Three Key Conditions to Revitialise an ePortfolio Program in Response to Increasing Regulation of Teacher Education

John Leslie Kertesz
University of Tasmania, john.kertesz@utas.edu.au

Three Key Conditions to Revitalise an ePortfolio Program in Response to Increasing Regulation of Teacher Education

John Leslie Kertesz
University of Tasmania

Abstract: This paper describes a study undertaken within the education faculty of a mid-sized university in response to the recommendations of the Teacher Education Ministerial Advisory Group (TEMAG) (2014) that initial teacher education (ITE) graduates emerge with an evidence-based professional standards-focused portfolio of teaching competency. In concluding that current teacher educator usage of, and attitudes to, ePortfolios limit the capacity of this particular faculty to respond to this challenge, the paper proposes three critical conditions to revitalise a stalled ePortfolio program and prepare for an increasingly demanding future. In sharing this experience, the paper seeks to support discussion of how teacher educators can respond best to the professional portfolio challenge in an environment of increasing regulation.

Introduction

In 2014 the Australian Government directed the Teacher Education Ministerial Advisory Group (TEMAG) to examine "how initial teacher education in Australia could be improved to better prepare new teachers with the practical skills needed for the classroom" (TEMAG, 2014, p. v). Their report, *Action Now: Classroom Ready Teachers* declared that "the standard across all initial teacher education programs must be lifted" (p. viii). Among its many recommendations, TEMAG (2014) made a number of references to "portfolios of evidence", (pp. vii, xiv, xv, 38, 39) as essential for the demonstration of standards-focused graduate outcomes and to launch new practitioners towards teacher proficiency. However, the term *portfolios of evidence* was not defined further. More recent initial teacher education (ITE) accreditation documentation (AITSL, 2016) requires students to demonstrate achievement of both enabling and terminal performances of the 37 Australian Professional Standards for Teachers (APST) focus areas throughout their course, to use rich evidence to verify impact on classroom learning, and build on these foundations towards proficiency certification. Furthermore, ITE providers are required to maintain such evidence for at least three years for further accreditation. Given such requirements for storage, manipulation, retrieval and display, it seems highly unlikely that the TEMAG (2014) student *portfolio of evidence* would be other than digital in form; that is, an *ePortfolio*. Such an ePortfolio would represent a complex and dynamic aggregation of the development of teacher skills and dispositions eventuating from its application to the various purposes of learning, assessment, graduate attainment, and proficiency certification over time (Chatham-Carpenter, Seawel, & Raschig, 2010; Costantino, De Lorenzo, &Tirrell-Corbin, 2009).

Both staff and students in this medium-sized university have had continuing access to some form ePortfolio tool for eight years. Institutional strategic documentation acknowledges the importance of ePortfolios in "students and staff responding to the graduate employability

and external stakeholder agendas" (Brown, Kregor, & Williams, 2013, p. 6), and includes the ePortfolio as an element of the highest level of online program design.

However, ePortfolio usage anecdotally has been sporadic, isolated, and declining. Consequently, the *portfolio of evidence* recommendation and impending accreditation procedures stimulated two questions: (1) *What is the actual ePortolio situation in the Faculty of Education?*, and (2) *What measures are required to respond effectively when the recommendations are implemented by the Australian Institute of Teaching and School Leadership (AITSL)*? The urgency of addressing these research questions was underscored by statements in *Action Now* that "Initial teacher education in Australia has been the subject of a large number of reviews, but the outcomes have had limited impact on the policy and practice of developing new teachers" (TEMAG, 2014, p. vii), and that "Programs that do not produce effective teachers should not continue to operate" (p. x). The determination of AITSL to proceed along the path mapped by *Action Now* has been evidenced since by the accreditation requirement that "Providers identify how their pre-service teachers demonstrate a positive impact on student learning" (AITSL, 2016, p. 9). Whilst portfolios are not mentioned directly in the accreditation documentation, and employment and registration data, and surveys are deemed acceptable evidence of impact, the requirement for verification of ITE student final year performance assessment suggests that portfolios may appear in more explicit terms as the new accreditation requirements are implemented.

Literature Review

Responding to these impending major changes in teacher education and considering the limited ePortfolio use apparent in this institution, a literature review was undertaken to identify key principles upon which to base a successful ePortfolio strategy. Although some articles documented minor failures (Oakley, Pegrum, & Johnston, 2014), no articles discussed the complete reconstruction of an unsuccessful ePortfolio implementation project, and there was little evidence of ePortfolio being introduced as a consequence of external accreditation or regulation pressures. However, Corbin, Carpenter, & Nickles (2013) surveyed 46 teacher education institutions across North Carolina as to their time, infrastructure, and personnel requirements for managing ITE accreditation similar to that proposed by *Action Now*. They notably concluded that ITE providers would need to invest substantial resources for increasing data collection, storage, and reporting, to the extent that some programs might have to close if institutions were unable to respond to the additional burden.

