

Lessons from reflective journaling in undergraduate ePortfolios

Ruth McManus^{*1}

¹ *Dublin City University, Dublin, Ireland*

Abstract

This article explores and critically reflects on the use of the ePortfolio as a space for student reflection, demonstrating its utility as a Teaching and Learning (T&L) tool for both learners and educators. It draws on the author's experience of using ePortfolios for assessment purposes, incorporating a reflective component, over a four-year period within an Irish university. Particular emphasis is placed on the experiences and outcomes of two groups, each with approximately 35 students, who undertook undergraduate modules between February and May 2020. The discussion develops a number of aspects of the ePortfolio experience, considering benefits to both learners and educators, with specific reference to group work, to struggling students, and to the role which these reflective journals played during the early stages of the Covid crisis. In conclusion, some best-practice guidelines are proposed, focusing on effective module design and pedagogical scaffolding, and points for further consideration are raised.

Introduction

My earliest engagement with student reflection arose in 2005, when the Geography Department of what was then St Patrick's College, a college of Dublin City University, first adopted the Moodle platform. From 2005, I experimented in using the Journal facility on Moodle to obtain feedback and encourage student reflection, initially with first and second year BA students undertaking practical geography modules. In this iteration of Moodle, individual students could make a private journal entry responding to a prompt, while the educator could respond with a comment or feedback which was only visible to that student. At the time, this was a revelation, offering a new form of communication between student and educator. Within the department our use of Moodle evolved over subsequent years, however, in 2013 a change in the platform removed the existing Journal facility. Significant changes to the degree programme were initiated when a two-subject BA Joint Honours degree replaced our previous BA model which had required three first year subjects. Combined with modified teaching allocations and a period of major institutional change, it was not until 2016 that student reflection using an electronic platform became a renewed focus of activity.

In 2016 the Mahara platform was introduced into the university. Initially, this seemed to provide a solution to issues arising from the changes to the Moodle platform outlined above, but it quickly became apparent that the Mahara ePortfolio was a more versatile tool, offering a more rounded and holistic approach for students as it enabled them to create, collate, curate and comment upon material related to their modules (see McManus, 2018). I initially adopted the ePortfolio approach for a second year undergraduate Population Geography optional

module, where it forms a major assessment component, but subsequently incorporated an ePortfolio into two practical hands-on research methods modules in second and final year respectively. In these latter cases, the modules are flexible in content and aim to foster a creative approach to problem-solving and presentation of results. The ePortfolio requirements for the three modules differ, and all incorporate additional elements of content, but in all cases, students are required to incorporate a reflective learning journal within the ePortfolio. Thus, the reflective journal forms one component within a broader ePortfolio, but the observations within this article focus specifically upon the reflective learning journal.

These reflections are based on my on-going experience of using ePortfolio-based reflective journals with approximately 200 students over a four-year period. The journals were a graded activity to be completed on a weekly basis throughout the module for final submission at the end of the semester. While the weighting varied between the three modules, in all cases a significant proportion of overall marks (ranging from 10% to 30%) was allotted to the ePortfolios, to encourage student engagement. Students were briefed on the nature of the reflective journal component at the start of the module and given short prompt questions on a weekly basis. They were also regularly reminded of the need to maintain their reflections on an on-going basis.

Literature Review

Although ePortfolio practice has become almost ubiquitous across higher education, only a small body of empirical research exists in relation to the practice in Ireland (Donaldson 2018, Farrell 2018). As Chen and Black (2010) have pointed out, ePortfolio is a multifaceted concept and the ePortfolio can be used to fulfil many functions. Some limited research has demonstrated its use as a tool for reflection, including exploring broader aspects such as developing self-reflection and self-regulated learning, and exploring identity (Alexiou & Paraskeva 2010, Slepcevic-Zach & Stock 2018, Farrell & Seery, 2019).

