

Authentic assessment of reflection in an ePortfolio: How to make reflection more 'real' for students

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In a doctoral study that focused on the enhancement of reflection through an ePortfolio-based learning environment, students' indicated that they felt reflection was not real when it was used for assessment. This led to an examination of assessment practices linked to reflection and ways to make it authentic. The literature revealed that reflection is often a component of authentic assessment rather than being a focus of it. The practices associated with the assessment of reflection are examined in order to formulate 4 guiding principles. These principles aim to make the process of reflection more 'real' to students in higher education settings, particularly when using an ePortfolio platform.

Keywords: Reflection, assessment, authentic assessment, ePortfolio

Introduction

Reflection is considered an important component of pre-service teacher education and an effective means by which to link theory to classroom practice (Hatton & Smith, 1995; McBride, Xiang & Wittenburg, 2002). The process of reflection is complex and requires students to examine their practice in relation to the theoretical understandings provided to them in the university setting. It is also considered an important component for effective learning assessment of the multiple frameworks suggested for authentic learning (Herrington & Herrington, 2006), particularly when embedded in practice. In addition to this, portfolios - and more recently ePortfolios - have been proposed as an authentic environment to allow students to enhance their reflective skills and dispositions.

In contrast to this viewpoint, student feedback collected from a recent doctoral research project raised the idea that reflection completed for assessment, in any form, was not 'real'. As the field of education places such emphasis on reflection and the ability to write high level reflective entries, this perception was a concern that warranted further investigation. Through the discussion of this paper the authors focus on the question: 'if educators working in higher education institutions are focused on encouraging students to be reflective practitioners, and are increasingly embedding this process in an ePortfolio as an authentic environment, how do they ensure that this procedure is realistic for the students'?

Based on the student opinion presented in the research discussed, the authors will provide recommendations in the form of design principles for future practice based on examination of the current literature on reflection assessment in higher education settings. This includes the use of ePortfolios and how real or authentic the process of reflection in these environments appears to the students involved.

Impetus for the current review

The impetus for the examination of 'real' reflection was the findings of a doctoral study that aimed to enhance reflection in 4th year Bachelor of Education students. Within this research study, the students' reflective abilities were scaffolded by prompts placed within an ePortfolio-based learning environment as they completed their own individual action-research projects. At the end of the implementation, focus group and individual interviews were conducted utilising a convenience sample of 15 students to ascertain what components of the environment were effective in the scaffolding of students' reflective abilities. The analysis of this interview data revealed an unexpected viewpoint that focused on the process of written reflection. In these interviews there were several responses stating that the students felt reflection, in a university context, was not 'real' as it was completed as part of an assessment task (Roberts, 2014). Student feedback also commented that the marking of

reflective entries throughout their degrees had left them confused about what was expected of them and what reflective writing was supposed to be. Presented below are some of these comments, drawn from the research by Roberts (2014).

It was an assignment at the end of the day. It wasn't necessarily about what I was thinking.

If you weren't writing about what you had done wrong, you weren't getting marks for it.

When I saw the [4R] framework it really helped me to understand how I am supposed to be reflecting and the process in which I am supposed to follow; not just writing what's in my head.

[Tutors/universities] need to provide more authentic opportunities for students to reflect on a situation ... [and] redo the lesson with the changes made.

This feedback led to an examination of authentic assessment models used in higher education and the use of ePortfolios for reflection. The goal of meaningful reflection is for it to be applicable to real life situations rather than just academia but current practices do not appear to support this perception. What is of concern is that if reflection for assessment is not considered 'real' by the students, then how authentic are assessments that use, or are embedded in, reflection? This led to a more detailed review of the literature to identify how best to proceed.

The role of reflection in assessment

In an educational context, reflection is widely defined from the work of Dewey (1933, p. 9) as "active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and further conclusions which it tends." This has recently been adjusted to include components of a process that "strongly influences learning by increasing understanding, inducing conceptual change, and promoting critical evaluation and knowledge transfer" (Strampel & Oliver, 2007, p. 973). ePortfolio platforms have been suggested as an environment that allows students to collect evidence of their experience and reflect on these items as a means of facilitating this increased understanding (Barrett, 2005; Pelliccione, Dixon & Giddings, 2005).

In the literature pertaining to reflection in higher education it is reported that the development of these abilities and attributes allow students to make direct links between the theory they are being taught in the university setting and the practice of teaching in the classroom context (Beattie, 2001; McBride et al., 2002). This link from theory to practice was also what endeared the process of reflection to those examining more authentic types of learning environments that were proposed to ensure the foundation of graduates who were considered more workplace ready. In line with the focus on authentic processes, the use of portfolios, and more recently ePortfolios, has emerged as a way for students to record and present their learning for both assessment and future employment opportunities (Moran, Vozzo, Reid, Pietsch & Hatton, 2013; Raison & Pelliccione, 2006).

