

Refocussing Portfolio Assessment: Curating for Feedback and Portrayal

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Abstract

Portfolios are embraced extensively in higher professional education as effective tools for students to represent their learning and help prepare them for future practice. They are very diverse, used for both formative and summative purposes, however concerns are raised that the current emphasis on academic standards and/or the focus on employability may lead to the perception of portfolios simply as means to portray achievements. This paper argues that contemporary portfolios in digital environments can readily facilitate both purposes. It conceptualises a whole-of-program approach to the use of portfolios in which consideration is given to the need to bring curation skills and feedback processes to the forefront of portfolio practices. For teachers considering these issues, a planning framework for the design of program-wide portfolios is proposed.

Keywords: Portfolios; portfolio assessment; formative assessment; feedback, professional education; higher education, curation for learning

Introduction

Well known in arts and architecture contexts, portfolios, in more text-based formats have long been used in higher professional education as valuable tools to support student learning. Growth in portfolio use is evident. For example, two reviews of the effectiveness of portfolios found some 5000 initial citations in undergraduate and postgraduate programs in the health professions alone (Buckley et al., 2009; Tochel et al., 2009). This uptake has been attributed to their authenticity, validity and credibility as well as the richness of the information they supply (Driessen, Van Der Vleuten, Schuwirth, Van Tartwijk, & Vermunt, 2005, p. 215).

Portfolios, however, represent a diverse set of tools with a wide array of pedagogical intentions. In teacher education for example, Meeus, Van Looy, and Van Petegem (2006)

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express exasperation with ‘at least 49 different nomenclatures used to describe particular types of portfolio ... and 28 different classifications’ (p. 129). Ranging from simple repositories of learning artefacts to deeply reflective personal journals to promotional accounts of professional achievement, portfolio use is driven by a range of influences from individual reflective practice to mandatory professional requirements. In preparing university students for professional life, the use of portfolios has been explored across all levels, from undergraduate education, where it has improved students’ ability ‘to integrate theory with practice’ (Buckley, Coleman, & Khan, 2010, p. 187), to postgraduate and research education, where portfolio use ‘recognises the breadth of expertise that an extended professional requires’ (Maxwell & Kupczyk-Romanczuk, 2009, p.141).

Some portfolios emphasise formative aspects, such as Lam’s (2014) approach to self-regulated learning through ‘iterative feedback processes’ (p 699). Others follow a growing trend to use portfolios to demonstrate achievements or outcomes, often driven by the increasing push to codify levels and articulate outcomes with explicit educational standards, and represent student achievements for purposes of employability (e.g. Chetcuti, Murphy & Grima, 2006, p. 98). In their comparison of reflective learning fostered by portfolios, Groom & Maunonen-Eskelinen (2006) emphasised that unless program structures provide alternatives, students may perceive portfolios as mere tools for collating competency standards (p. 298). The issue with such summative approaches is that student work is typically recognised with marks or grades, which do not sufficiently explain the rationale behind the mark, rarely indicate why criteria have not been met, and fail to suggest how students might identify and fill gaps in their understanding. Portfolios aimed at these ends may neglect to focus on fostering learning.

In times of limited resources in higher education, it is rarely viable to conduct separate sets of activities for formative, summative and sustainable purposes: thus, assessments must encompass aspects of all (Boud & Soler, 2016). Increasingly, sophisticated electronic portfolio platforms support the adaptation of portfolio material to many purposes. The ease with which learning artefacts can be stored and retrieved allows students to keep, manipulate and selectively share their work, revealing it selectively for any desired purpose. Although portfolios provide an adaptable vehicle for multipurpose functions, care must be taken to ensure that students do not receive contradictory messages and that they are not expected to pursue incompatible purposes within any given task. The nature of high stakes assessment dictates that students present their best achievements to gain the highest possible grades, as these are the gateways to future studies or employment. Thus, a summative portfolio providing evidence of achievement should demonstrate the student’s best efforts. Conversely, a portfolio created for learning purposes may well include draft or incomplete work for feedback or reflection, so that it may be improved. In FitzPatrick and Spiller’s (2010) example of the tensions that arise from using a portfolio for both critical self-reflection and the demonstration of achievement, students felt bewildered and angry over the uncertainty generated by multiple purposes (p. 168). The authors suggest providing private portfolio spaces where difficulties can be worked out before public presentation. While acknowledging there is little doubt of these tensions, Wiliam (2000) nonetheless demands that ‘we must refuse to accept the incompatibility of “summative” and “formative” assessment. Instead, we must find ways of mitigating that tension, by whatever means we can.’ (p. 16).

