A Reflective Journal Please Would you like an ePortfolio with that?

Betty Walsh*       Susan Main†
Graeme Lock‡

*Edith Cowan University, b.walsh@ecu.edu.au
†Edith Cowan University, s.main@ecu.edu.au
‡Edith Cowan University, g.lock@ecu.edu.au
Abstract

Reflection and ePortfolios are current ‘buzz words’ in learning and teaching circles in pre-service teacher education. Given their increasingly prominent role in teacher preparation members of the Primary Program in the Faculty of Education and Arts sought to determine how best to incorporate these activities into learning and teaching at ECU. A program-wide implementation was considered to be most effective in promoting reflective practice and that a reflective portfolio would enhance the engagement of pre-service teachers with their learning experience and encouraging them to take responsibility for their developmental learning. This resulted in the development of the Professional Learning Journal (PLJ), which incorporated both reflective practice and a professional portfolio. While a number of measures were implemented to support pre-service teacher use of the PLJ, one of the key concerns identified by them was the cumbersome nature of the print-based PLJ. It was determined that a digital version of the PLJ would be the best way to overcome the physical restrictions of the print-based version and, as such, an ePortfolio was developed. Ensuring that the PLJ is used consistently and effectively across the Primary Program is ongoing; however, the lessons learnt to date provide some important insights for those in other programs and disciplines wishing to promote reflective practice.
Abstract: Reflection and ePortfolios are current ‘buzz words’ in learning and teaching circles in pre-service teacher education. Given their increasingly prominent role in teacher preparation members of the Primary Program in the Faculty of Education and Arts sought to determine how best to incorporate these activities into learning and teaching at ECU. A program-wide implementation was considered to be most effective in promoting reflective practice and that a reflective portfolio would enhance the engagement of pre-service teachers with their learning experience and encouraging them to take responsibility for their developmental learning. This resulted in the development of the Professional Learning Journal (PLJ), which incorporated both reflective practice and a professional portfolio. While a number of measures were implemented to support pre-service teacher use of the PLJ, one of the key concerns identified by them was the cumbersome nature of the print-based PLJ. It was determined that a digital version of the PLJ would be the best way to overcome the physical restrictions of the print-based version and, as such, an ePortfolio was developed. Ensuring that the PLJ is used consistently and effectively across the Primary Program is ongoing; however, the lessons learnt to date provide some important insights for those in other programs and disciplines wishing to promote reflective practice.

Introduction

The concept of reflective practice as a means of cultivating an individual’s expertise in a specific field was introduced by Schon (1983) and there has subsequently been considerable support for its use in a number of disciplines, including business, health and education (e.g. Shephard, 2006; Gaye & Lillyman, 2006; Fetherston, 2007). Schon conceived reflective practice as critical inquiry into thoughts and actions in order to improve practice and positioned the practitioner as a “researcher in the practice context” (1983, p. 68). Therefore, the practitioner is involved in a process of identifying their actions and outcomes, relating these to their knowledge in the field, and, using the understandings that they generate to enhance subsequent practice.
In the context of pre-service teacher education, reflection provides the opportunity to make the link between theory and practice and evaluate teaching performance in light of this. Ferraro (2000) suggests that “The primary benefit of reflective practice for teachers is a deeper understanding of their own teaching style and ultimately, greater effectiveness as a teacher.” Further, the use of journals is widely accepted as an effective way to promote critical reflection which facilitates professional development (Clarke, 2004; Conner-Greene, 2000). The value of reflective practice in education is consistently recognized in the literature and professional frameworks, including the Ministerial Council on Education, Employment, Training & Youth Affairs (MCEETYA) ‘A National Framework for Professional Standards for Teaching’ (2003) and the Western Australian Department of Education and Training’s (DETWA) Competency Framework for Teachers (2004), who identify reflective practice as a characteristic of effective teachers. It was with this in mind that members of the Bachelor of Education (Primary) course undertook to develop and implement the use of reflective journaling across this course.