Reflection, reflective learning and reflective journaling are terms which have become increasingly common in the academic literature, seen as offering beneficial opportunities for reinforcing student learning (e.g. Harvey, Coulson, & McMaugh, 2016). Kember et al (2008) identified four levels of reflection, ranging from the most minimal 'habitual action' through understanding, reflection and, the deepest level, critical reflection. This final level of reflection implies a transformation in perspective, which is a process that takes place over time and therefore should not be expected to be seen early or necessarily frequently as a student gradually develops reflective skills.

While reflective journals have become a common tool to promote reflection, the degree of structure varies. Journals may be prompted, whereby students are presented with specific themes or questions to reflect upon, but others are unprompted, with students invited to reflect on topics they consider important (Wallin & Adawi, 2018). Sultana et al (2020) recently examined the role of ePortfolios in encouraging reflective learning among undergraduate students at a Hong Kong university, drawing on Kember's (2008) work. Their findings emphasise the role of teacher as a learning facilitator and guide, the desirability of building scaffolding toolkits to support both students and teachers, and the need to provide sustained capacity building on both reflection writing and building e-Portfolios. Some of these elements will be explored further in the discussion which follows. Within the Geography discipline, early attention was paid to the benefits of learning journals as a means of encouraging active student engagement in the learning process (Park, 2003), while more

recently Hegarty (2017) has explored the use of ePortfolios as an integral part of assessment within a geography module. The specific use of reflective learning journals within an ePortfolio context is the focus of this reflection.

Experiences of using reflective journaling in an ePortfolio format

Since 2016 I have incorporated an ePortfolio element (based on the Mahara platform) into a number of second and third-year undergraduate modules, particularly those which have a practical, hands-on element. The key goal in this particular use of ePortfolios has been to encourage reflective learning within the relevant module. Reflection serves a number of different purposes as outlined by Moon (2004), but despite varying interpretations, it seems clear that reflection is an integral part of developing deep learning. Indeed, Mann et al. (2009) concluded that reflection and a deep approach to learning seem to be integrally related and mutually enhancing. The observations which follow begin with some general comments about student engagement before discussing, in turn, the value of reflective journals in group work situations, for struggling students and for the educator. The final theme of this section turns to specific learning from the early stages of the Covid-19 pandemic and the role which reflective journals played at this juncture.

Analysis of the grading outcomes over a four-year period suggests that, even with ongoing modifications to increase clarity regarding the nature of the task, levels of engagement with the reflective journal continue to vary significantly between students. Learners were encouraged to use the journal in a creative way – with a reminder that no two journals should be alike – but many struggled with the concept. Quite frequently, students sought to ascertain the number of words and/or the number of reflective journal entries required, then somewhat woodenly produced a very basic summary of class notes or activities, with no reflection whatsoever (similar to Kember's lowest level of reflection). At worst, it became apparent that these very limited ePortfolios had been cobbled together at the last minute rather than reflecting ongoing engagement throughout the semester. Another significant subset of students appeared to approach the task with an attitude of 'tell the lecturer what you think they want to hear'. Their journals were littered with plaudits praising the 'exciting' or 'fascinating' content of the classes, without ever engaging in deeper reflection on the material or on the learning process. The best reflections came from those students who used the reflective process in a very honest and genuine way, sharing their lived experience. Quite frequently the quality of entries varied across the course of the module's run, perhaps depending on the time students allotted to their reflective activities, or the degree to which particular topics appealed to their imaginations.

For two of the modules using ePortfolio, teamwork was also a required component. Students frequently experience challenges in undertaking a complex assignment, particularly as part of a team where different personality traits and working styles assert themselves. Their reflective journals offer an opportunity for them to comment on evolving group dynamics and other practical experiences, as well as considering intellectual content. In some cases, the journal offered a safety valve, a 'safe place' where they could confide difficulties without feeling that they were being disloyal to their teammates. Careful review of the ePortfolio entries could thus ensure some differentiation by the educator in grading group projects.