Based on existing literature and our own engagement with this topic, this paper argues that contemporary portfolios can be refocused towards learning development while ultimately serving the need for summative assessment, at least in our areas of teacher and

health professional education. It suggests six basic elements of portfolio design and conceptualises a planning framework for a whole-of-program portfolio to facilitate both the development of learning and the achievement of discipline specific goals, equally supporting formative and summative assessment. It discusses the need to facilitate skills in curation of content, and the importance of enhancing portfolios to facilitate effective feedback processes.

To achieve this, portfolio task briefings and instructions must explain explicitly what portfolios do and how they do it. No portfolio is generic in form or content and each related undertaking must serve an obvious, specific purpose. The student's task is to draw together appropriate pieces of evidence and justify their inclusion for different purposes (e.g. to demonstrate learning outcomes or to attract prospective employers). It is crucial for both students and staff to know which mechanism is in place and what is being revealed for what purposes at any given time. We suggest the purposes of program-wide portfolios may necessarily vary from the particularly formative in the early stages of the program to the exclusively summative, providing evidence of achievement, in the closing stages.

Portfolio elements

Having discussed the diversity of portfolios and ways to accommodate the different purposes of assessment, we frame their functions with the following six elements:

- (1) The repository: A collection of all artefacts of a student's work, including all academic assignments and materials, including those related to fieldwork / clinical supervision, etc.; any relevant materials about extracurricular activities and, progressively, items generated from other program activities. It is not assessed (although items within it may have been) and remains private to the student.
- (2) Portfolio tasks: A structured continuous task or sets of tasks that regularly engages the student in some educational work, perhaps each week, through their entire program. This 'portfolio entry' might consist of an ongoing reflective journal piece relating broadly to an educational experience of significance to the student, a blog, a feedback task or a reflection on an item of coursework. In our work, the weekly portfolio task is to write half a page of self-assessment on any piece of submitted work from the previous four weeks, to build their capacity to judge their work over time.
- (3) Coursework: All students' coursework tasks contribute to the portfolio repository. They can then use any repository items (or combine new materials and repository items) to curate a collection supporting the particular learning outcomes for the course or course unit.
- (4) Competencies: Students add proof of competence in various attributes to the repository as they are attained. They can then draw from it, progressively over the program, to curate collections evidencing development in both their professional competencies as well as their learning skills. At interim levels they can be formatively assessed and aspects of the collection opened up for feedback. After working with the feedback and considered complete, these can serve as records of achievement.
- (5) Feedback: An ongoing collection where feedback comments from all assessment tasks, whether graded or not, can be easily accessed and built up over time, and where giving, receiving and working with feedback from teachers, peers and others is required, valued, evidenced and included at some point(s) in the assessments.
- (6) Curated collections of evidence: Students draw relevant evidence from the repository and explain how this demonstrates a particular feature of their learning. These include learning skills such as reflection, self-assessment and feedback, as well as evidence of

professional competencies such as clinical judgement and professional requirements, at increasingly complex levels. Curated collections or parts thereof may be assessed, or form the basis for an assessment. This is the place to demonstrate and display achievement in increasingly public contexts, such as creating a professional curriculum vitae (CV), especially towards the end of a program.

