPT to help them? Maybe, but what would be the point, as we are talking about an iterative piece of assessment over the life of the program, not in an individual unit, of which they may be doing four (4) at any time? It's a big ask to pull all those bits together in a Generative AI engine.

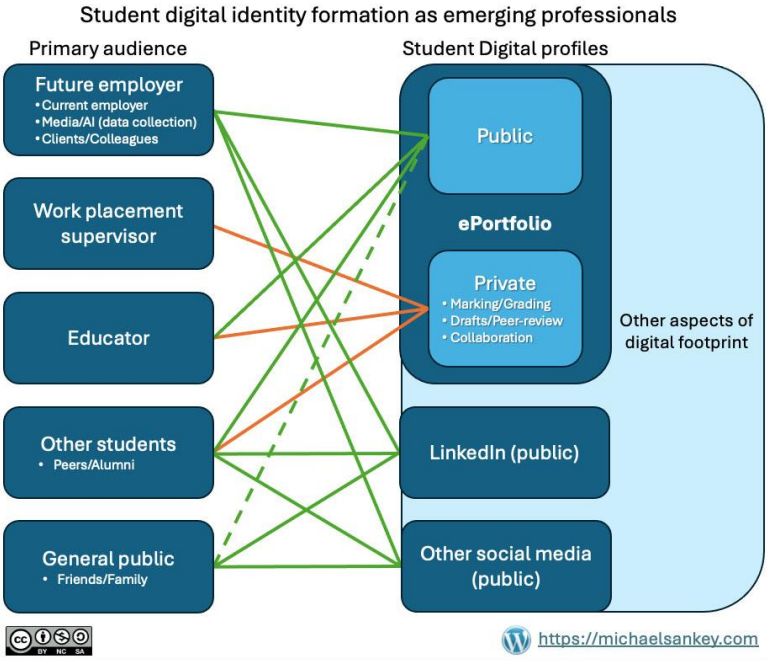
Student digital identity formation

Generally, in a higher education setting, ePortfolio practice is primarily used to encourage self-reflection and autonomous learning and/or to gather evidence of the skills necessary for future employment (Walland & Shaw, 2022). Notwithstanding, there are three main cohorts for an institutional ePortfolio, students, teachers and institutions, but the student focus is clearly the main driver for an institution (Ciesielkiewicz et.al., 2024). From this perspective, we see it active in many ways, for transition to work, assessment, presentation, learning activities, to evidence service learning or work-integrated learning and in some cases, for peer and self-assessment (Walland & Shaw, 2022), just to mention a few.

In particular, given the disruption of education that COVID-19 brought about, and now the advent of Generative AI, it becomes even more critical to understand the significance of digital, virtual, and web-based identities (Torres & McKinley, 2023). Because of the internet's propensity for knowledge materialisation, by bringing together familiar artifacts and forms, this, in many senses, now underpins our relationship with one another and the world. For example, the curated representation of 'self' might happen in various ways and in different online spaces (Facebook Vs LinkedIn, etc.), which requires educators wishing to use these tools in their teaching to think deeply about what and where they are asking their students to represent their learning and in what detail (Torres & McKinley, 2023). This means different forms of digital storytelling become increasingly important as methods of deep reflection become more necessary for evidence learning and this potentially to different audiences (Kelly & Le Rossignol, 2022). Figure 5 attempts to illustrate that the student's digital identity thus needs to consider 1) the different ways an ePortfolio platform may be used while 2) illustrating that other tools or platforms may also be used by students to represent different aspects of their digital self to different primary audiences.

Figure 5

Student Digital Identity Formation



The question then becomes, how are institutions responding to this challenge?

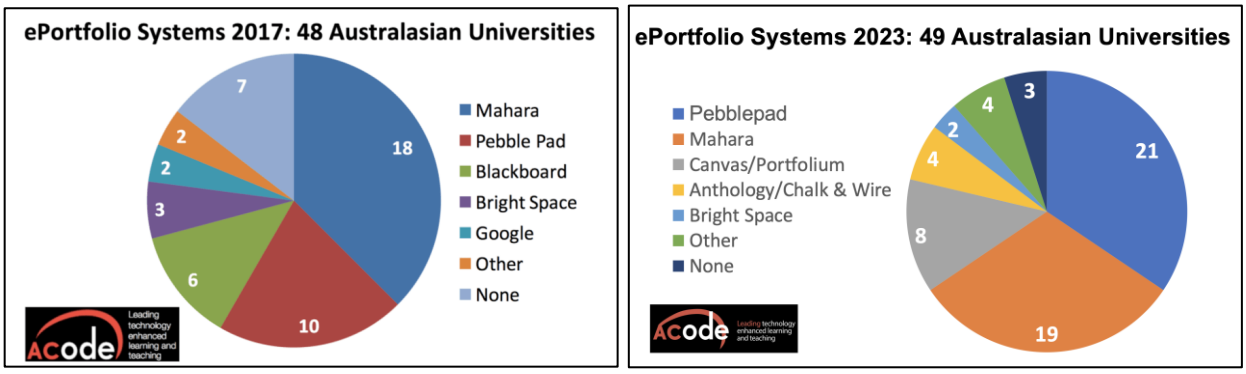
Understanding the contemporary ePortfolio landscape

Although there are now many technology solutions to represent one's thoughts, ideas and achievements, there is still something that a modern ePortfolio platform provides that cloud-based and public platforms do not, and that is their ability to host private information and make this viewable to a select audience. This is often associated with a Learning Management System (LMS), and linked with the ability or opportunity for the student to provide a direct and private link to their lecturer for assessment purposes. This might include reflections, draft assessments, and group work that the general public does not need to see (Hui et al., 2023), but it can be viewed by teaching staff and possibly other students (as seen in Figure 5).

