

# **Towards reflective project management: introducing the Portfolio-in-Practice**

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## **Abstract**

This qualitative study set out to explore the relationship between the practice of reflection in a project management MSc. programme and reflective practice in the workplace. We propose that students who learn and practice reflection in an academic programme can transfer these skills to reflection-in-action (Schön, 1983) in their project management roles, thereby contributing to the development of reflective project managers. Reflection in the context of post-project reviews forms an essential element in project management. Research has shown that this element is often the exception or omitted altogether due to time constraints (Anbari et al., 2008; Fuller et al., 2011; Nicolaisen & Driscoll, 2016). This study proposes that students who learn and practice reflection in an academic programme can transfer these skills to the project management workplace. Guided by the principles of phenomenography, online survey data were collected from 30 students and postgraduates along with 10 faculty members. The study found that despite initial apprehension students considered the reflective learning process to be useful and three quarters felt they could apply the reflective learnings to their practice after the first module of use. Towards the end of the programme almost half indicated their intention to continue with reflective writing practice post-graduation. Instilling the practice of reflecting on an education programme has two goals. Firstly, to reflect on the learnings of the programme work, at and across modules. Secondly, to bring those learnings forward to a real-world environment, encouraging not just our own development as reflective practitioners, but also the development of reflective project teams. To support these goals, we propose a new model: the reflective learning portfolio-in-practice.

## **1. Introduction**

There is a general expectation in today's world that graduates should master skills such as communication, reflection and creativity in addition to the content knowledge of their chosen programme (Bryant & Chittum, 2013). Reflective learning evidenced through a portfolio can contribute to the development of lifelong learners (Roberts, 2018). Similarly, Zubizarreta (2019) noted the importance of reflection being key to the concept of the learning portfolio. Zubizarreta further referred to reflection as “the linking pin of life-long, active learning, the key to helping students discover and understand what, how, when, and why they learn” (2019, p. 2). The key components of a learning portfolio are reflection, documentation and

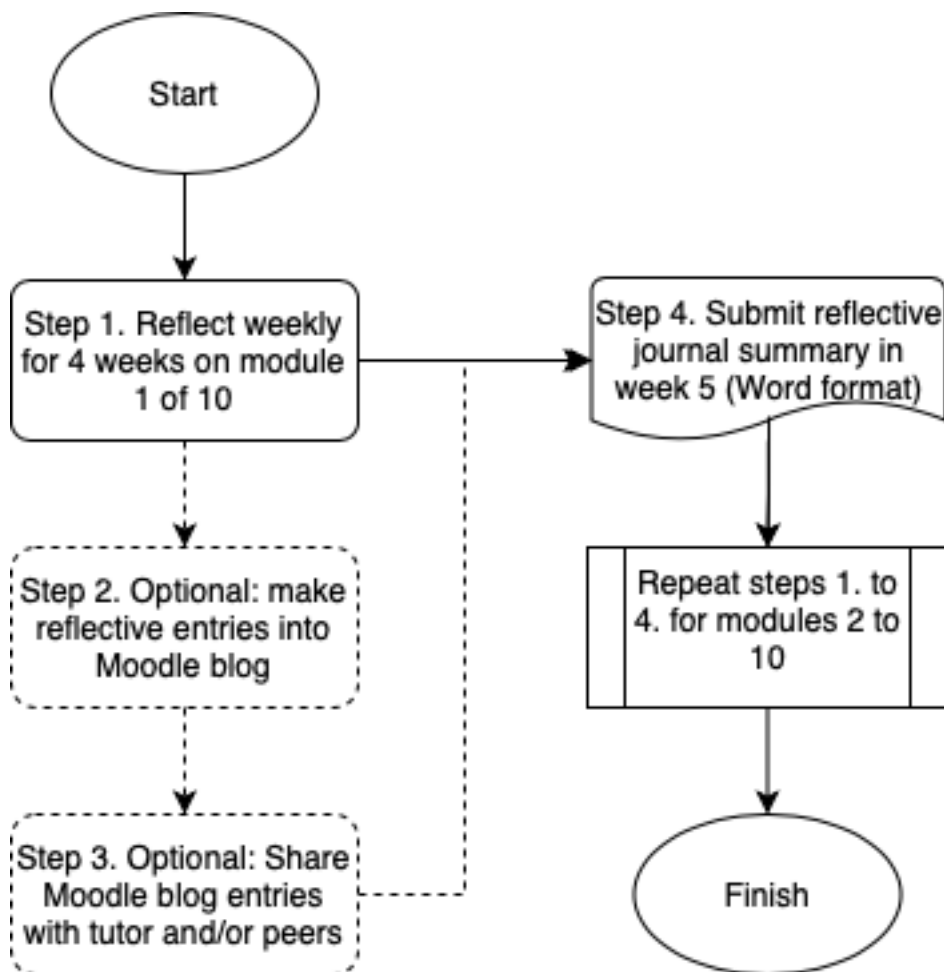
collaboration. In other words, students move in the direction of improved knowledge and insights through a combination of the documentation of individual reflection and collaboration with others (Zubizarreta, 2009; Barrett, 2007). This presents an opportunity for students to consider the reflective process as an important formative element on the path to their postgraduate degree, to complement the summative role as assessment of learning (Bolliger & Shepherd, 2010; Dalton et al., 2015; Ixer, 2016). In 1997, the Dearing report in the UK called for the development of a management system for individuals to record their personal and professional learning (Cambridge, 2008). In industry, the sharing of knowledge, learnings and experiences are now streamlined through the availability of tools and resources and the increasing emergence of collaboration through open innovation (Lakemond et al., 2016).

