

# **Evidencing your lifelong learning with e-Portfolio**

SMITH, David <a href="http://orcid.org/0000-0001-5177-8574">https://shura.shu.ac.uk/24475/</a>

This document is the Published Version [VoR]

### Citation:

SMITH, David (2018). Evidencing your lifelong learning with e-Portfolio. Biochemist, 40 (5), 22-24. [Article]

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# Evidencing your lifelong learning with e-Portfolio

#### **David Smith**

(Sheffield Hallam University, UK)

Electronic or e-portfolios act to bring the products or objects of learning and experience together in a digital format. They make visible the accumulation of learning, competencies and experience. The outputs can be shared with employers, accreditors and tutors alike. Used to their full potential they act as an area for focused reflection and future goal setting. In this article we will explore what an e-portfolio can be, what it can contain and how to create one.

### e-Portfolios are a rich digital tool

e-Portfolios fall between the public realm of social media sharing and the professional persona found within LinkedIn. Many universities have access to bespoke e-portfolio platforms which are integrated into the virtual learning environment (VLE) for staff and student use. However, bespoke packages are not always needed as tools, such as the freely available Google apps, that allow the sharing of outputs can be just as effective. The digital nature of an e-portfolio allows rich, interactive content over and above what can be achieved on paper. YouTube videos, SlideShare presentations, audio recordings of conversations, links to publications - almost anything you can interact with or embed can be included.

#### How can they be used?

In their simplest form, an e-portfolio is a collection of artefacts that have been uploaded in an organized manner. A deeper use of e-portfolios is as a focal point for reflection over time, organized in a chronological order with evidence of development. Below are a number of ideas of how e-portfolios could be used.

## Long-term assessment

e-Portfolios can make learning and achievements visible to employers, funding and accrediting bodies, giving a qualitative window into longterm achievements, the impact of the work and the capabilities of the student. Development of scientific writing, practical laboratory skills and evidence of effective group work over the course of a year can all be evidenced. Once they are created, academics can offer feedback to students on the contents and give guidance on further personal development.

#### Showcase of practice

A bespoke collection of standout artefacts provides a powerful and comprehensive digital résumé of an individual. Items such as graphics, pictures, multimedia, stories, journals, certificates of training or laboratory outputs can all be displayed. Rather than stating that a talk or poster has been given, an embedded recording or copy of the work could be shown alongside the data that generated it. Bespoke e-portfolios for employers can be created, showcasing key skills requested in the job specification and included as a link in the cover letter.

#### Thinking back to evidence employability

Students can keep a record of experiences gained through their course as a means of demonstrating competency. This may be how problems were solved during a laboratory project or reflections on group work tasks. Such reflections can provide answers to the interview questions asking for examples of when and how you have demonstrated leadership or dealt with a difficult situation. The e-portfolio acts to highlight to both the student and the employer that the student has these core qualities.

#### Thinking forward for personal development

A longitudinal view of outputs gives a comprehensive picture of growth and progress that can be used during reflection. By reflecting on the artefacts in the e-portfolio and asking questions such as "what went well?" and "how can I improve?" the learner can gain insights into their personal strengths and areas for development and create an action plan to achieve them.

# Lifelong Learning

#### Impact

e-Portfolios are not just for students. Demonstration of the impact of your teaching and research are critical for both promotion and funding. You may, for example, want to collate meeting abstract text alongside PDFs of posters or slides, direct links to publications and photos or videos of outreach activities on a given project or theme. These can then be drawn on during grant writing as evidence of impact or pulled together during promotion rounds to demonstrate leadership in a given area.

# Getting to the nuts and bolts of e-portfolio creation

#### What to write?

Having some level of structure of an e-portfolio can greatly help in their creation. Initially, you may want to create areas for students on scientific writing, presentation skills, employability or group work. In each section, prompts can be given as to the type of artefacts that could be uploaded or reflected on. For example, in a scientific writing section, students can be prompted to upload the feedback from a recent assessment:

"Talk about your feedback (and your own feedforward) for the gene editing essay and any other scientific writing you have engaged in during your first year on the course."