The practice of reflective journaling can be particularly beneficial for students within a cohort who appear to be struggling with the material, and can show the educator how these less-academically-able students have benefitted from their experiences in the module, such as building skills or enhancing their knowledge base. Reflective journaling allows learners to develop their writing skills, by encouraging them to write small amounts on a regular basis. Because all students are on an equal footing, they can gain marks simply by reflecting on their learning processes. The very act of reflection can help students to see where they are going wrong and perhaps address their own weaknesses. In the teamwork environment, one student might say that they were not particularly good at X task, but were being supported by a team-mate, while they recognised their own skills in another area, perhaps to do with organisation or motivation of the team. Students could learn from each other but also recognise and celebrate their own skills, particularly those beyond traditional academic tasks. Sometimes, too, reflective journaling will reveal development over the course of the module. While a struggling student may not have fulfilled the objective assessment criteria to a particularly high level, it may become apparent from their journal entries that they have nevertheless developed their skills or understanding significantly over the course of the module, perhaps from a lower starting point. For example, a student who reflected on their fear of using maps because they considered themselves to be ‘useless’ at map reading, could state by the end of the module that they felt more confident and proficient at the task. Although this might not necessarily earn them a higher grade, the student’s trajectory should be recognised in some way, at least through positive written feedback from the educator at the end of the module.

While research has evaluated the benefits of reflective journals for students (e.g. Park 2003, Moon 2004, Mann 2009, Harvey et al 2016), less has been written about their potential benefits for the educator. Indeed, I would argue that student reflective journals can become an important tool for reflection on the part of the educator; they can remind the educator of the student’s lived experience, demonstrate their trajectory through a module, and illustrate what teaching elements work effectively or are less successful. Where students have recorded their journal entries on a regular basis, the educator is potentially brought on their learning journey. Reading the student experience serves as an important reminder of the student’s situation, of the challenges which they face and their position at a particular point of learning. It can reveal the gaps in their knowledge, but also the sense of discovery and sometimes even of wonder as a new area opens up to them and they begin to develop an appreciation for the topic. The most encouraging reflections show a clear trajectory, with a developing understanding, or sometimes even a ‘lightbulb’ moment where a student suddenly makes a connection or develops a deeper appreciation of a topic.

However, the reflective journal should not simply function as a device to reassure the educator of their efficacy. They are not there to make us feel better. Careful and critical reading of reflections from an entire class cohort is a way of assessing oneself as a teacher, remembering to engage in self-reflective practice. They can provoke many questions: What elements of the module were successful? Where was the information conveyed clearly? Where were the points of confusion? Are there areas that need to be reconsidered, presented in a different way or developed differently? Further, reviewing individual journals and seeing the range of responses to the same teaching, is a helpful reminder of the variation within the student body. It can sometimes also prompt a rethink on the approach to a particular topic. Unlike grading exam papers, where a student’s misunderstanding of a particular topic can feel hugely frustrating, because the journal presents reflections over the duration of the module it can give a broader overview and insight into student thinking and engagement with

the module. Although not their primary purpose, such learning journals offer a more meaningful feedback mechanism to assist educators than many student surveys, because they are more holistic and can show the degree of student engagement as well as their gaps in understanding. Furthermore, there is potential for this material to be incorporated in more formalized continuous professional development (CPD). For an educator building their own portfolio of evidence prior to applying for Advance HE fellowship, for example, the learning arising from careful engagement with such student ePortfolios could be highly relevant. The development of the educator as evidenced by their engagement with – and reflection upon – student reflections, thus has potential at both formal as well as informal levels of CPD.

Having looked at overall student engagement with reflective journals, with teamwork, with the experiences of struggling students and with the educator's perspective, we finally turn to the very particular experience of Spring 2020. When evaluating the ePortfolio submissions of the two cohorts who undertook modules in Spring 2020, it became apparent that the reflective journal was used by some as a means of exploring and/or coming to terms with the traumatic events of that semester. The students had completed the majority of their coursework prior to the closure of third level institutions on 13 March 2020, but were heavily engaged in project work, much of which was to be undertaken in teams. In many cases, archival and library visits had been planned by students but could not now be undertaken. Following the 'emergency online pivot', learning including teamwork was moved to the online environment, using Zoom (lecturer and formal class sessions) and WhatsApp (student informal team meetings), with GoogleDocs used for sharing documents. Despite the difficult circumstances, the students coped remarkably well and successfully completed their modules. In reviewing their ePortfolio reflections it was clear that a significant number of students had used them to consider their educational experience in a far deeper and more meaningful way than had been the case for previous cohorts. There was deep engagement with the experience of transitioning from the face-to-face to online environment, with the challenges associated with accessing research materials, and the personal sense of loss and need for adjustment as a result of the lockdown. A number of students remarked upon the usefulness of their reflective journal as a grounding mechanism or as a way of tracking their 'journey' through these uncharted waters. It functioned almost in the same way as a teenager's diary, to which they sometimes poured out their concerns. They made meaningful observations about their experiences, in which they revealed a deeper understanding of their own modes of learning, including the impact of informal learning through their peers, which they were now missing.