Light, Chen, and Ittelson (2012) stress that "pedagogy MUST lead the technology" (p. 3) if new ePortfolio tools are to both link and respond effectively to learning needs (Bhika, Francis, & Miller, 2013; Cambridge, 2012; Carson & Robertson, 2008; Maher & Gerbic, 2009; Slade & Readman, 2013). When this is not the case, academics easily can withdraw, pleading lack of ICT skills, or explaining away the technology as clunky, difficult to use, or not suiting their teaching style (Coffey & Ashford-Rowe, 2014). However, experienced ePortfolio researchers know that

> *Successful ePortfolio systems built upon a folio thinking culture are not dependent on the particular ePortfolio tool that is selected but on how the affordances of the tool relate to the curriculum and address the critical needs of the institution and various stakeholder groups (Light, Chen, & Ittelson, 2012, p. 136).*

There is greater potential for ePortfolio integration where educators acknowledge a new role as facilitators of collaborative learning, where students can manifest a high degree

of autonomy and utilize a broad range of tools to not just demonstrate knowledge, but also embed that knowledge into diverse authentic settings (Herrington, Reeves & Oliver, 2010; Light, Chen, & Ittelson, 2012). ePortfolios struggle where educators insist on students consulting the same books to write the same essay on the same topic, or sit the same exam at the same time. The obstacles are not merely physical. Traditional approaches perpetuate power relationships, demand student isolation and intellectual conformity, and generate transactional environments that are anathema to the open, collaborative, and constructive nature of ePortfolios (Laurillard, 2009). In such an environment, efforts to preserve academic standards promote a digital cold war between plagiarism sentinels and sharing technologies; a proxy battle between educational innovation and replication that is symptomatic of traditionalist inability to adapt to an inevitably and continually changing educational order.

ePortfolios by their nature embrace multimedia, capture both formal and informal learning, require rich formative input as well as traditional summative assessment, and transfer the ownership of learning to students who are licensed to engage in real world collaboration to demonstrate understanding in new and unpredictable ways that may nonetheless adhere to academic standards (Bhika, Francis, & Miller, 2013; Brown, Kregor, & Williams, 2013; Laurillard, 2009; Ring & Ramirez, 2012; Slade & Readman, 2013; Sorin, 2005). There is no simple solution or *silver bullet*, and talking about tools is of little benefit unless teacher-educators fully comprehend the structure they are seeking to build, and have some concept of the data type and volume being sought ultimately by the regulator or accreditation authority (Bryant & Chittum, 2013).

Educational progress by its very nature is disruptive and challenges traditional methodologies. Threatened teacher-educators (like their school counterparts) either resist by closing the office/classroom door or trying to squeeze entrenched practices into new expectations (Light, Chen, & Ittelson, 2012; Slade & Readman, 2013). This is evidenced by theatre lectures transforming into lengthy PowerPoint monologues and substantial document downloads in learning management systems (LMS), research effort directed to making digital examinations viable, and enforced attendance at tutorials translating into compulsory online discussion postings (Ward & Kushner Benson, 2010). A more fundamental pedagogical change is required; "without a clear pedagogical purpose, technology can be more show than substance" (Light, Chen, & Ittelson, 2012, p. 3; Carson & Robertson, 2008; Hallam, Harper, McAllister, Hauville, & Creagh, 2010). Cambridge (2012) stresses that ePortfolio success requires not just changes in practice, but also changes in fundamental responsibilities:

> *faculty members must take much broader responsibility for student learning…seek to understand and support students' learning throughout their undergraduate learning careers, not just the learning that relates directly to the intended outcomes of a particular course…[and] …give students a substantial voice in decision-making about curricula and programs throughout the institution, more so than is offered by course-evaluation forms (p. 53).*

Ward and Kushner Benson (2010) note that most academics teaching online have no history as online learners and this affects how they teach. However, it also impacts on how they respond to learning technology, and their ability to contribute effectively to ePortfolio technology decision-making (Light, Chen, & Ittelson, 2012). Even if teacher-educators engage with ePedagogy through professional learning and attempt to design units around standards-focused ePortfolio requirements, such efforts are unlikely to be effective if they see the technology as something beyond their own experience and *done to* students, and fail to explore the various demands, functions, capabilities, and potential of the tool (Bryant & Chittum, 2013). Teacher-educators should not and cannot expect their students to take ownership of ePortfolios to evidence professional teaching standards when they themselves have not utilized it to both share and expose their professional competence to the same

scrutiny, and cannot model the same teacher behaviours (Carson, McClam, Frank, & Hannum, 2014; Meyer & Latham, 2008; Oakley, Pegrum, & Johnston, 2014; Wetzel & Strudler, 2006; Wray, 2007). Without such exploration, teacher-educators can be neither competent nor confident to engage in discussions with students about valid forms of evidence, effective portrayal of standards, or how best to utilize the technology (Light, Chen, & Ittelson, 2012; Meyer & Latham, 2008; Rientes, Brouwer, & Lygo-Baker, 2013). On a more basic level, inexperienced course coordinators unable to answer the most basic ePortfolio questions must redirect enquiries constantly to education technologists, thus sending students a clear message both of their inadequacy and that they do not value the ePortfolio sufficiently to use it themselves.

Methodology

This paper reports on the results of a small scale study conducted within an ITE faculty at a mid-size Australian university, and the conclusions drawn to form an initial response to the portfolio recommendations within the *Action Now* report. The scale of the qualitative and short answer response survey was limited, but a response rate close to half (46%, n = 25) of teacher educators provides a solid profile of current ePortfolio usage and attitudes, and has established a foundation for program revitalization planning (Ethics approval reference H13959). The survey questions focused primarily on the use in teaching of information and communications technology (ICT), particularly ePortfolios. However, two questions asked about individual responses to confronting new technology. A five point Likert scale was used for a number of questions, but the agree and disagree responses have been collapsed deliberately in the tables below to highlight the extent – rather than the degree - of educator support, ambivalence, or opposition. Whilst the results are confined to a single institution of a certain size, and with a particular ePortfolio history, it is hoped that the conclusions may inform other ITE providers considering their responses to the portfolio recommendations within *Action Now*.

Survey Findings

The survey identified any ePortfolio activity within this faculty at no higher than 30% with only six teacher-educators using the current learning management system (LMS) ePortfolio tool regularly (Tab. 1). Of these, three had been PebblePad users, with another two possibly foregoing ePortfolio use on discontinuation of that licence. The low teaching figure and almost non-existent personal use suggests that an ePortfolio culture does not exist, and that even those utilizing ePortfolios consider it as something for students use alone. Actual ICT use was quite diverse, but respondents were more likely to utilize presentation software for teaching, and blogs for personal purposes.