Instilling the practice of reflecting on an education programme has a twofold goal. Firstly, to reflect on the learnings of the programme work, at and across modules. Secondly, to bring those learnings forward to a real-world environment, encouraging not just our own development as reflective practitioners, but also the development of reflective teams and even reflective organisations akin to Serge's (1990) concept of the learning organisation. Cicmil and Gaggiotti refer to the pursuit of experiential reflective learning in responsible project management education (Cicmil & Gaggiotti, 2017). This complements other research on general self-reflection capabilities in the development of effective leaders (Crossan et al., 2013; Shelley, 2015; Thompson and Thompson, 2018).

In the world of project management, reflective practice takes place in the form of a lessons learned process (Project Management Institute, 2021). A debriefing process in terms of post-project reviews might be considered in the format of the following questions - "what happened? how did the participants feel? what does it mean?" (Boud, Keogh and Walker, 1985, p. 72). In post-project reviews, the project team is essentially engaging in reflective practice. When investigating organisational learning from a project management context, von Zedtwitz (2002) concluded that the potential for building competence at an organisational level is lost when vehicles for learning and reflection such as post-project reviews are neglected. The reality for project management practitioners is that post-project reviews are still an exception, and by no means standardised (Nicolaisen & Driscoll, 2016). Project managers find that the reflective element of a project, or debriefing process, is often omitted due to time pressure and the need to proceed quickly to the next project (Anbari et al., 2008; Fuller et al., 2011). By not undertaking appropriate post-project reviews, practitioners are missing the opportunity to reflect and capture learnings that might be of benefit to future projects and indeed team learning. Nicolaisen and Driscoll (2016) further noted that the lack of impetus paid to post-project reviews is known to impact costs and other key factors such as environmental and social impacts, whilst the learning potential for project managers and their teams is lost. This loss of learning at a project level supports the previous assertion by von Zedtwitz (2002) regarding the loss of competence at an organisational level. The recognised neglect in conducting post-project reviews by project practitioners supports the question raised by Griggs et al. (2018) regarding the potential loss of connection between reflective learning in education and reflective practice in the workplace.