What can be taken from this? Clearly the degree of engagement with the reflective journals was a product of particular circumstances and the heightened emotions of that period in time. Perhaps it was inevitable that students whose learning rug had been pulled out from under them, who had been forced to engage in new ways, would reflect more deeply than usual on their experiences. Nevertheless, are there elements which can be taken from this? Could some of this enhanced engagement be encouraged by means of a sequence of question prompts, with the prompts moving from relatively superficial to deeper levels over the course of a number of weeks? What else made it attractive to the students to reflect in this way? Did they develop a habit of engaging more regularly with the learning journal? These are questions which merit further consideration, perhaps in the form of a dedicated research project.

Practical Implications

These observations on the reflective journaling experience over several years and with different student cohorts lead to a number of conclusions relating to both module design and

student outcomes. My personal experience supports the available research into the benefits for students of incorporating a reflective journal ePortfolio element in module design, but also stresses the potential benefits for the educator in terms of feedback and their own reflective practice. However, it is also clear that such a component is not a panacea; it needs to be approached with care. Inevitably, as with all aspects of teaching, there will be students who engage in only the most limited way with the process. Careful attention at the module design stage may enhance engagement and encourage the greatest possible benefits (Moon 2004, Sultana et al 2020).

McIntosh (2010) found that attempts to include reflection in assessment tasks with limited pedagogical scaffolding was likely to result in superficial reflections with very limited impact on learning, while Ryan (2013) has identified pedagogic strategies that can be used to prompt these reflective levels in students' work. Combining this research with my own experience, the following points become clear. Reflective journals are most effective in an ePortfolio when the students receive clear briefing and are aware of the benefits of undertaking this process. Provision of marks towards the journal offers a tangible incentive for students, while the less tangible benefits of the activity may become clear over the course of the module. Therefore, the following guidelines are suggested:

- Identify clear objectives for the learning journal and convey these to the students at the outset
- Give enough marks towards the task to make it clear that this is important and worthy of attention.
- Consider incorporating a reflective journal within a broader ePortfolio context, as this may help to embed student reflective practice
- Develop a grading template to share with the students, which will further clarify expectations, while also ensuring that evaluation of the student's work can be as impartial as possible
- Show students samples of a range of successful journals, while also reminding them of the desirability of originality, rather than following the model too closely
- Avail of opportunities in class time to remind students about their ePortfolio entries, including talking over how they might incorporate a learning experience into their journal discussion
- Offer periodic (ungraded) feedback on the ePortfolio to date – this can provide guidance and/or reassurance to students, while the educator can also gain feedback from students to aid in targeting and supporting challenging areas.
- Require a final overarching reflection to encourage students to draw together their thoughts on their experience of the module as a whole. This helps learners to evaluate how far their thinking has evolved over the course of the semester, and thereby encourages a deeper level of reflection.
- Take time, as an educator, to review and reflect on the feedback received from students through their reflective journals, and incorporate this learning into future iterations of the module.

Conclusion

With careful scaffolding, reflective journaling in an ePortfolio format can offer meaningful benefits to both learners and educators. Indeed, as discussed above, the increased level of student engagement with such journals at a time of crisis reveals their additional value, including their potential role as a 'safe space'. Reflective journals within a broader ePortfolio context offer particular benefits to struggling students and can also be hugely helpful for the

development of the educator. Although a degree of caution should be observed in raising expectations that one learning element can perform multiple functions, it is nevertheless worth considering the potential revealed by this experience. This simple format, when effectively introduced and scaffolded, can prove to be a powerful tool for deep engagement, reflection, and transformative learning.