These elements can form the basis of a program-wide portfolio focussed as much on facilitating learning as it is on presenting achievements, embracing Klenowski, Askew, and Carnell's (2006) contention that, since portfolio use is consistent with particular beliefs about effective learning, 'it cannot be an "add-on" to a course but must be at its very core' (p. 284). Using these ideas we offer a planning framework that could be used to upgrade an existing portfolio approach or identify and prompt decision points within a new portfolio (Table 1). This has been developed from an ongoing evaluation of the design of a portfolio over the last seven years in a program for health professionals.

Table 1. Planning framework for feedback and curation activities in a professional practice portfolio.

Progress Trajectory	Orientation	Novice	Advanced Beginner	Approaching Competence	Graduation / Entry to Profession
Pedagogic Intentions	Transition to HE/ orientation / early and frequent engagement	Learning / understand and work with criteria and standards	Learning / starting to meet criteria /standards / early competence	Learning/ demonstrate standards / increasing competence/ emerging professional capabilities	Summative evidence / standards met / competencies met / employability / longer-term learning
Portfolio tasks	Portfolio Induction / Exemplars / Introductory activities	Continuous portfolio tasks. All activities have a place in the portfolio.	Foster learning skills e.g. reflection, self-assessment	Focus on self-management, professional and learning competencies	Preparing / displaying / fine-tuning summative evidence
Curation for feedback	Introduce and practice curation of portfolio content. Introduce and practice giving, receiving and implementing feedback	Familiarisation with curation, making curatorial commentaries. Students begin to engage with feedback comments and responses	Curation for feedback increasingly introduced. Students discover for self and others what is known and not known. Curation for feedback increasingly challenging against criteria, standards and/or self-assessment.	Increasingly curation becomes summative / for public portrayal of competencies and learning. Feedback communications become increasingly sophisticated and responsive	Curation for feedback in preparation for employment. When refined, can be made public. Feedback can be in relation to standards, competencies, employer expectations, or other summative reasons. Reflection on the value of feedback is evident in summative products

Planning framework

Our planning framework sees students moving through a trajectory of progressive stages (we use the term 'progress' in the top row of Table 1), starting at the commencement of their

program with orientation, through to novice, advanced beginner, approaching competence, and finally graduation. At each stage, the overarching pedagogical intentions for learning are outlined, the portfolio tasks to facilitate this described, and opportunities to include curation for feedback are outlined.

At the commencement of most programs, pedagogical intentions include facilitating the transition to university, providing orientation and promoting early engagement. This corresponds to an introduction to the portfolio as an activity within the orientation program or an appropriate commencing course unit. Careful induction of the student in the portfolio processes is vital (Van Tartwijk, Driessen, Van der Vleuten, & Stokking, 2007) and involves early and frequent introductory portfolio tasks that promote engagement while waiting for the first coursework assignment(s) to start. Subsequently, increasingly challenging portfolio tasks are scheduled throughout the program, with consistent support at the appropriate level.

As students progress through each stage, the intent is to develop academic learning, engage students with criteria and standards and facilitate increasingly challenging professional competencies and capabilities. The portfolio tasks provide regular opportunities for active learning, participation, and reflections to go into the repository, and feedback to contribute to the feedback stream. Students are taught to curate their artefacts, practice this often and for multiple purposes, and increasingly demonstrate their abilities of self-management and consolidation.

In the latter stages portfolio tasks encourage students to progressively demonstrate well-developed professional and learning competencies that will carry them into practice and continuing professional learning, with the final stage reflecting achievement, as outlined. It should be noted that although progress (in Table 1) is depicted linearly it may be otherwise, and the number of stages could be reduced or increased. Further, despite being later in the program, a difficult topic might be considered at a lower level if it builds on a number of previously developed skills.

Two functions of our portfolio conceptualisation require further consideration: feedback and its development through the portfolio, and curating collections for various purposes.