The Professional Learning Journal

The task of introducing reflective journaling into the Primary Program was assigned to three academic staff with input being sought from all members of the Primary Program. Imbedding reflective practice throughout the Primary Program, rather than in the ad hoc manner generally characteristic of reflection (Hoffman-Kipp, Artlies & Lopez-Torres, 2003), was seen as a priority. As such, the decision was made that all academic units in the Primary Program would include reflective writing in some form. Further, it was acknowledged that there needed to be a clear and consistent structure that pre-service teachers could utilize, which included articulating a definition of reflection. To this end the following definition was agreed on by academic staff within the program: “Reflection can be seen as the process of thinking about an event, action or process and identifying ways in which this could be enhanced to improve the outcome” (Aspland, Lock, & Yardley, 2004, p.3).

The curriculum designers, recognizing that reflection is a complex skill, sought to provide guidelines which would assist pre-service teachers to develop their reflective writing skills. Bain, Ballantyne, Mills and Lester (2002) also highlighted the need to provide a framework “to help student teachers understand what is involved in serious reflection”; and “to enable student teachers to assess their own journal writing” (p. 13). The 5R Reflective Writing Scale framework that they developed to facilitate this was consistent with the aims of the Primary Program and as such became the basis of the PLJ. The 5R framework incorporates the following levels of reflection:

1. **Reporting** – describing a situation, incident or issue
2. **Responding** – making an emotional or personal response to the situation, incident or issue
3. **Relating** – drawing a relationship between current personal or theoretical understandings and the situation, incident or issue
4. **Reasoning** – exploring, interrogating or explaining the situation, incident or issue
5. **Reconstructing** – drawing a conclusion and developing a future action plan based upon a reasoned understanding of the situation, incident or issue. (Bain et al., 2002, p.13)
In addition to developing pre-service teachers’ reflective writing skills it was hoped that they would develop an appreciation of the potential this has to impact on their classroom practice, the implications of educational theory on practice, and their own development as teaching professionals. As such the Professional Learning Journal (PLJ) was developed to not only include information on the reflective practice, but also links to the DETWA Teacher Competencies and the development of their professional portfolio. Initially this was distributed to the students as a printed document that would form the basis of a file into which they could insert their written reflections and the artefacts they gathered.

The PJL and the mapping of teaching competencies are intended to span the four years of the Bachelor of Education (Primary). During the course of study pre-service teachers must collect maintain and store relevant artefacts and other evidence. This presented a range of issues for the students and staff including secure storage and the physical size of the paper based portfolio. A major issue for pre-service teachers was keeping the portfolio in a secure place that ensured the material would not be lost, misplaced or damaged. It could also become so large that the current final year pre-service teachers referred to it as “the doorstop”.

The size of the portfolio would also be problematic when pre-service teachers were asked to submit the journal for comment by the feedback team. It was necessary for the staff to collect the “doorstops” and store them in a secure place before distribution to the feed back team. As the number of pre-service teachers in each year of the program is approximately 150, secure storage also presents problems. As the feedback team is off campus this brings with it another set of issues including collection, transportation and secure storage of the PLJ. Distributing the folios to the feedback team requires time to be allocated to the collection and return of the folios. The cost of couriering the folios to feedback team members could be prohibitive given the numbers of pre-service teachers; however, transporting a large number of folios in a small car is also difficult. Finally, team members must be able to securely store the portfolios, either at their workplace or home.

Additional concerns highlighted by Lock, Yardley and Walsh (2008, in Lim, Brook and Lock (2008) included issues of staff change that arise when viewing a longitudinal student project. Incoming staff need to be able to readily access pre-service teachers’ past portfolio work to determine how the pre-service teacher is progressing with their developmental learning.

The concept and issues of the PLJ and related competency mapping were discussed with an educational designer and a project officer. It was agreed that to overcome some of the issues it would be beneficial for the PLJ and accompanying competencies to become an ePortfolio.

ePortfolio

An ePortfolio is, as the name suggests, an electronic or digital version of a paper based portfolio. The Carrick Institute for Learning and Technology in Higher Education (2008) defines an ePortfolio “as a collection of works purposely chosen by the author to provide evidence of a certain nature, and in the case of ePortfolios are digital” An ePortfolio enables a student to build a body of evidence from many sources, store them digitally, vary the presentation and allow access to selected parties.