Thanks to increased interoperability with the LMS, we have still seen the adoption of ePortfolio platforms within universities in Australasia continue to expand (Miyoshi et.al., 2021). For example, in 2017, the author, on behalf of the Australasian Council on Open Distance and eLearning (ACODE), conducted a benchmarking activity of universities supporting a centralised ePortfolio platform. In that activity, 7 out of 48 universities did not offer a centralised and supported ePortfolio platform (Sankey, 2017).

Figure 6

Change in ePortfolio Platform Use Over the Last 6 Years (2017 - 2023)



In July 2023 the author again, on behalf of ACODE, conducted the same benchmarking activity, (six years on). Since that time (2017) one further university had been added to the sector (Avondale University). Figure 6 shows the change in ePortfolio platforms used over the last 6 years. Of note, there are now only three (3) institutions that have no formal ePortfolio platform. But all the public universities now support some form of system. Also of interest is that some 11 institutions are now supporting the use of two tools or platforms.

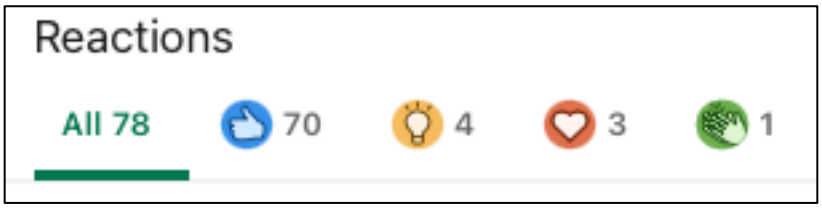
The largest growth in the market has been experienced by one particular platform (PebblePad) that has more than doubled its acceptance. This is not surprising given this platform serves multiple purposes for an institution, offering both an ePortfolio platform but also more advanced assessment features (known as ATLAS). However, the other growth that has been seen is that of certain LMS providers enhancing their ePortfolio platform functionalities in their own systems, by buying in the functionality of what were once stand-alone systems: Canvas acquiring the Portfolium Platform and Anthology (formally Blackboard) acquiring Chalk & Wire.

But what next

By way of extension to this data, particularly in relation to how students and staff are sharing other professional elements of their practice, there has also been a significant growth in the use of the LinkedIn platform, primarily thanks to its links to job search and recruitment (Quigley, 2022). When the above data was recently shared on Linkedin on 8 August, there was quite a response. At the time of writing, 78 people responded positively to this, 12 people had reposted it, and 35 people contributed further thoughts.

Figure 7

Likes on my Recent LinkedIn Post



These comments point to some interesting and emerging trends and can be summarised into three main categories:

1. The use of LinkedIn as an alternative platform: Some felt that this platform provided a place where students could professionally represent their skills. However, this did not support activities associated with things like placements and peer interactions based on their studies. But then neither is it designed to do so. Thus a platform to do this was still important. Having said this, it is important for institutions to build this into their practice for students.
2. Debate about the suitability and portability of the content held in ePortfolio platform: There was some concern that some ePortfolio platforms did not make it easy for students to export their data and make that usable on platforms such as WordPress or Wix, etc. This is of some concern, but in reality, this is not a major incumbrance of using other platforms, as only certain data can be shared publicly anyway.
3. The types of information that should be shared online, now that identity theft is rife: A growing concern that universities are starting to take more seriously, which leads systems to make more personal data private. This requires a platform that can be shared internally but not publicly for things associated with assessment and work placements.

Nevertheless, it would appear from both the institutional data and the anecdotal data that the sector is looking to facilitate the needs of the students in new ways.

Conclusion

What the above discussion and data demonstrate is that there are a number of platforms that are being mediated by institutions to allow for a combination of outputs for their students, allowing them to represent themselves for different audiences and in ways that are conversant with their future profession. But as the data is demonstrating this range of uses is not necessarily found in just one platform. Having said that, those systems that an institution provides its students and those that they recommend, must be able to provide an increased level of privacy, particularly due to the unintended consequences of sharing content and discussion of events, images and data that should not be seen by the public (Siddiqui, et.al., 2023), but that weighed against what a prospective employer may want to see.

The data indicates that we are seeing an expansion of ePortfolio practice across the Australasian University sector. But that practice has become and is becoming even more eclectic, using multiple platforms to achieve the professional goals of our students and our staff. But one thing is clear, as we continue to experience the shift in education experiences brought about by the advent

of tools such as generative AI, the role of ePortfolio practice and the platforms that house this practice is in no way diminished, rather we see only new opportunities for its use in the student learning journey.

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