Electronic portfolios, often abbreviated to eportfolios, particularly in relation to software licensing or platforms, offer a variety of uses including a development opportunity afforded to learners over a period of time, for example over the duration of a programme of education. Developing the practice of reflective writing, in itself a learning experience, promotes reflective learning and development towards becoming a reflective practitioner (Faulkner,

2013; Lombardi, 2008). In a study undertaken of a Master’s programme in business education and development, researchers used Baumgartner’s classification of portfolios which identifies the purposes of an eportfolio as reflection, development or presentation (Baumgartner, 2009). Slepcevic-Zach and Stock also concluded that the use of a portfolio is a valuable tool to encourage reflection, self-reflection and competence development (2018). It is important to distinguish that the type of portfolio engaged with as a career portfolio is very different to a reflective portfolio (Satterthwaite and D’Orsi, 2003). A process portfolio is focused on the process of learning rather than the product of learning (Farrell, 2018). In the context of this paper, the term reflective learning portfolio is the preferred term owing to the process of continuous learning and reflection in one MSc. project management programme. The current process is depicted in Figure 1 as follows:



**Figure 1: ‘As is’ process of module reflection**

Beyond the education programme, graduates who have developed critical reflection skills may exercise such personal practice to encourage the normalisation of lifelong reflective practice behaviour. In his seminal work, Schön attributed the identification of a gap between “professional knowledge and the demands of real-world practice” to Schein, Glazer and Simon (Schön, 1983, p. 58). In their consideration of reflective practice, Brockbank and McGill (2007) cited Barnett’s phrase “we’re all reflective practitioners now” and “the learning outcome to be desired from every student, is that of the reflective practitioner” (Brockbank and McGill, 2007, p. 85). In his work on building learning organisations, Senge noted the prevalence of reflection-in-action (Schön, 1983) in the form of managers “thinking

on their feet" and "keeping their wits about them" (2006, p.177) as examples of skills essential to the learning organisation. This is important because managers may not consider these skills as reflective in nature, perhaps considering them instead to be the results of experience. However, as researchers noted "experience alone is not the key to learning" (Boud, Keogh and Walker, 1985, p. 7). This concept has been expanded by Cicmil and Gaggiotti (2018) to actively promote reflection of experience lived through projects. Thus, experience combined with knowledge and reflection contributes to a project management student's ability to lead in today's project-based climate.

A number of sectors including healthcare and education incorporate reflective practice as an important part of what professional practitioners do and who they are (Rolfe, 2014; Gibbs, 1988). In fact, Griggs et al. (2018) argues that reflective learning is now supported by many professional bodies and features at the heart of management and professional education contexts. It should follow then, that the process of reflective learning in education would culminate as a norm in reflective practice in management generally and project management specifically. It is however recognised that a barrier to reflective practice in organisations is the fast pace of work required in today's performance-driven work environment (Griggs et al. 2018).

Drawing on qualitative online survey data from 30 students and graduates along with 10 faculty members of one MSc. programme in an Irish university, this study considers how the practice of reflective learning on a postgraduate project management programme contributes to the development of reflective project managers. We also propose that students who learn and practice reflection in an academic programme can transfer these skills to reflection-in-action (Schön, 1983) in their project management roles.

## **2. Methods**

Grounded in educational research, phenomenography is used to study experiences and variation in experiences (Forster, 2016; Limberg 2008; Orgill, 2012). Phenomenography was considered appropriate for this study since it is concerned with how different groups experience a phenomenon, in this case reflective learning, by students on an MSc. programme as one group and MSc. faculty as another group. It is important to note that the study of experiences refers to those between groups rather than individuals within groups (Åkerlind, 2012). The research approach required two groups of participants to share their experiences of the phenomenon of reflective learning with the researcher. Purposive sampling was deemed appropriate for the study since the cases that make up the sample are selected based on the researcher's judgement (Saunders et al., 2019). The first sample selected included students and recent graduates who had all completed the reflective learning component of the programme at the time the study was being carried out. The second sample selected was the teaching faculty and programme support staff who have experience of the reflective learning component and are actively engaged in the programme.