There are many similarities between the paper portfolio and the ePortfolio. When constructing either portfolio or an ePortfolio users will be engaged in processes that include collection, selection, reflection, direction and presentation (Stefani, Mason & Pegler, 2007,
The difference between the portfolio and ePortfolio is not in the processes but in the uniqueness of the media used.

The digital media of an ePortfolio has some advantages over the paper based portfolio. An ePortfolio:

- is easy to rearrange
- allows for easier storage of all documents, artefacts etc are they are in a digital format
- is portable and easier to access
- has the ability to link either within the ePortfolio or outside the ePortfolio
- allows for easier backup thus reducing the risk of loss or damage.

The premise of the ePortfolio is based in constructivism where the emphasis is placed on the learner. In the case of The PLJ the pre-service teacher is responsible for determining which competencies have been met, and then seeking out opportunities to either develop the competency further or move onto another competency.

Current research is investigating the impact that the use of an ePortfolio can have on student learning. Sherman, Jafari and Kaufman (2006) list eleven roles the ePortfolio can have in the learning and teaching process. These roles include artefact creation as instructional context, goal setting, assessment, reflection, instruction planning and management tool, and learner organization tool.

Developing the ePortfolio

When addressing some of the concerns surrounding the PLJ and proposed ePortfolio several other issues arose. One issue being the students’ wide-range of IT skills. A study by Ring and Foti (2006) found that even though most pre-service teachers consider themselves technologically proficient, they still expressed fear frustration and anxiety at the notion of developing an ePortfolio. This meant the tools needed to be easy to use.

Stefani, Mason and Pegler (2007) highlight that the use of an ePortfolio should be within the students’ current elearning environment. Therefore, as designers we sought to find the solution to the issues surrounding the PLJ within the Blackboard environment. For pre-service teachers a concern was the secure and private nature of the tool used.

With these concerns in mind a blog was used for the PLJ and a wiki accommodated the teacher competencies. Using these technologies has the added advantage of exposing pre-service teachers to current Web technologies. A building block within Blackboard supported both technologies and allowed students to link the PLJ to the competencies. The physical linking of the wiki and blog has enabled the pre-service teachers to see a direct relationship between their reflective journal, Teacher competencies, their artefacts and a professional portfolio. These associations were not so explicit in the paper version. In the words of a third year pre-service teacher, when shown the ePortfolio, “Oh now I see how it fits together. There is a relationship between the reflections and DET competencies.”

It was also possible to develop templates for use within the wiki and blog. The pre-service teachers’ wikis and blogs were pre-populated with these templates. Worked examples were also provided for the students within their own wiki and blog.

The following diagrams show the interfaces for the ePortfolio.
Figure 1: Front page of ePortfolio

2. Example Teacher Competency Progress Table Entry

<table>
<thead>
<tr>
<th>Dimension 1: Facilitating Student Learning</th>
<th>Year One</th>
<th>Year Two</th>
<th>Year Three</th>
<th>Year Four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 1</td>
<td>Semester 2</td>
<td>Semester 3</td>
<td>Semester 4</td>
<td>Semester 5</td>
</tr>
<tr>
<td>1.5 Manage teaching and the learning process</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Establishes and communicates expectations for student learning and provides clear directions and instructions to students to support their engagement with learning experiences</td>
<td>Reflection title and Month/Year + artifact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Behaviour management (12/10/06) (A1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Structures learning experiences to ensure students have a sense of purpose</td>
<td></td>
<td>Behaviour management (12/10/06) (A1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Establishes and maintains a classroom environment which has clear expectations for standards of behaviour</td>
<td></td>
<td></td>
<td>Behaviour management (12/10/06) (A1)</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2: Table Entry
Of Problems or Lessons Learnt

The PLJ continues to evolve in response to the demands of the staff and pre-service teachers who use it; however, there are several lessons learnt from the development to date. While some issues are specific to ePortfolios, others relate to portfolios in general, whether they are paper or digital. Issues pertaining to portfolios in general are centred around pre-service teachers and staff understanding the purpose and value of a reflective portfolio. For ePortfolios the issues focus primarily on the pre-service teachers’ and staff members’ ability to understand and use the technology.