	Please identify all the programs you have used for teaching regularly - at least one semester each year	Please identify all the programs you regularly use for personal purposes
PebblePad	5	1
	25%	6%
LMS ePortfolio	6	1
	30%	6%
Prezi	8	3
	40%	17%
Wordpress	5	7
	25%	39%

Table 1: ICT Usage

Despite the low usage rate, around two-thirds of respondents identified ePortfolios as beneficial for student professional growth and development, and to demonstrate competence (Tab. 2).

ePortfolios……	Disagree	Undecided	Agree
Document student professional growth over time	8%	24%	68%
	2	6	17
Help students identify and build on strengths	12%	20%	68%
	3	5	17
Encourage student ownership of assessment	16%	20%	64%
	4	5	16
Provide a clear snapshot of student professional progress	12%	24%	64%
	3	6	16
Help students towards proficiency certification	12%	28%	60%
	3	5	17
Encourage connections between theory and practice	16%	24%	60%
	4	6	15

Table 2: ePortfolio Benefits

These figures were supported by a relatively low number of highly negative comments in response to the open-ended questions about ePortfolios:

I don't believe they are effective in any way shape or form and do not wish to use them. Students should be encouraged to develop their own personal cyberinfrastructure.

No real need to use them.

I'm not really interested.

Do I really have to do it? There are so many other things to teach. I'm not teaching digital/software skills.

Despite being few in number at just over 10% of respondents, the potential for such a strong negative group to undermine an ePortfolio program cannot be overlooked. A number of studies caution against mixed messages, lack of staff enthusiasm, or outright negativity as contributing to student confusion and concerns about the purpose and value of their ePortfolios (Mayer & Latham, 2008; Oakley, Pegrum, & Johnston, 2014; Peacock, Gordon, Murray, Morss, & Dunlop, 2010). Consequently, any reintroduction of ePortfolio needs to respond to educator opposition, often driven by "lack of academic interest, resistance to eLearning initiatives, reluctance to engage in reflective practices, and competing priorities" (Hallam, Harper, McAllister, Hauville, & Creagh, 2010, p. 29).

The depth of the positive attitudes is open to question, as the level of teacher-educator indecision increased markedly when question statements were directed towards teaching practices (Tab. 3). This was reflected in the open-ended responses where teacher-educators posted a range of questions that should have been addressed within the previous ePortfolio implementation. A key issue was the requirement for employment and certification, and how to convey this to students to facilitate ePortfolio engagement.

Currently none of the major employers require an ePortfolio for job applications, poor software and technology available to students.

Convincing students they are valuable. For a tipping point to be reached they MUST be done on a FREE platform that students can access after university.

Convincing pre-service teachers that it is relevant to their employability.

ePortfolios……	Disagree	Undecided	Agree
Encourage the development of authentic assessment	12%	52%	36%
	3	13	9
Provide a holistic approach to assessment	16%	52%	32%
	4	13	8
Stimulate the development of teacher dispositions	24%	44%	32%
	6	11	8

Table 3: ePortfolio Teaching Practices

Furthermore, although two-thirds had read the *Action Now* recommendations that clearly advocate the development of teacher portfolios, and provide exactly the type of motivation previously absent, respondents demonstrated a similar level of indecision when asked if they were motivated by that report to improve their own ePortfolio skills, and to reconsider unit assessment tasks (Tab. 4). Meanwhile, the one-third of teacher educators who had not read the significant study months after its publication were unlikely to have considered the impact of portfolios in upcoming ITE reforms, and thus also were unlikely to have thought about the potential effect on their teaching.

Please respond to the following statements about ePortfolios	Disagree	Undecided	Agree
I have read the TEMAG recommendations on graduate ePortfolios	32%	4%	64%
	8	1	16
The TEMAG recommendations encourage me to improve my ePortfolio skills.	16%	42%	32%
	4	10	10
The TEMAG ePortfolio recommendations motivate me to rethink my unit assessment tasks	29%	38%	33%
	7	9	8

Table 4: *Action Now* ePortfolio Response

Teacher-educator concerns appeared principally to be in the area of ePortfolio pedagogy (Tab. 5). Again, around two thirds of respondents were keen to learn how to integrate ePortfolios into their teaching, and to undertake professional learning to that end. However, fewer were interested in building their own ePortfolios (44%), and most (60%) were reluctant to participate in a community of practice, possibly because of perceived time constraints. An alternative explanation could be that, with the perception that it is something done to students, teacher-educators in this small sample may attribute less personal relevance to ePortfolios and thus be less motivated to commit to a community of practice; it doesn't directly affect them. Meanwhile, when disagree and undecided responses are combined, one-third of these teacher educators are neither keen to integrate ePortfolios into their teaching, nor to engage in associated professional learning.

Please respond to the following statements about ePortfolios	Disagree	Undecided	Agree
I am keen to learn how to integrate ePortfolios into my units	16%	16 %	68%
	4	4	17
The main obstacle to my ePortfolio use has been a lack of experience with this technology	28%	24 %	48%
	7	6	12
I would like professional learning on ePortfolio pedagogy	24%	16 %	60%
	6	4	15
I would like to join an ePortfolio community of practice	60%	16 %	24%
	15	4	6
I would like to try to build my own professional ePortfolio	36%	20%	44%
	9	5	11
I don't have the time to spend on ePortfolios	24%	28%	48%
	6	7	12
I see little benefit in the additional effort it will cost me	36%	44%	20%
	9	11	5
I lack confidence in unifying the technology and content requirements of ePortfolios	25%	33%	42%
	6	8	12

Table 5: ePortfolio Attitudes

Pedagogy generated the most responses in the open-ended questions, with the phrase *how to use* occurring a number of times. However, many responses might better be described as relating to ePedagogy, because respondents often had difficulty separating the teaching from the tool, and insecurity about one most likely overlapped the other.

