ePortfolios: Introductory concepts and strategies for informed practice

Have you heard of ePortfolios but are not sure what an ePortfolio is or how you could use one to enhance student learning? Today, ePortfolios are recognized as a high-impact teaching and learning practice, given expression through the wide adoption of ePortfolio technologies. Ultimately, however, an ePortfolio is an idea, not an object! For convenience, ePortfolios are often talked about in terms of the technology that puts that idea into practice, for example Mahara or PebblePad. However, this can lead to a focus on the tools and products, limiting the idea of what an ePortfolio is, as well as ignoring the processes involved in developing.

This Guide explains the concepts, strategies and benefits of ePortfolios for teaching and learning. The focus is on exploring the idea of ePortfolios, rather than specific technological tools.

What are ePortfolios?

The ePortfolio is a 21st-century tool for supporting learning, teaching and assessment that offers a pedagogical approach for deep and meaningful learning. Broadly speaking, it is a digital collection of meaningful artefacts which provide evidence of learning, skills or competencies, and employability.

The Joint Information Systems Committee (JISC) (2008) offers the following definition:

An eportfolio is the product, created by the learner, a collection of digital artefacts articulating experiences, achievements and learning. Behind any product or presentation, lie rich and complex processes of planning, synthesising, sharing, discussing, reflecting, giving, receiving and responding to feedback. These processes referred to here as ‘eportfolio-based learning’ are the focus of increasing attention, since the process of learning can be as important as the end product (p. 6).

While definitions of ePortfolios can differ, they do share similar descriptors, such as: a collection of work, the curation of artefacts, a digital repository, a tool to demonstrate reflection and skills, and as a showcase of evidence.

ePortfolios are commonly used for their capabilities to ‘showcase’ artefacts and evidence. For example, they allow for the personalised curation and showcasing of artefacts to evidence skills requirements and competencies to potential employers.

Their full potential, however, lies in their capacity to record and integrate deep learning over time, and develop lifelong, self-reflective learners. ePortfolios are well suited to develop those attributes listed as essential for the workplace of the future: graduates
who can be flexible, adaptive, integrative, reflexive and critically engaged life-long learners.

At UniSA Mahara is the officially supported ePortfolio platform, although there are alternative tools that may be used. Guide doesn’t focus on the tool but on why and how an ePortfolios can be a *purposeful collection of work that demonstrates effort, progress and achievement over time, stored in an electronic container* and using web tools help to present the ePortfolio as a digital story (Barrett 2006).

**The ePortfolios process**

The image below depicts an overview of the ePortfolio process from the point of view of the student learning journey. This process includes **collecting** artefacts from past learning experiences, processing **present**, learning and preparing for professional representation of skills and achievements (or assessment) in the **future**.

![Image 1: Student learning journey using ePortfolio](TIU: UniSA (adapted from Barrett 2009)).

**Why use ePortfolios?**

ePortfolios allow students to showcase a lifelong learning journey, with relevant artefacts selected, presented, adjusted and shared with different audiences and courses.

A student ePortfolio has the potential to establish connections between different phases of work and learning (Barrett 2008, cited in QUT 2008):

- **What? (The Past)** What have I collected about my life/work/learning? (my artefacts)
- **So What? (The Present)** What do those artifacts show about what I have learned? (my current reflections on my knowledge, skills and abilities)
- **Now What? (The Future)** What direction do I want to take in the future? (my future learning goals)

ePortfolios can be transformational in their ability to capture the entirety of a student’s experience, enabling meaningful and continual connections to be made across their
academic, professional, and personal lives via the key activities of inquiry, integration and reflection.

While portfolios are not necessarily new as an educational approach, a digital portfolio enhances the support for students’ to integrate their learning across a series of courses, over an extended period of time, by means of a single repository. It additionally provides students with the opportunity to present innovative, technology-based ways of evidencing their learning outcomes.

ePortfolios can be used to develop, record and demonstrate:

- skills and competencies;
- transformative potential;
- reflection;
- identity development;
- active learning/student-centred engagement;
- employability; and
- assessment.

**Using ePortfolios as a pedagogical tool**

Technology provides staff and students with new opportunities. For teachers, pedagogy is the driver that focusses the use of that technology on the task of enhancing student learning outcomes.