At the outset the need to embed the reflective journal in the course was identified and several strategies were implemented including the requirement to formalize the use of reflection in all academic units and the appointment of a member of staff to oversee the use of the PLJ and provide support for staff and students in using it. There is, however, the perception by some staff that the PLJ is not owned by them, but by one member of staff and this has made it difficult to embed the PLJ and, therefore, ePortfolio across the course. In addition, there is still some uncertainty among both staff and students about the purpose and value of the PLJ.

Stefani, Mason and Pegler (2007) suggest that there needs to be a very clear path for students when developing any portfolio and recommend the following steps:

- Collect materials
- Select materials
- Reflection
- Direction
- Presentation (p.19)

These steps are evident in the PLJ, but in order to enable pre-service teachers to follow the suggested process, staff need to provide a foundation that includes opportunities to work through the relevant steps.

<table>
<thead>
<tr>
<th>Date</th>
<th>Unit</th>
<th>Assignment/Reflection</th>
<th>Insights Gained</th>
<th>Teacher Competencies</th>
<th>Artefact Stored</th>
</tr>
</thead>
</table>
| 12/10/05   | Workplace learning - embedded days - maths unit MIFE2100 | Reflection - behaviour management | (As a result of completing this reflection... what key issues have you identified?)
- Inappropriate behaviour may have an underlying influence
- Importance of understanding the developmental level of children
- Peer pressure - its influence
| (As a result of completing this reflection what teacher competencies can you link to?)
1.5 abcdefh | (Where is the evidence that supports your reflection? Label this according to entry in Teacher Competency Progress Table eg A1, A2)
Observation notes in my Professional Learning Journal -A1 |
Arguably the most significant step is Direction and this process involves pre-service teachers identifying the competencies that have been attained, the degree of achievement, and determining and planning to meet the next competency. It has become evident that, for pre-service teachers to be self reliant in the process of self assessment and developmental learning, scaffolding is extremely important. As one lecturer reported “We’ve given them the bones, but they don’t have the skills to flesh it out”. The depth of the pre-service teachers’ analysis is often superficial and therefore the future professional development lacks a clear direction. Pre-service teachers need to become more proficient in both their understanding and use of the 5 R’s Framework, in particular the final R – reconstructing.

As part of their understanding pre-service teachers should be encouraged to view their reflective portfolio as part of their life long learning, particularly in their profession. It is imperative that staff as well as pre-service teachers understand the importance of reflective writing for developmental learning. Without this understanding, staff cannot become willing advocates for the portfolio. As it is difficult to get pre-service teachers to participate in an activity that does not have a grade attached to it, the valuing of the process is crucial. Pre-service teachers need to realize that the portfolio is not just about the product and value the process as much as the product.

One of the key issues of the ePortfolio is that pre-service teachers are not as technologically “savvy” we, their teachers, assume. Therefore there is a need to provide ongoing technical support to ensure that they are both capable and willing to use the technology. The support that has been offered to date includes workshops, one-on-one just-in-time support and a range of online guides. The guides can be found on a supporting Blackboard community site. The guides are presented in several formats including Word documents, Camtasia presentations and links to other relevant web sites. In conjunction with this, pre-service teachers and staff need to understand the connection between the wiki and the blog, or as the pre-service teachers know it, the connection between the reflection and the teacher competencies. For us as staff we need to make these links more explicit so the pre-service teachers recognize how the reflection links to their portfolio.

A criticism of the ePortfolio tool is that it is cumbersome to use. In its current format this criticism is valid. For the designers, the current technology met their immediate needs, but with some deficiency. It is recognised that as technology develops the ePortfolio tool will evolve to encompass developments that will enhance its usability. It is also envisaged, that with input from the pre-service teachers and School of Education staff, the tool will be improved and refined.

It is evident from our experience that for an ePortfolio to succeed there is a heavy investment in time and planning for both staff and pre-service teachers. For the current and future pre-service teachers the promotion of the PLJ and ePortfolio needs to centre on its significance and worth to them in their professional and life long learning.
References