> *How they will be used in the course and for what purpose. Whether such use is likely to be worthwhile i.e., contribute to rigorous and improved assessment.*
>
> *Will they be mandatory? How will UCs [unit coordinators] share assessment artifacts? How will UCs collaborate to maintain the relevance of the ePortfolio to the student?*
>
> *In which ways it can be used? How can the assessments be linked to the use of e-portfolios? Whether students will get opportunities to continually use this tool in their degree.*

Indicative of confusion was this response: "[LMS ePortfolio] sorry is a piece of crap! Like PebblePad, little thought has been put into the teaching and learning aspects." This particular respondent appears to assume mistakenly that the ePortfolio is the pedagogy itself rather than an educational tool that they need to integrate into their broader teaching and learning strategies. Furthermore, the uptake of PebblePad (that had concluded over three years previously) anecdotally had been minimal also, so this individual's negativity is unlikely to have been prompted by pressures to adapt to a new platform. To the contrary, familiarity with one ICT tool can often support new learning. Meanwhile, comments such as these below suggest not just a lack of knowledge, but also that little effort had been made to research basic questions about ePortfolios.

> *I don't know enough about them to be convinced that they aren't just a "useful repository" for students to CHOOSE to use.*
>
> *Relevance...to me they don't really look any different to a resume...apart from the fact they're digital…If I'm forced to assess with them, I really don't see how they will more useful in ascertaining higher order skills than the assessments that I have now.*

One third of respondents claimed to be self-starters, and half saw themselves as active problem-solvers with technology (Tab. 6). However, this does not appear to have translated into ePortfolio use and problem resolution.

When it comes to using new technology			When I encounter problems with new technology		
I jump straight in and start clicking like a child	9	35%	I try to fix it myself and seek aid only when I think I might really screw things up	13	52%
I like to have initial PD and then find my way around	10	38%	I need collegial support to just guide me over hurdles	7	28%
I like to have comprehensive PD	7	27%	I feel stressed and am easily discouraged	5	20%

Table 6: ICT Initiative

The evidence suggests that merely providing access to an ePortfolio tool, and expecting teacher-educators to engage with it, does not work. There is a clear need for them to appreciate fully the wider strategic picture, have confidence that the product will meet the needs of their students, and have access to continuing pedagogical as well as technical support (Rientes, Brouwer, & Lygo-Baker, 2013). This means that a comprehensive ICT support plan must accompany ePortfolio reintroduction in this faculty, and that teacher-educators must both find and allocate time to familiarise themselves with the full range of

platform capabilities. Finding such time may be problematical with competing teaching and research demands, but without it, there is a strong probability that technical issues combined with insecurity about pedagogy would once again erode confidence and fuel disengagement.

> *Lack of knowledge about and skill in the technology. TIME to learn about it and create my own.*

> *It's not an intuitive platform* [No specific tool identification, so suggesting ePortfolios in general]. *We're so used to single clicks to things in the use of things like iphones and facebook, that it adds to frustration to need a lot of time to learn how to use it and then continue to use it often enough so that each new 'entry' into it (or use of it) isn't framed with concern that I have to relearn. So big issue is time to invest to enable and encourage greater use. Also, I understand their potential but get discouraged when students claim they have problems - I don't have the faith in them myself to reassure them.*

Whilst limited in scope and quantity of responses, this survey nonetheless provides a valuable perspective of staff practices and attitudes as this faculty confronts new challenges in the ITE area. The data and comments indicate that:

1. ePortfolio usage in this faculty is limited and sporadic, and there is no evidence of an ePortfolio culture. To the contrary, there are identifiable pockets of resistance, suspicion, and confusion that must be overcome in any revitalization of the ePortfolio program.

2. Despite institutional advocacy of a blended learning model, continuing access to ePortfolio tools, and no doubt some level of professional learning support over the past eight years, there is no evidence of the development of ePortfolio pedagogy within this faculty. Responses to professional learning questions and the minimal usage figures also reveal that teacher-educators identify ePortfolios as something *done to* students. Some of the basic questions about ePortoflio pedagogy also suggest that few have independently sought answers from available literature, such as Light, Chen, and Ittelson (2012) and Costantino, De Lorenzo and Tirrell-Corbin (2009).

3. Teacher educators appear less inclined to reinvent their own teaching practices or apply ICT effort to something over which they lack professional ownership. If such an attitude was to persist, then technical and teaching integration challenges would probably fuel the discouragement and disengagement reported by some in the survey.

4. This faculty would be unable to respond to the recommendations in *Action Now* without developing a comprehensive long-term plan for genuine change. Such a plan must unite all teacher-educators and students in common purpose to overcome the theory-practice dichotomy, and develop ePortfolio pedagogies to replace traditional models clearly identified by TEMAG (2014) as failing new teachers.

Key Conditions for Revitalisation
Condition 1 - Pedagogy Before Technology

Regardless of their discipline, all academics and particularly teacher-educators, should be researchers into learning in the new e-spaces emerging in a world of instantaneous communication, social media, and wide access to information. It is important to look behind statements such as this in *Action Now*:

> *Ongoing monitoring and examination of the impact of programs on teacher capability and effectiveness is essential to continuous improvement and quality*

assurance. Programs that do not produce effective teachers should not continue to operate. There is significant evidence of system failure in this context (TEMAG, 2014, p. x).