Feedback

Feedback processes can enhance learning not only through the information provided to students by teachers, but also through the ways that students frame what they do, what they need and how they respond to the information they receive. The tensions, discussed in the introduction, between formative and summative purposes are diminished by positioning a portfolio as a continuous work in progress containing curated collections that are predominantly formative at earlier stages and which can become summative at the end of a program through the deliberation and choice of the learner. Thus, the either/or tension changes to a staged progression over time from formative to summative.

Portfolios can be particularly useful devices to enable feedback processes (Barbera, 2009). Regular portfolio engagement across a program provides a means for ongoing feedback communications that the usual string of course modules typically does not. Universities are increasingly looking to improve student perception of feedback, not only because students consistently rate this as one of the least satisfactory aspects of their university experience, but also because teachers struggle with it as well. Further, feedback is often the only part of the curriculum individually tailored to each student and is the chief mechanism for communication between teachers and students (Jolly & Boud, 2013). Nicol (2010) advocates pedagogical strategies to help students to practice giving and receiving

feedback, and actively working with it to make judgements about the quality of their work. Molloy & Boud (2013) further suggest that students must be positioned as active agents in managing feedback information. They identify feedback ‘as a complex *system* that needs to permeate the curriculum, rather than an activity that appears within it from time to time’ (p. 25, italics in original).

Portfolios can facilitate this complex feedback system through ready access to prior feedback comments, without having to navigate a vast amount of material, allowing students and teachers to see if previous comments have been satisfactorily addressed. Feedback monitoring can also unveil different understandings about feedback from both staff and student perspectives (e.g. Adcroft (2011)). Portfolio tasks may be designed to encourage students to elicit their own feedback (from peers, group work and previous self-assessment) and can support ways of engaging students, such as releasing grades only when feedback has been subject to reflection and future goal setting (Irwin, Hepplestone, Holden, Parkin, & Thorpe, 2012). Carless, Salter, Yang, and Lam (2011) find that ‘multistage’ assignments such as portfolios ‘facilitate sustainable feedback when ... processes support students in self-monitoring their work while it is being developed’ (p. 398). Portfolios can also facilitate feed-forward into the next task (Quinton & Smallbone, 2010), helping students actively participate in managing feedback. This is done in one of our programs by setting an intermittent portfolio task (twice per semester) asking students to collate and critique (curate) teacher and ‘respected other’ feedback on recent work, with a reflective response regarding actions to be taken. Additionally, there is a reflection on all four tasks at the year end. Students and teachers have greater opportunity to close the feedback loop in a structured feedback communication space in which comments, responses and exchanges can be expected. While individual feedback episodes by different lecturers at different times may not readily identify learning gaps, repeated instances over time visible in the portfolio can be a powerful alert to both students and teachers to take remedial action.

To maximise the portfolio’s potential to contribute to learning through the feedback stream, an aligned system of instruction is desirable (Biggs, 2012), with a fit for purpose, ‘programmatic approach’ to assessment (van der Vleuten et al., 2012, p. 205). Towards the end of the program, students are well placed to prepare and display summative achievements based on the accumulated portfolio evidence. Feedback at this point might be solicited through a portfolio task asking students to examine their work against professional standards or employer expectations of new graduates.

Curating portfolio collections

One of the major criticisms of portfolio assessments is that, unless carefully curated, they can contain vast volumes of material that cannot be managed by either student or assessor (Driessen, 2009). We suggest that any portfolio content accessible to anyone other than the student (such as a teacher or peer) necessarily needs to be curated for a particular purpose, as viewing portfolios as mere repositories is to obscure their important function as devices for active learning and multipurpose portrayals that achieve what they are designed to achieve without overloading the recipient. Like the curator of a museum exhibit, students must create a clear theme or purpose, carefully select pieces for display while forgoing others, edit their work and construct a discourse that communicates and / or justifies the theme to succinctly guide the reader to make sense of what is presented and direct their attention to the salient features that require a response.