In the context of authentic learning, reflection and assessment are considered important components of learning environments that provide more realistic experiences for students. Seminal works on authentic learning environments include reflection as a characteristic of these environments that allows for the formation of *abstractions* by providing a context and task that is considered authentic (Herrington & Herrington, 2006; Herrington & Oliver, 2000). It is believed that by using "authentic and meaningful activities ... together with access to expert performance and opinion" students will be encouraged to reflect (Herrington & Herrington, 2006, p. 7). The authors further state that this process is particularly effective when students engage in meaningful discussion with *tangible outcomes* provided through journals, portfolios and blogs (Herrington & Herrington, 2006). These three components are generally facilitated through ePortfolios and, more recently, ePortfolio-based learning environments (Roberts, 2014).

When specifically discussing authentic assessment, Herrington and Oliver (2000) offer that it should be integrated within the learning task with opportunities that allow students to effectively organise and exhibit their knowledge during interaction with peers. The goal of authentic assessment, in this context, is to adhere to an approach that integrates the marking of both the learning process and the finished products (Herrington & Herrington, 2006).

Studies that have reviewed the assessment of reflection have identified problems with the use of some of the strategies advocated in authentic assessment models. These include the assessment of teaching portfolios that have been "widely touted as an authentic practice because of the opportunity it offers for teachers to reflect on

their work” (Rennert-Ariev, 2005, p. 2). Ironically, it was an action research based approach utilising an electronic portfolio environment that produced the aforementioned comments that were the impetus for this investigation. The student views that reflection for assessment was not ‘real’ were also identified by other studies into the assessment ePortfolios and other reflective writing formats including blogs and online journaling platforms as outlined below.

In a process that has been labelled by Shulman (1998) as *lamination*, the use of portfolios for assessment, particularly against a set of external standards (Rennert-Ariev, 2005, p. 2), reduces the usefulness of the tool to the student as they treat “the portfolio as a showpiece rather than an account of meaningful reflection”. Similarly, Thomas and Liu (2012) defined this as the *sunshining process*. In this situation, students were using the *buzzwords* of reflection, as well as *blameshifting* or *downtoning* negative aspects of their experiences to present a positive viewpoint of their experience in their reflective entries. It was felt that this occurred when reflection was used in an ePortfolio that may be used for future employment and, as such, needed to portray the student in a positive light (Thomas & Liu, 2012). A final example of this unrealistic reflection was research that identified the need to differentiate between reflection and commentary in response to what Kidwai, Johnson, Hsieh, Hu and Buzzetto-More (2010) labelled the *cliche response*. In this situation, “students might appear to show reflective activity but in reality these responses may be created only to satisfy requirements” (Kidwai et al., 2010, p. 253).

Guiding principles

Based on the recommendations for authentic assessment and the latest literature on the assessment of reflection in higher education, including the use of ePortfolios, the following 4 guiding principles for practice to authentically assess reflection were identified. Each of these was developed with the goal of enhancing assessment processes for reflective thinking and writing.

1. *Use practice-based tasks as the point on which to reflect.* The most authentic experience for pre-service teachers is something based within the classroom context. These placements, however, are becoming increasingly difficult to facilitate with the growing pressure on schools. To maximise the effectiveness of any practicum experience, students should be encouraged to reflect, plan and act on issues within these experiences and make changes based on these real world problems. There should also be opportunities before and after these experiences to interact with peers, as this discussion has been shown to assist in reflective development (Sim, 2006). These could be facilitated through an online learning space or ePortfolio platform.
2. Students need to be provided with clear guidelines and models for reflection with the levels identified from research into the process. In the literature, there are a number of strong reflective models including the Van Mannen model, Valli’s types of reflection and the 4R’s of reflection (Ryan, 2011). The students involved in the research that prompted this examination found the provision of the 4R model very useful in identifying what reflection looked like at the different levels and thus were able to examine their writing in relation to this framework (Roberts, 2014). The provision of these models can provide the students with a framework from which they can begin to assess their own reflective writing.
3. *Allow students to privately self-assess their reflective writing.* Authentic assessment needs to allow students to self-assess their reflective writing in an environment that remains private where they retain control over what is being shared. The various levels and sharing options of most ePortfolio environments allow for this process. If the goal of reflection is personal growth and development, the author needs to be free to write what they really think/feel without the fear of writing the ‘wrong thing’. If regular journal writing is completed, the students can review their own writing based on a provided framework (as discussed in Principle 2), with this written review becoming the task that is then submitted for assessment. In this way, students can select excerpts of their writing to demonstrate the various levels at which they have reflected whilst the content as a whole remains private and therefore may remain more ‘real’. There are concerns relating to student self-assessment for formal assessment tasks (Boud, 1999) which is why the submission from this self-reflection is recommended as the assessable piece.
4. *Provide multiple contexts and opportunities for reflective events.* The final recommendation to assist students in identifying assessment of reflection as a real activity is to provide multiple opportunities and contexts to continue to build upon experiences with reflective writing. The more chances students have to complete reflective writing, and practice the skills involved with the process, the more they will internalise the structures and take advantage of reflection as a learning activity (Boud, 1999). This increased awareness will then hopefully assist the students to see the process as beneficial to their ongoing growth and development.