TEMAG clearly is telling not just programs, but also individual teacher educators that society has lost confidence in their traditional practices, and that they need to embrace new pedagogies that yield "genuine assessment of classroom readiness", and "robust evidence" measured "against a national assessment framework" (TEMAG, 2014, p. xi; Slade & Readman, 2013). *Action Now* directs ITE providers to graduate not academics, but classroom ready teachers well versed in the direct daily application of theory. The statement above clearly indicates that change is mandatory, and that tokenism is unacceptable. Students *must* graduate with portfolios full of verifiable evidence of competence and employability, and such portfolios *must* align with a national assessment framework (Light, Chen, & Ittelson, 2012). As mentioned earlier in this paper, TEMAG (2014) did not define *portfolios of evidence.* TEMAG (2014) and the AITSL (2016) accreditation templates dictate the *what*, not the *how*. However, it is almost impossible to conceive of other than ePortfolios for students to construct, collate, manage, link, and publish diverse multimedia artefacts evidencing their individual teacher competencies across all APST focus areas, and for faculties to archive and retrieve collective course and program graduate performance outcomes for accreditation.

Simple responses, such as mandating ePortfolios (Meyer & Latham, 2008; Schneckenberg, 2010) for students alone, or instituting professional development in the technology for teacher-educators, are manifestly inadequate because they fail to address the complexity of the teaching act itself and its effective portrayal. Teacher-educators need to step beyond their individual units, develop a strategic understanding that anticipates the contribution of their performance assessment evidence to the demonstrated final competency, and be able to trace and demonstrate direct impact of their own teaching within student graduate certification portfolios (Light, Chen, & Ittelson, 2012). However, because each ePortfolio is individual in its format, artifact collection, and standards attribution, such a connection is not possible unless programs are constructively aligned throughout (Biggs & Tang, 2011). According to constructive alignment, changes to assessment necessitate adjustment of teaching and learning activities, and possibly course learning outcomes (Johnsen, 2012; Ring & Ramirez, 2012). By extension, if the program assessment outcome is altered – and this is what TEMAG has done - then all course assessments, teaching activities, and learning outcomes must be realigned internally and reconciled across the whole program. This requirement is also identified within the critical issues for implementation identified by Light, Chen, and Ittelson (2012), specifically *defining learning outcomes*, *designing learning activities*, and *using rubrics to evaluate ePortfolios* (p. 2). However, this is not possible if educators are either unaware of, or misinterpret, the ePedagogies necessary to facilitate the change. Ward and Kushner Benson (2010) argued for the utilization of Mishra and Koehler's (2006) technology, pedagogy and content knowledge (TPACK) model to help teachers develop new schema for online teaching, and for consideration of pedagogy at the front end of online course design. Their arguments can equally be applied to the TEMAG portfolio recommendations and to redress the ePedagogy shortfall revealed in the survey of teacher-educators in this study (Laurillard, 2009; Rientes, Brouwer, & Lygo-Baker, 2013).

Previously, ePortfolios have been defined by their different purposes - working/learning, assessment, showcase/exit, and interview –some of which are suggested to partially conflict with each other (Costantino, De Lorenzo, &Tirrell-Corbin 2009; Oakley, Pegrum, & Johnston, 2014). However, because they are what Cambridge (2012) calls a *disruptive innovation*, ePortoflios challenge traditional compartmentalised educational approaches. Bhika, Francis, and Miller (2013) describe the construction of an *integrative social pedagogy* where ePortfolios move beyond electronic display folders to become the

focus of individual and collaborative transformative communities of practice (Hallam, et al., 2008; Laurillard, 2009). The negative responses to ePortfolios by teacher educators identified in this study are based at least partly in their inability to appreciate this alternative paradigm as they tried to squeeze the technology into their established practices. There is no template. *Action Now* and the associated new accreditation requirements have shifted the parameters in ways not identified previously in literature. As Slade and Readman (2013) suggest, academics must "begin conversations with a new 'schema' for working in the e-space created by the ePortfolio" (p. 441). The boundaries, which may be blurred, and the purposes should emerge from those conversations. Teacher educators hopefully would experience an epiphany to similar to one of the respondents in the survey by Chatham-Carpenter, Seawel, & Raschig (2010): "Rather than an eportfolio FOR learning or an eportfolio FOR assessment – we look at ours as an eportfolio AS learning" (p. 451).

Condition 2 - Unified Consistent Purpose

The *Action Now* recommendations and regulator compulsion may force the introduction of portfolios, but they do not create the positive ePortfolio engagement required to overcome traditionalist inertia. A unified and internalized common purpose is essential, because teacher-educator recalcitrance has implications more significant and sinister than failure of an ePortfolio initiative, both for students who are expected to demonstrate competency in authentic ways (Herrington, Reeves & Oliver, 2010), and for the program that could forfeit accreditation and damage the reputation of the institution (Ring & Ramirez, 2012; Wetzel & Strudler, 2006; Wray, 2007). If students are to accept ePortfolios as the best vehicle for comprehensively demonstrating their competence and maximize their employability, and if programs are to remain viable, then all teachers *must* engage with the ePortfolio. This does not represent a new draconian order that threatens academic freedom. Courses already need to achieve different layers of approval before release for teaching. The requirements to clearly define ePortfolio outcomes, and identify how they directly and authentically evidence competence become merely additional caveats for course approval. Meanwhile, once students realize the important connections between the ePortfolio for provisional and proficiency certification (AITSL, 2015) and employment, they quickly will start demanding explanation of course relevance should educators fail to engage. Students cannot think that their ePortfolio efforts represent extra work compared to their colleagues in the same program, or that it is necessary for some initial teacher education programs and not others. Such suspicions are likely to have been a key factor in student disengagement with ePortfolio within this particular ITE provider the first time round (Light, Chen, & Ittelson, 2012; Oakley, Pegrum, & Johnston, 2014; Ring & Ramirez, 2012; Wetzel & Strudler, 2006; Wray, 2007). There is here a direct link back to the issue of pedagogy. Unified purpose demands that ePortfolios be fully embedded in the structure and delivery of every unit in every program. Every educator must at any time and all times be able to