Curation has become a particularly important skill for managing the increasingly complex demands on professional digital environments. As Flintoff, Mellow & Clark (2014) argue, ‘Curators add a level of quality control around a topic [and] context to the found artefact sharing experience and ideas ... giving readers a frame of reference’ (p. 1). These authors also point out the growing trend of collaborative curation, where readers’ comments develop a collaborative experience and create a medium for ‘rich engaging learning activities’ (p. 3), useful in group-work assessments. Curation skills can be introduced and facilitated as students work with portfolio items on a regular basis. In one of our health programs we do this through a portfolio task during a work-integrated learning placement, asking students to record daily activities in their repository, then curating this into a brief account explicitly addressing outcomes in terms of professional and personal learning. As summed up by Wilhelm (2000), ‘portfolios should be curatorial collections of the processes and products of [educational] design’ (p 18).

Curating for feedback

Taking this a critical step further, we include curation *for* feedback in the planning framework, where students transform individual feedback instances into an overview or create a commentary requesting feedback on specific points of a piece they are working on. To do this, students must curate somewhat differently and focus on demonstrating learning processes and pathways. Curation for feedback moments can be made progressively challenging and sophisticated until they become part of an ongoing communication in which students can identify knowledge gaps for themselves and each other.

Curating for feedback over time can help students judge the quality of their work against standards, criteria or peers, and can facilitate any combination of self, peer or teacher feedback:

- (1) Self-assessment: Portfolio tasks (regular portfolio tasks – see no. 2 above) that ask students to self-assess, can show them the value of making a space to intentionally critique their own work. In reviewing work for self-assessment, students inherently reflect on it. Additionally, self-assessment should involve other people they respect providing feedback on whether they appear to be achieving their aims. The curated piece, the feedback, and the student’s reflection on both, may form the basis of a formative or summative assessment.
- (2) Peer formative assessment: Tasks where students curate portfolio content for peer feedback facilitate practice in giving, receiving and working with feedback. As discussed above, students can use the task to collaborate, compare and critique. A final product for summative assessment may focus on the students’ ability to work with feedback, rather than the actual peer assessment of the work, as that can be fraught.
- (3) Progress against standards and competencies: Portfolio tasks which ask students to curate collections demonstrating they have met particular standards or professional competencies are commonplace. Formative curation, however, helps identify gaps in meeting standards at interim points. This has been done, for example, in the Australian occupational therapy (OT) profession, which has developed ‘Levels of Evidence’ so that any OT student from any university can demonstrate his or her professional progress. Levels range from ‘emerging’, to ‘consolidating’, to ‘competent to practice’ (Occupational Therapy Competencies Australia, n. d.). Documented through a portfolio, these are ‘used by students to self-assess, evidence and track their developing competence’ (Ryan, Studdert, Sijpkens, Hills, & Nguyen, 2013, p. 51).

Conclusion

This paper has explored the increasing use of educational portfolios in higher education for the professions, and found that they reflect multiple designs, pedagogical intentions and purposes. We have argued that some recent uses of portfolios, in particular where the purpose is primarily to portray outcomes, may have limited their potential to foster learning, and suggest their use for both, provided clarity of purpose is prioritised. A conceptualisation is offered of portfolio design elements, which contribute to a program-wide portfolio planning framework, supporting both formative and summative goals. The importance of fostering students' skills in curation has been highlighted as necessary to make portfolio submissions manageable for staff and students, and as a key skill for future professionals. Providing students with regular opportunities to curate portfolio artefacts with critical commentary, especially for formative purposes, has featured in the discussion.

We suggest that the next important development for portfolios is to provide an efficient means to continuously engage students and staff in feedback communications. In these ways, portfolios can be used to engage students while they are in higher education and ultimately contribute to longer-term learning.

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