<table>
<thead>
<tr>
<th>Inquiry</th>
<th>ePortfolio pedagogy engages students in a recursive and iterative inquiry into their own learning and their evolving identities as learners. They develop new skills and understandings by moving back and forth between learning phases.</th>
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<tbody>
<tr>
<td>Integration</td>
<td>Students use ePortfolios to bring together work from multiple contexts, to consider the relation between their courses and the external environment, and to construct new identities as learners.</td>
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<tr>
<td>Reflection</td>
<td>Reflection is essential to meaningful student ePortfolios, which prompt students to record, and share reflection on their learning.</td>
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Table 1: Three principles of ePortfolio practice: inquiry, integrated learning and reflection (adapted from Eynon. Gambino & Török 2014).

Effective ePortfolio use in teaching requires a clear pedagogical purpose, underpinned by an understanding of the three key foci of portfolio practice, in conjunction with considered planning.

The following elements are important in that process:

- **Purpose:** identify the purpose of your eportfolio.
- **Alignment:** align the eportfolio activity with the course objectives and assessment.
- **Constructivist learning activities.**
We’ll look at each of these in more detail.

**Purpose**

The first step is to identify a clear purpose (or purposes) for using an ePortfolio in your course. This is fundamental to the design of authentic learning activities and will enable you to identify the most appropriate type of ePortfolio to use.

Sometimes the assumption that an ePortfolio has a single, distinct function denies the complexity and potential of the tool and its pedagogic purposes.

An ePortfolio can be thought of as both a product and process; however, the emphasis may vary. In courses where the ePortfolio is conceptualized as a *product*, it functions as a digital repository. In such a case, a student will construct a portfolio as a collection of artefacts, from which views of selected artefacts are assembled to articulate their learning, often around the summative assessment of course objectives or professional standards. The focus at this level is on content, digital conversion and collection, with the ePortfolio being used mainly as a tool of collection and display.

The idea of the ePortfolio as a *process* focuses on ePortfolio-based learning using self-appraisal and reflection across a period of time and often involves formative assessment for learning. A student in this case will construct an integrated learning or development portfolio. This is commonly associated with the ePortfolio as a tool of social pedagogy: engaging users in repeat cycles of creating, reflecting, seeking feedback, reviewing and ‘integrating revised work within a larger context of professional or learning identity formation’ (Lewis 2017, p. 74). The focus here is firmly on the pedagogical capabilities of the ePortfolio, which can be described as a working or learning portfolio, supporting the process of personalized learning through (for example) reflective blogging, and development over a period of time.

Using the ePortfolio as *both* product and process involves the construction of a showcase or a presentation portfolio. This type of ePortfolio contains evidence of integrative knowledge drawn from diverse sources and is usually accompanied with reflective comments on learning, growth and professional development. Showcase portfolios, for example, can present a graduate’s personal and professional qualities that can be useful for employment purposes or as an interview tool. This reflects the tool aspects of an ePortfolio, however, these are incorporated with its pedagogical capability to support integrative learning.

The table below outlines five different types of portfolios: Learning Portfolio, Personal Career Portfolio, Showcase Portfolio, Learning and Employability Portfolio and an Extended Learning and Employability Portfolio.

<table>
<thead>
<tr>
<th>Type</th>
<th>Purpose</th>
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<tbody>
<tr>
<td>Learning portfolio</td>
<td>Learning to know - The purpose is to introduce students to a different way of thinking about their learning and to begin understanding themselves as learners</td>
</tr>
<tr>
<td><strong>Personal career portfolio</strong></td>
<td>Learning to do - The purpose is to engage students in reflecting and understanding their learning given the depth of a discipline focus and to consider their development as a professional</td>
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<tr>
<td><strong>Showcase portfolio</strong></td>
<td>Learning to do - Where an ePortfolio is introduced in one discrete unit, usually at final year, the primary purpose is for students to reflect on their learning with a view to evidencing that learning for enhanced employability</td>
</tr>
<tr>
<td><strong>Learning and employability portfolio</strong></td>
<td>Learning to be - The purpose is to engage with students to reflect on their learning across all years of a course (that may include a specific major/s) and to integrate evidence of learning and skills development that enhance their prospect for employability</td>
</tr>
<tr>
<td><strong>Extended learning and employability portfolio</strong></td>
<td>Learning to live together - In this scenario, the ePortfolio is extended to provide an opportunity to consider learning from an institutional perspective. The purpose is to extend students to consider their learning and themselves as individual learners more broadly – perhaps without being bound by a professional, discipline focus</td>
</tr>
</tbody>
</table>

**Table 2: Types and purposes of ePortfolios** (adapted from Watty & McKay 2015).

**Alignment**

For ePortfolios to work, you need to provide a clear goal, realistic tasks, supporting assignments, enough time and student support or guidance. The design and use of an ePortfolio needs to align the teaching and learning activities with course objectives and assessment.