Acknowledgments

I would like to thank the guest editors for their supportive approach and the anonymous peer reviewers for their very helpful comments on a previous draft of this article'

References

- Alexiou, A. & Paraskeva, F. (2010). Enhancing self-regulated learning skills through the implementation of an e-portfolio tool. *Procedia - Social and Behavioral Sciences*, 2(2), 3048-54. doi: 10.1016/j.sbspro.2010.03.463.
- Chen, H.L. and Black, T. (2010). Using eportfolio to support an undergraduate learning career: an experiment with academic advising. *Educause Review*. Available at: <https://er.educause.edu/articles/2010/12/using-eportfolios-to-support-an-undergraduate-learning-career-an-experiment-with-academic-advising>
- Donaldson, L. (2018) (Ed). *Eportfolio Based Assessment – Inspiring Exploration and Supporting Evaluation for Practitioners*. Dublin: National Institute for Digital Learning, Dublin City University.
- Farrell, O. (2018). Failure to Launch: The Unfulfilled Promise of Eportfolios in Irish higher education: An Opinion Piece, *DBS Business Review*, 2: <https://www.dbsbusinessreview.ie/index.php/journal/article/view/30>.
- Farrell, O., & Seery, A. (2019). “I am not simply learning and regurgitating information, I am also learning about myself”: learning portfolio practice and online distance students. *Distance Education*, 40(1), 76-97. doi: 10.1080/01587919.2018.1553565.
- Harvey, M., Coulson, D., & McMaugh, A. (2016). Towards a theory of the ecology of reflection: Reflective practice for experiential learning in higher education. *Journal of University Teaching & Learning Practice*, 13(2), 1–20.
- Hegarty, S. (2017). Integrating ePortfolios into an Assessment Strategy in an Undergraduate Geography Module. *AAEEBL ePortfolio Review*, 2 (1), 52-7.
- Kember, D., McKay, J., Sinclair, K., and Wong, F. K. Y. (2008). A four-category scheme for coding and assessing the level of reflection in written work. *Assessment & Evaluation in Higher Education*, 33 (4), 363-79.
- Mann, K., Gordon, J., MacLeod, A., (2009). Reflection and reflective practice in health professions education: a systematic review. *Advances in Health Science Education*, 14, 595-621. doi: 10.1007/s10459-007-9090-2.

- McIntosh, P. (2010). *Action research and reflective practice*, London: Routledge.
- McManus, R. (2018). Population Geography Toolkit' In: L. Donaldson (ed.) *Eportfolio based assessment: Inspiring Exploration and Supporting Evaluation for Practitioners*. eBook available at <https://read.bookcreator.com/czHiWg1mbURBt6XGEriXdgYJEr62/j09MDQqZTXGthHfmyzsU0Q>.
- Moon, J. (2004) *A Handbook of Reflective and Experiential Learning*. London: Routledge Falmer.
- Park, C. (2003). Engaging Students in the Learning Process: The learning journal, *Journal of Geography in Higher Education*, 27(2), 183-99. doi: 10.1080/03098260305675.
- Ryan, M. (2013) The pedagogical balancing act: teaching reflection in higher education, *Teaching in Higher Education*, 18(2), 144-55. doi: 10.1080/13562517.2012.694104.
- Slepcevic-Zach, P. & Stock, M. (2018). ePortfolio as a tool for reflection and self-reflection. *Reflective Practice*, 19(3), 291-307. doi: 10.1080/14623943.2018.1437399.
- Sultana, F., Lim, C.P. & Liang, M. (2020). E-portfolios and the development of students' reflective thinking at a Hong Kong University. *Journal of Computers in Education*, 7, 277–94. doi: 10.1007/s40692-020-00157-6.
- Wallin, P., & Adawi, T. (2018). The reflective diary as a method for the formative assessment of self-regulated learning. *European Journal of Engineering Education*, 43(2), 507–21. doi: 10.1080/03043797.2017.1290585.