Conclusion

While the list of recommendations in this paper is not exhaustive, it does provide a starting point from which to begin to improve the process of the assessment of reflection. By examining the literature that explores how best to facilitate reflection, and linking that examination with prior experience in working with students, the authors have identified 4 design principles as a means of making reflection more ‘real’ for students. The use of an ePortfolio environment could facilitate these principles as a more realistic approach for students to begin to enhance the skills and dispositions of reflective practitioners.

References

- Barrett, H. C. (2005). *Researching electronic portfolios and learner engagement* (White Paper). The Reflect Initiative. Retrieved from <http://www.citeulike.org/group/2518/article/800018>
- Beattie, M. (2001). *The art of learning to teach: pre-service teachers narratives*. Columbus, OH: Prentice Hall.
- Boud, D. (1999). Avoiding the traps: Seeking good practice in the use of self assessment and reflection in professional courses. *Social Work Education, 18*(2), 121–132. <https://doi.org/10.1080/02615479911220131>
- Darling-Hammond, L., & Snyder, J. (2000). Authentic assessment of teaching in context. *Teaching and Teacher Education, 16*(5), 523–545.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Lexington, Massachusetts: D.C. Heath and Company.
- Hatton, N., & Smith, D. (1995). Reflection in teacher education: Towards definition and implementation. *Teaching and Teacher Education, 11*(1), 33–49. doi:10.1016/0742-051X(94)00012-U
- Herrington, A., & Herrington, J. (2006). *Authentic learning environments in higher education*. IGI Global.
- Herrington, J., & Oliver, R. (2000). An instructional design framework for authentic learning environments. *Educational Technology Research and Development, 48*(3), 23–48. <https://doi.org/10.1007/BF02319856>
- Kidwai, K., Johnson, G., Hsieh, P., Hu, R., & Buzzetto-More, N. (2010). Promoting reflective thinking through e-portfolios. *The E-Portfolio Paradigm: Informing, Educating, Assessing, and Managing With E-Portfolios, 247–266*.
- McBride, R., Xiang, P., & Wittenburg, D. (2002). Dispositions toward critical thinking: The preservice teacher’s perspective. *Teachers and Teaching, Theory and Practice, 8*(1), 29–40. doi:10.1080/13540600120110556
- Moran, W., Vozzo, L., Reid, J.-A., Pietsch, M., & Hatton, C. (2013). How can technology make this work? Preservice teachers, off-campus learning and digital portfolios. *Australian Journal of Teacher Education, 38*(5), 8. <https://doi.org/10.14221/ajte.2013v38n5.9>
- Pelliccione, L., Dixon, K., & Giddings, G. (2005). A pre-service teacher education initiative to enhance reflection through the development of e-portfolios. In *Balance, fidelity, mobility: Maintaining the momentum in proceedings of the 22nd Annual Conference of the Australasian*.
- Pelliccione, L., & Raison, G. (2009). Promoting the scholarship of teaching through reflective e-portfolios in teacher education. *Journal of Education for Teaching, 35*(3), 271–281.
- Raison, G., & Pelliccione, L. (2006). Aligning assessment practices with long term outcomes in higher education. In *Enhancing Student Learning: 2006 Evaluations and Assessment Conference Refereed Papers*.
- Rennert-Ariev, P. (2005). A theoretical model for the authentic assessment of teaching. *Practical Assessment Research & Evaluation, 10*(2), 151–163.
- Roberts, P. (2014). *Investigating an ePortfolio-based learning environment for developing reflection with pre-service teachers*. Murdoch University, Perth, Australia. Retrieved from <http://researchrepository.murdoch.edu.au/22150/>
- Ryan, M. (2011, October 17). *Theorising and implementing a model for teaching and assessing reflective learning in higher education*. Plenary Address presented at the ePortfolios Australia Conference 2011, Curtin University, Perth, Australia. Retrieved from <http://www.slideshare.net/tag/eac2011>
- Sim, C. (2006). Preparing for professional experiences—incorporating pre-service teachers as “communities of practice.” *Teaching and Teacher Education, 22*(1), 77–83. doi:10.1016/j.tate.2005.07.006
- Strampel, K., & Oliver, R. (2007). Using technology to foster reflection in higher education. In *ICT: Providing choices for learners and learning. Proceedings ascilite Singapore 2007*.
- Thomas, M., & Liu, K. (2012). The performance of reflection: A grounded analysis of prospective teachers’ eportfolios. *Journal of Technology and Teacher Education, 20*(3), 305–330.

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