> *clearly communicate to learners why they are using ePortfolios, how the use of ePortfolios will assist them in developing their own identities, and how that documentation can help them to make connections between the learning that happens in different contexts (Light, Chen, & Ittelson, 2012, p. 17; Johnsen, 2012; Wray, 2007).*

Compulsory integration of ePortfolio into programs does not address the whole issue, because TEMAG recommendation 33 requires that "Beginning teachers build on their Portfolio of Evidence to reach full registration at the Proficient level of the Professional Standards" (p. xiv). Whilst schools are charged with mentoring, the phrase *build on* implies

that institutional responsibility extends beyond graduation to providing all students with the tools, habits, and skills necessary to facilitate their full integration into the profession. This raises the issues of consistency of purpose. As revealed in the survey, currently graduates do not have to present ePortfolio evidence to the local teacher registration board for initial entry – a university transcript is sufficient. Furthermore, job applications generally remain a case of written responses to selection criteria and an interview – ePortfolios are not required, and anecdotal evidence is that schools do not know what to do with ePortfolios when they are submitted. When the TEMAG recommendations fully come into effect, the relevance of the ePortfolio in the real world will need to be underscored lest it become part of the theory-practice dichotomy and thus *something only done at university* (Chambers & Wickersham, 2007). At this point, one confronts a conundrum. The relevance of the ePortfolio outside of the ITE institution is dependent on its successful creation within. But at the same time, the relevance of the ePortfolio within is dependent on its application in the real world where there is no culture of evaluation or disclosure of practice, let alone understanding of ePortfolio evidenced practice (Kertesz, 2007). This negative nexus can be broken only when the (re-)introduction of ePortfolios within the ITE institution is accompanied by a corresponding education of the wider profession of its value for evidencing of professional practice and establishing a collaborative professional continuum of teacher education to proficiency (Light, Chen, & Ittelson, 2012).

It can be argued that the "partnerships" referred to in *Action Now* extend beyond professional experience practicums alone, but include a more enhanced teacher training relationship between the ITE provider and the school communities it serves. A couple of options present themselves. One is to invite classroom practitioners in to ePortfolio professional learning, but this can only occur if the ITE institution itself has resolved its own understanding of ePortfolios and can demonstrate clearly the relationship to professional standards. The other would be to ensure that all students proceeding on placement are fully inducted into ePortfolio practice, and are required to accumulate evidence directly related to program and course learning outcomes and capability objectives. This would appear to be the intent behind the collection of impact evidence presented in the AITSL (2015) position paper *Classroom ready: Demonstrating the impact on student learning of initial teacher education programs.* However, either option can occur only against the backdrop of comprehensive ePortfolio integration into the ITE program. Something has to change in teacher quality process, and it will not emerge from the mid or late career schoolteachers who have never had to evidence their competency, and who are socialized to longevity as the basis for promotion. TEMAG and AITSL are calling on ITE providers to act directly as agents of wider professional change, but they can do so only if they first change themselves effectively. There is here again a clear link back to resolving the pedagogy question in the first instance, because the process of wider change cannot proceed without it. Unless teacher-educators engage completely, students will not feel committed, valid standards-focused ePortfolios will not eventuate, the status quo will remain, and *Action Now* will be relegated to another well-intentioned report – that is unless AITSL de-accredits a program or two, at which point everyone will be scrabbling to stand to attention for the wrong reasons.

Condition 3 - Total Faculty Ownership

Light, Chen, and Ittelson (2012) recommend engagement with stakeholders and the communication of a *vision* to develop a folio thinking culture. Whilst such a persuasive approach would be ideal, it is unlikely to work where teacher-educators have already failed to engage and respond. The superficial understanding of ePortfolios and reluctance to engage

with the technology in the survey is evidenced by the usual cries for *professional learning* or *in-time support*, both of which have been available in the past but rarely utilized. This was another clear factor in undermining previous ePortfolio introduction efforts within this faculty.

If ITE providers are to engage effectively with the *Action Now* recommendations, and progress to the highest accreditation level where ongoing "light touch" (TEMAG, 2014, p. xiii) scrutiny is all that is required, teacher-educators must be fully conversant with the application of teaching standards for professional certification, know how to use ePortfolios to evidence competence effectively and comprehensively, and be totally committed to ePortfolios as a cornerstone of teaching and learning practice. The only way to do this is for teacher-educators to undertake exactly the same process as their students, an action the Australian ePortfolio Project identified as a key element for success in 2010 (Hallam, Harper, McAllister, Hauville, & Creagh, 2010).

This has not been possible until now due to the absence of professional teaching standards for academic teacher-educators. However, at the end of 2014, this medium sized university promulgated a set of academic Teaching Performance Expectations (TPE) (http://www.teaching-learning.utas.edu.au/continuing-professional-learning/teaching-performance-expectations-tpes) mapped against the UK Higher Education Academy's Professional Standards Framework, on the basis that "Outstanding teaching practice must be informed by a pedagogy based on substantive educational scholarship as well as sound disciplinary knowledge, and tested against appropriate benchmarks inside and outside the University" (UTAS, 2014, p. 3). The necessity for teacher-educators to progressively evidence their own achievement of teaching standards provides an opportunity to mirror exactly the student experience, and to authentically apply ePortfolio skills (Danowitz, 2012; McGowan, 2008; Swan, 2009). An added incentive would be to replace the current text only descriptive application for teaching merit awards with ePortfolio evidence – exactly the TEMAG argument of *don't tell me, show me*. In 2015, a small internal project entitled *Walk in my shoes* identified increased engagement and confidence among academics when they were themselves the subject of the ePortfolio. However, uptake in this project was low because the TPEs as yet remain an optional professional learning and staff development tool rather than a compulsory performance management activity.