![The alignment triangle](image)

**Image 2: The alignment triangle** (Centre for Teaching Excellence, University of Waterloo)

**Constructivist learning activities**

ePortfolios foster student engagement through the design of purposeful, active and collaborative learning activities involving reflective and self-appraisal approaches to learning, or self-regulation of professional learning through standards-based achievement and social learning. In addition, integrative learning through ePortfolio draws on meaning-making from formal and informal learning experiences across different contexts and time.
ePortfolios embody constructivist approaches because they enable students to be ‘actively engaged in their own learning’ and to support their construction of what it means to be a learner, a graduate or a professional.

ePortfolios can be viewed as an evidence-based pedagogical approach which has the potential to enhance student learning by taking students beyond the limits of their individual courses, and helping foster lifelong learning.

**Key considerations in using ePortfolios**

According to Muireann O’Keeffe and Roisin Donnelly (2013), students struggle and face challenges in developing ePortfolios when:

- the purpose of the ePortfolio is not clear;
- the students are not provided proper training to use the technology;
- the requirements for assessment are not explained well to students (ie what was needed within the ePortfolio for the assessment purpose); or
- the amount of time taken to develop the ePortfolio was not taken into consideration while designing the assessment.

It is therefore vital that you first decide what value the ePortfolio adds to student learning and how you are going to introduce it and support the students.

In order to have effective and consistent use of ePortfolios across the curriculum, it is important for the academics and instructors to consider the points outlined in the table below, prior to implementing ePortfolios.

<table>
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<th>Type</th>
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<tbody>
<tr>
<td><strong>Set standards</strong></td>
<td>For students to develop effective and consistent ePortfolios, it is critical to set the standards for portfolio artefacts beforehand, ie. What is accepted and what is not accepted.</td>
</tr>
<tr>
<td><strong>Purpose of ePortfolio</strong></td>
<td>Explain the objective and purpose of ePortfolio use in the course to the students i.e. why it is used and how this is going to help in their career journey. This will encourage students to use ePortfolio for engagement and interactivity, otherwise, this might just become a piece of assessment. The ePortfolio will represent a student’s development over time.</td>
</tr>
<tr>
<td><strong>Benefits and expectations</strong></td>
<td>Set the expectations and intended benefits quite clear from the beginning. Explain to the students why it is being used for the course and how it will benefit in their career growth.</td>
</tr>
<tr>
<td><strong>Ownership of ePortfolio</strong></td>
<td>ePortfolios are student-owned and driven - it is up to them to decide what ePortfolio elements need to be included and shared with others. Hence it is important to foster a sense of personal ownership between the student and their ePortfolio.</td>
</tr>
<tr>
<td><strong>Structure of ePortfolio and help</strong></td>
<td>Explain to students in advance the acceptable structure of ePortfolio and the academics and provide some exemplars for the students to get inspiration. Provide students with training and help resources in using the ePortfolio tool.</td>
</tr>
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Table 3: Key considerations in using ePortfolios (Center for Teaching and Learning).
Examples of ePortfolios

The following examples of Showcase portfolios are taken from staff ePortfolios at UniSA.

<table>
<thead>
<tr>
<th>Showcase ePortfolios (from UniSA)</th>
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<tbody>
<tr>
<td>Dr Diana Quinn</td>
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Showcase ePortfolio

Tracey Johnson


The examples below are from a course taught at Charles Sturt University where blogs are used to reflect on teaching and learning issues in a digital environment.

<table>
<thead>
<tr>
<th>Reflective blogs in ePortfolios (Charles Sturt University)</th>
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<tbody>
<tr>
<td>LOOK WHO’S CHALKING: Reflections on Knowledge Networks &amp; Digital Innovation</td>
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</table>

notyouraverage JoBlogs: REFLECTIONS ON LEARNING IN A DIGITAL WORLD
If you would like to ask online teaching and learning questions related to your course, you can look through our FAQs, write to TIU@unisa.edu.au, have an online consultation with a member of the TIU, or complete the online modules as part of Introduction to Engaging Learners Online.

References


Lewis, L. 2017 ePortfolio as pedagogy: threshold concepts for curriculum design E-Learning and Digital Media 14(1-2) pp.72-85.

Queensland University of Technology. Department of Teaching Learning Services 2008, *Australian ePortfolio project ePortfolio use by university students in Australia: informing excellence in policy and practice*. Queensland University of Technology, Brisbane, Qld.

Watty, K & McKay, J 2015 Pedagogy and ePortfolios: purpose aligned to design (or the why and how) *International Journal of Pedagogies and Learning* 10 3 pp194-207