Of the 30 student and graduate responses to the survey, there was a balance of experience with 20% having more than 21 years' project management experience. The remainder was equally divided in the bands 0-5 years, 6-10 years and 11-20 years. 87% of all participants hold a primary degree and 38% have certification from a professional body. These include engineering and project management bodies for the most part. There were 10 faculty member

responses to the survey, equating to a 71% response rate, half recorded more than 11 years' experience. A further 2 recorded between 6- and 10-years' experience, and the remaining 3 fell into the 0-5 years range. 7 were in part-time roles on the programme and the remaining 3 in full-time roles. These faculty members have considerable experience in supporting education, whether in a teaching, management, research or support capacity. Less than half of the participants were involved in the initial design of the programme when the reflective learning component of the programme was established. Ethical approval for this study was granted by Lancaster University.

### 3. Findings

Students were surveyed as to their experience in writing or communicating for personal and professional development. Of these, 62% responded positively with experiences including presenting at conferences and work events, writing blog and media posts for work and community groups. At the outset of the online programme 68% of students were apprehensive about the reflective journal assessment component. Over half found that on completion of the first module, the reflective journal was either '*extremely useful*' or '*very useful*' and three quarters felt they could apply the learnings to their practice. Participants commented that the reflective component helped them '*think more deeply about their practice*'; '*provided a good grasp of theoretical concepts*'; enabled some to '*better understand personal shortcomings and consider the perspectives of others*'. Before commencing the final module—18 months after programme commencement—with a reflective journal assessment component, only 7% were apprehensive about it and 39% looked forward to it, in stark contrast to the first module. 61% considered the reflective journal component to be '*extremely useful*' or '*very useful*' and 79% felt they could apply the learnings to their practice, both up 4% on the first module. Participants' comments on this final module are consistent with the first module. Overall satisfaction showed 28% '*extremely satisfied*' and 40% '*somewhat satisfied*' with the reflective learning component. Regarding their intention to continue with reflective writing practice after the programme, 48% indicated that they '*definitely would*' or '*probably would*'. If offered a lifelong learning eportfolio software licence by the university this figure jumped to 60%.

On the MSc. programme, reflections are considered and assessed at module level by individual module teams. Student participants were asked to consider the scenario where reflections are assessed at programme level by a dedicated faculty team. In terms of the benefits, students responded to a selection of options with one quarter each selecting '*consistency in assessment and feedback*' and '*integration of learnings across modules*'. In terms of the drawbacks, 40% of students selected '*more time-consuming to consider reflections outside of the current module*'. 30% were concerned about '*biased expectations by the assessor based on earlier submissions*' and 23% cited '*an expectation to reflect across all modules, not just the current one*'. One participant commented further:

*With the part-time MSc. time is a [sic.] rarest commodity of all - adding better resources to the reflective path is highly recommended but it should not exert extra commitments to the students. Refining the method at the beginning is important, the dedicated team can then consistently grade the journals.*

Faculty members were asked about the purpose of the reflective learning journal on the online programme and all participants selected two of the options: *'to encourage student development in the practice of reflection'* and *'to encourage the practice of reflection by students in their professional environments.'* One participant commented further that *'(usually) a reflection helps them sew the threads together and understand the purpose of the (module) learning outcomes'*. When asked about the importance of the reflective learning journal in relation to achieving the module learning outcomes, three quarters indicated that it was *'very important'*, and none selected any level of unimportance on the scale. Taking this a step further to consider the programme learning outcomes, all 8 who responded to the question indicated that the reflective learning journal was *'very important'*. Students showed that they recognised the importance of the formative aspect of reflective practice, demonstrating both quality and depth of reflection. At MSc. level the project management students already align with the graduate attribute noted by the Institute of Technology, Carlow (2021), that students aspire to be reflective practitioners.

Zubizaretta (2009) suggests three elements of a learning portfolio to be documentation, collaboration and reflection. Amongst the faculty participants, 7 agreed that all three elements currently apply to the online programme and should continue to do so. Considering the establishment of a learning portfolio at programme level rather than module level, all participants considered the *'integration of learning across modules'* as being a benefit with the majority also selecting *'opportunity for greater reflection'* as another benefit. Interestingly, only 3 of the 7 considered *'experience of becoming a reflective practitioner'* to be a benefit. In terms of the drawbacks, 3 participants selected *'more time consuming to consider reflections outside of the current module'* and 2 selected *'an expectation to reflect across all modules, not just the current one'*. Only 2 participants stated that they did not consider there to be any drawbacks, however 1 participant commented that *'a programme team might easily go off at a tangent and quickly become irrelevant'*.