Teacher graduates soon will have no choice in building their portfolios, to ensure that their evidence aligns with standards and to develop the skills necessary to advance towards proficiency certification. Consequently, teacher-educators have an obligation to develop in their students the necessary technical skills, and to take due cognizance of the impact of ePortfolio learning on course content. The most effective option would be for all teacher-educators to experience building their own-standards focused ePortfolios. However, since a progressive consensus approach has been unsuccessful previously, and "leadership must be willing to provide the centrifugal force to bring the faculty together and work through what potentially could be a contentious process" (Swan, 2009, p. 640), there would be real benefits for students and for program viability to mandate academic TPE ePortfolios as part of organisational performance management.

There are direct organizational consequences from adopting such a *do as I do* rather than *do as I say* approach. ePortfolios would move higher on the list of educator priorities from an amorphous TEMAG future to immediate personal relevance. Because ePortfolio use across this university is minimal currently, it is possible to tick off adherence to e-learning strategic plans regardless of the quality of the platform. There is an "ePortfolio" within the learning management system – *tick* – everybody appears satisfied as there are no complaints (because nobody is using it) – *tick* – so there is no need to upgrade or investigate other systems – *tick*. Identifying a platform that meets new professional requirements, such as

TEMAG, attracts a low priority because teacher-educators lack sufficient understanding of student needs and the shortfalls of the current system, and decisions are left to technical staff with no pedagogical knowledge. If their own employment depended on it, the same as the students, then teacher-educator interest in both ePortfolios and the necessary ICT skills should increase dramatically (Slade & Readman, 2013).

Conclusion

There is no intention of overlooking all the significant and multiple educational and procedural measures and resources needed to implement a vibrant and successful ePortfolio program. Rather, this paper suggests that these three critical interrelated conditions are required together to break through those factors that undermined the university's initial implementation effort, and to redress the lack of ePortfolio pedagogy knowledge. The *Zeitgeist* in Australian education suggests strongly that professional regulation of both schoolteachers and teacher education programs will continue to increase. Aside from funding battles that remain a constant, consistent bi-partisan inter-governmental educational policy renders futile waiting for a change in administration. Shutting the door and hoping it will all somehow disappear is equally unrealistic and unhelpful. The *times are a-changing* and ITE programs must change with them or face the risk of de-accreditation, with students likely to be the sacrificial lambs. Institutions must source the most effective ePortfolio platform for student and ITE program requirements, and teacher-educators must engage with the tool themselves to develop the ICT skills necessary to respond to the wider educational implications in all courses in all programs. However, this must be accompanied in the first instance with comprehensive informed professional learning about integrated ePedagogies so that application of the ePortfolio facilitates both the development and accumulation of rich professional standards aligned evidence of ITE student learning and graduate performance. It is only when faculty members are collegially discussing and collectively implementing such fundamental changes to their own teaching practices that we will know we are on the cusp of building an ePortfolio culture independent of, and yet compliant with, regulator demands.

References

Australian Institute for Teaching and School Leadership (AITSL). (2015). *Classroom ready: Demonstrating the impact on student learning from initial teacher education programs*. AITSL: Melbourne. Retrieved from http://www.aitsl.edu.au/initial-teacher-education/ite-reform/accreditation/demonstrating-impact

Australian Institute for Teaching and School Leadership (AITSL). (2016). *Guidance for the accreditation of initial teacher education in Australia*. Retrieved from http://www.aitsl.edu.au/docs/default-source/initial-teacher-education-resources/guidance-for-the-accreditation-of-initial-teacher-education-in-australia.pdf

Bhika, R., Francis, A., and Miller, D. (2013). Faculty professional development: Advancing integrative social pedagogy using ePortfolio. *International Journal of ePortfolio,* 3 (2), 117-133.

Brown, N., Kregor, G., & Williams, G. (2013). *Technology enhanced learning and teaching white paper*. Hobart: University of Tasmania. Retrieved from http://www.teaching-learning.utas.edu.au/__data/assets/pdf_file/0020/439013/Technology-Enhanced-Learning-and-Teaching-White-Paper-Academic-Senate-15-November-2013.pdf

Bryant, L. H., & Chittum, J.R. (2013). ePortfolio effectiveness: An (ill-fated) search for empirical support. *International Journal of ePortfolio,* 3 (2), 189-198.

Cambridge, D. (2012). ePortfolios: Go big or go home. *Educause review*, March/April. Retrieved from http://er.educause.edu/articles/2012/3/eportfolios-go-big-or-go-home

Carson, A.S., McClam, S., Frank, J., & Hannum, G. G. (2014). ePortfolio as a catalyst for change in teaching: An autoethnographic examination of transformation. *International Journal of ePortfolio*, 4 (1), 73-83.

Carson, M & Robertson, A 2008, 'From hype to Reality: e-Portfolios in Nursing'. in The 7th European Conference on E-Learning. Academic Publishing Limited, pp. 160-168, ECEL 2008 - 7th European Conference on e-learning, Agia Napa, Cyprus, 6-7 November. Retrieved from http://www.ed.ac.uk/schools-departments/health/research/themes/therapy-policy-interventions/publications/2008?language=pl%3Fid%3D0%2C42

Chambers, S.M., & Wickersham, L.E. (2007). The electronic portfolio journey: a year later. *Education*, 127 (3), 351-360.