A small amount of guidance gets over the dreaded blank page and gives a clear point to start from.

#### How to write it?

The initial mechanics of creating the e-portfolio can sometimes be a challenge for both academics and students alike. Here, structured tutorials can be a great help. An effective and simple icebreaker exercise is to get the students to upload a photo and write a short paragraph about themselves. Prompts such as "tell us where you have come from" and "why you have chosen this course" can be a good start. The students learn how to use the basics of the e-portfolio package and the academics can put a name to a face, finding out a little about their students at the very beginning of the course. The more advanced features, like embedding videos or slides, can then be supported through screencasts and drop-in sessions.

## The tricky art of reflection

Reflective practice is the act of self-observation and self-evaluation. Students can be made to feel comfortable with this process, in the private space of the e-portfolio with the knowledge that what they write will only be seen by the tutor. However,

reflection is not always easy. Often, when asked to reflect, knowing what to say or write is challenging as much of the earlier thinking has been subconscious or nonverbal. Here, prompt questions and structure can really help in the process.

#### What happened? So what? Now what?

- What occurred during the task?
- · How might what I have learned affect my future decisions?
- · How will I develop this skill?

The Learning Cycle developed by David Kolb is one way of structuring this reflection; other methods, such as the Gibbs reflective cycle, are also useful. These cycles are based on the idea that deep learning (learning for real comprehension) comes from a round of experience, reflection, development and active testing.

Experience - evidencing or describing something that has happened

Reflection - thinking about and reviewing the experience

Development - learning from the experience, developing a new idea or setting a goal

Active testing - trying out what you have learned to gain a new experience

Standing back, thinking about what has happened, identifying difficulties and focusing on areas for improvement, then going out and doing it, is the reflective cycle in action.

#### The end product

So what might it all look like when it's finally produced? From the student perspective, a section of the e-portfolio may look something like this:

(Experience) A formative 10-minute presentation was given in class and received low marks for delivery. A YouTube video of the presentation was embedded in the e-portfolio as evidence. (Reflection) The written description alongside the presentation identified issues with going over time and forgetting what was going to be said. The student also talked about feeling nervous and scared. (Development) Presentation techniques were discussed with the personal tutor and the suggestion to practice beforehand to an empty room was given. (Testing) Notes were used so as not to forget content and the talk was practised to keep to time. Reflection on the second talk noted that because they were better prepared they were less nervous. The recording of the new presentation was then used as evidence to an employer of effective presentation skills.

# Lifelong Learning

From a personal point of view, I have been keeping an e-portfolio for the last five years. Initially, I created it so I could better understand the process, and support my students in a core skills module. I began by gathering a body of evidence around my research and teaching practice. I noted that although I was creating innovative teaching materials, as evidenced by quotes from my students, they were not founded in theory and shared only with my own department. I set a goal to share more widely by presenting at external conferences. To embed a culture of evidenceinformed teaching I enrolled in a mentoring program to develop the pedagogy of what I was doing. The wider dissemination of my practice was then used during my National Teaching Fellowship application.

An e-portfolio makes lifelong learning real. Whether it's your own professional development or your students' experiences, by collecting products or objects of learning from real-life tasks and reflecting on these, personal meanings are developed. The reflective process tells stories about these experiences and the e-portfolio is the book in which they are recorded.

#### **Further reading**

- JISC (2008) Effective Practice with e-Portfolios: Supporting 21st Century learning
- JISC (2012) Crossing the Threshold. Moving e-portfolios into the mainstream
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David is a National Teaching Fellow, Molecular Bioscience Biochemistry. He is a Senior Fellow of the Higher Education Academy and has received the Sheffield Hallam Vice Chancellors Award for Inspirational

Teaching. David has been research active in the field of biosciences for over 20 years focusing on the molecular basis of neurodegeneration in diseases such as Alzheimer's and Parkinson's. His teaching involved the innovative use of digital technology to enhance student learning. Email: D.P.Smith@shu.ac.uk

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