These findings indicate that the students became comfortable with the reflective writing process with any apprehension all but eliminated in the 18 months between the first and last modules that have a reflective writing component. It is interesting to note the limited awareness generally of the terms relating to learning portfolios. Neither faculty nor students appeared aware of the potential opportunity for reflective writing to develop into a learning portfolio.

## **4. Discussion**

The importance of the formative assessment nature of reflection was acknowledged by both groups in terms of underpinning a deeper understanding of practice and purpose of reflection. This supports an earlier study of reflective writing on a University of Limerick undergraduate civil engineering programme, where Cosgrove et al. (2014) considered reflective learning to be lifelong and key to professional formation and development. Wu and Crocco (2019) extended this research into an integrative model of reflection for leadership development consisting of three levels namely, intrapersonal, interpersonal and public leadership, along with three stages which are descriptive, reflective and critical.

Ultimately, project management and leadership involve considerable decision-making and as noted by researchers, poor decisions can be made without the practice of reflection (Densten

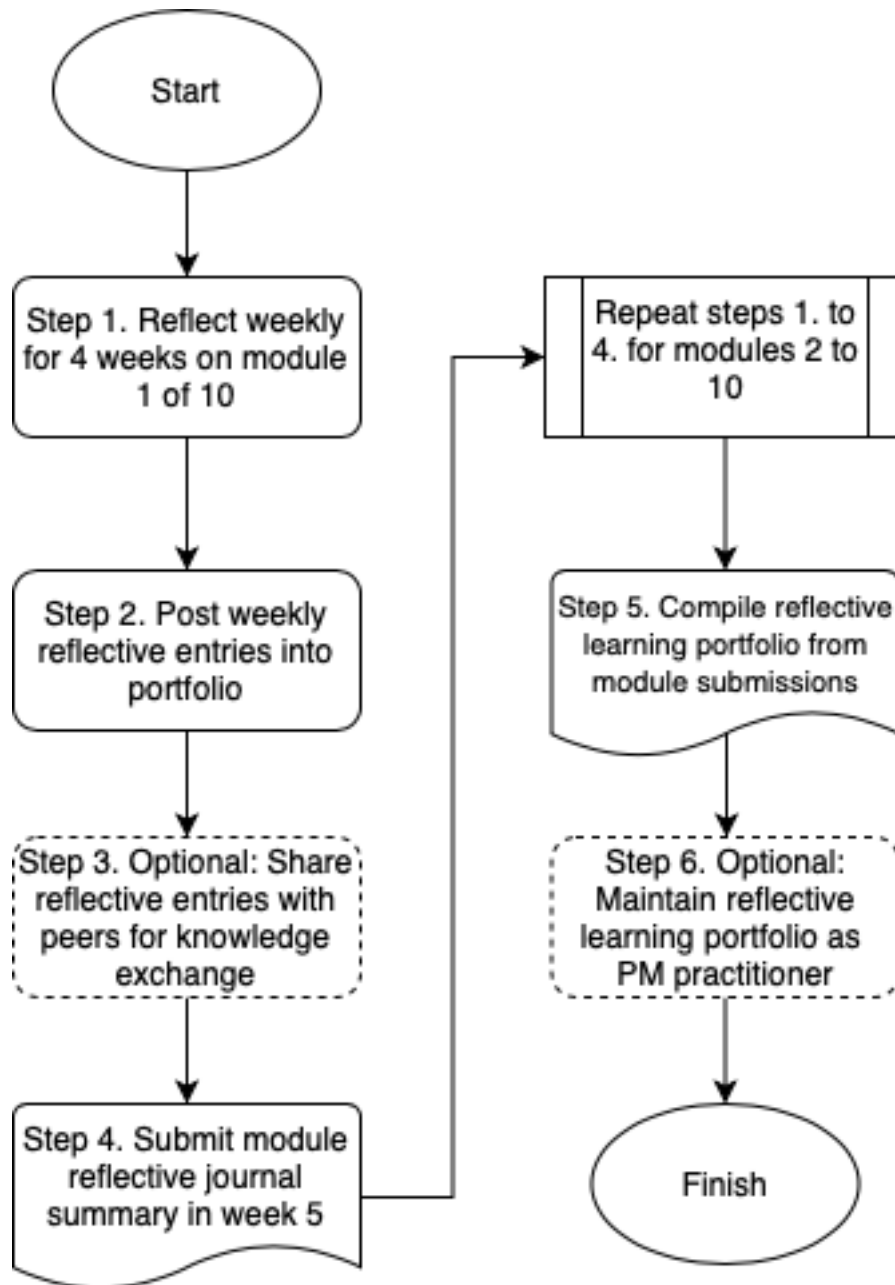
& Grey, 2001; Finlayson, 2016). This in turn speaks to the benefits of ongoing reflective practice. Our findings showed that a high number of students were likely to continue with reflective writing in practice if offered a lifelong learning eportfolio software licence by the University. It follows then, that since there is a willingness of graduates to continue reflective learning in practice, then in time the practice of reflection should become normalised in the workplace. By extension, these graduates would become reflective project managers. Both students and faculty noted that time was a significant constraint when reflecting across all modules, but also agreed that this more 'holistic' reflection would reap deeper learning outcomes.