Chatham-Carpenter, A., Seawel, L., & Raschig, J. (2010). Avoiding the pitfalls: current practices and recommendations for ePortfolios in higher education. *Journal of Educational Technology Systems*, 38 (4), 437-456. http://dx.doi.org/10.2190/ET.38.4.e

Coffey, U., & Ashford-Rowe, K. (2014). The changing landscape of ePortfolios: A case study in one university. *Australasian Journal of Educational Technology*, 30 (3), 284-294. http://dx.doi.org/10.14742/ajet.199

Corbin, R., Carpenter, C. D., & Nickles, L. (2013). The capacity of teacher education institutions in North Carolina to meet program approval and accreditation demands for data. *International Journal of ePortfolio,* 3 (1), 47-61.

Costantino, P., De Lorenzo, M., and Tirrell-Corbin, C. (2009). *Developing a professional teaching portfolio*. Upper Saddle River, NJ: Pearson.

Danowitz, E. S. (2012). *On the right track: Using ePortfolios as tenure files*. *International Journal of ePortfolio,* 2 (1), 113-124.

Hallam, G., Harper, W., McAllister, L., Hauville, K., and Creagh, T. (2010). *Australian ePortfolio project - Supplementary report: October 2010*. Brisbane: Queensland University of Technology. Retrieved from http://www.eportfoliopractice.qut.edu.au/

Herrington, J., Reeves, T.C., & Oliver, R. (2010). *A guide to authentic e-Learning*. New York: Routledge.

Johnsen, H. L. (2012). Making learning visible with ePortfolios: Coupling the right pedagogy with the right technology. *International Journal of ePortfolio,* 2 (2), 139-148.

Kertesz, J. L. B. (2007). *Evaluation and professional development practices in Tasmanian high schools* (Unpublished doctoral dissertation). University of Tasmania, Hobart.

Laurillard, D. (2009). The pedagogical challenges to collaborative technologies. *Computer Supported Collaborative Learning*, 4, 5-20. http://dx.doi.org/10.1007/s11412-008-9056-2

Light, T. P., Chen, H. L., Ittelson, J. C. (2012). *Documenting Learning with ePortfolios*. San Francisco: Jossey Bass.

Maher, M., & Gerbic, P. (2009). E-portfolios as a pedagogical device in primary teacher education: The AUT university experience. *Australian Journal of Teacher Education*, 34 (5), 43-53. http://dx.doi.org/10.14221/ajte.2009v34n5.4

McGowan, K. (2008). Eportfolios: a student perspective. Proceedings of the 6th International Conference on Networked Learning. Retrieved from http://www.networkedlearningconference.org.uk/past/nlc2008/abstracts/PDFs/McGowan_544-551.pdf

Meyer, B., & Latham, N. (2008). Implementing electronic portfolios: Benefits, challenges, and suggestions. *Educause Quarterly*, 1, 34-41.

Oakley, G., Pegrum, M., & Johnston, S. (2014). Introducing e-portfolios to pre-service teachers as tools for reflection and growth: lessons learnt. *Asia-Pacific Journal of Teacher Education*, 42 (1), 36-50. http://dx.doi.org/10.1080/1359866X.2013.854860

Peacock, S., Gordon, L., Murray, S., Morss, K., & Dunlop, G. (2010). Tutor response to implementing an ePortfolio to support learning and personal development in further and higher education institutions in Scotland. *British Journal of Educational Technology*, 41 (5), 827-851. http://dx.doi.org/10.1111/j.1467-8535.2009.00986.x

Rientes, B., Brouwer N., & Lygo-Baker, S. (2013). The effects of online professional development on higher education teachers' beliefs and intentions towards learning facilitation and technology. *Teaching and Teacher Education*, 29, 122-131. http://dx.doi.org/10.1016/j.tate.2012.09.002

Ring, G., & Ramirez, B. (2012). Implementing ePortfolios for the assessment of general education competencies. *International Journal of ePortfolio,* 2 (1), 87-97.

Schnekenberg, D. (2010). Overcoming barriers for eLearning in universities – portfolio models for eCompetence development of faculty. *British Journal of Educational Technology*, 41 (6), 979-991. http://dx.doi.org/10.1111/j.1467-8535.2009.01046.x

Slade, C., & Readman, K. (2013). New pedagogical e-spaces: Keeping pace with staff readiness. In Frielick, S., Buissink-Smith, N., Wyse, P., Billot, J., Hallas, J. and Whitehead, E. (Eds.) *Research and Development in Higher Education: The Place of Learning and Teaching*, 36 (pp. 433 - 443). Hammondville, Vic: HERDSA.

Sorin, R. (2005). Webfolio – Using electronic portfolios in preservice teacher education. *Australian Journal of Teacher Education*, 30 (1), 27-36. http://dx.doi.org/10.14221/ajte.2005v30n1.3

Swan, G. (2009). Examining barriers in faculty adoption of an e-portfolio system. *Australasian Journal of Educational Technology*, 25 (5), 627-644. http://dx.doi.org/10.14742/ajet.1112

Teacher Education Ministerial Advisory Group (TEMAG). (2014). *Action now: Classroom ready teachers*. Retrieved from http://www.studentsfirst.gov.au/teacher-education-ministerial-advisory-group

University of Tasmania (UTAS). (2014). *Opening UTAS to talent: The UTAS academic 2014.* Retrieved from http://www.utas.edu.au/__data/assets/pdf_file/0010/447445/UTAS-Academic-2014-Introduction-Final-updated-21-November-2014.pdf

Ward, C.L., & Kushner Benson, S.N. (2010). Developing new schemas for online teaching and learning: TPACK. *MERLOT Journal of Online Teaching and Learning*, 6 (2), 482-490.

Wetzel, K., & Strudler, N. (2006). Costs and benefits of electronic portfolios in teacher education: Student voices. *Journal of Computing in Teacher Education*, 22 (3), 99-108.

Wray, S. (2007). Electronic portfolios in a teacher education program. *E-Learning*, 4 (1), 40-51. http://dx.doi.org/10.2304/elea.2007.4.1.40