Nevertheless, given the recognition of the value of learning portfolios in education, one might question why there has not yet been a greater uptake of reflective learning portfolios in project management practice and more specifically, in post-project reviews. The literature review examined the challenge for project managers to reflect on projects with their teams, assuming leadership roles with the expectation of delivering successful project outcomes. It was noted that they are quickly reassigned to the next project, and post-project reviews are not standardised throughout all sectors in the project management environment. Taking time to regularly reflect during a project — reflection-in-action (Schön, 1983)—may speed up the process of post-project reviews—reflection-on-action (Schön, 1983)—in turn encouraging the uptake of the review process. This supports the assertion by Griggs et al. (2018) regarding barriers to reflective practice in learning and reflective practice in the workplace. In turn, this addresses the previously discussed inhibiting factors of reflection-in-action and consequently post-project reviews.

## **5. Conclusion and recommendations**

This qualitative study set out to explore the relationship between the practice of reflection in a project management MSc. programme and reflective practice in the workplace. Our proposition was that students who learn and practice reflection in an academic programme can transfer these skills to reflection-in-action (Schön, 1983).

For the practice of reflective learning to become key to the professional development of reflective project managers, we propose the following process of MSc. programme reflection in figure 2. The proposed process looks at reflection from a programme level rather than the current module level. Of the changes to the process in Figure 1, step 3 encourages reflective entries to be shared with peers. Step 5 requires a compilation of a reflective portfolio from individual module submissions over the period and the final step promotes the maintenance of a reflective learning portfolio-in-practice in the workplace thereby contributing to the development of reflective project managers.



**Figure 2: ‘To Be’ process of programme reflection**

At an academic level, further research could be conducted into understanding why reflective practice is less prevalent in certain professions for example engineering or business management and leadership. In addition, researchers might explore the reinforcement of new habits into a sustainable practice of lifelong reflection. This might then correlate to the practice of reflection being embedded as a norm in the workplace.

At a practice level, education institutions should consider encouraging continued reflective practice throughout a programme of learning and beyond to the workplace through the offering of lifelong learning eportfolio software. Education institutions who do not do so already should consider the inclusion of a reflective component in its graduate attributes document. Finally, there is little to incentivise project managers to develop, maintain and indeed share, reflective learning portfolios. To maintain certification of a professional body,



such bodies should consider awarding professional development units (PDUs) for evidence of reflection. Finally, we propose the adoption of a reflective learning portfolio-in-practice with a view to embedding reflection-in-action that may result in sustained practice of post-project reviews in the project management sector.

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