Personal theory and reflection in a professional practice portfolio

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Portfolios are widely used in the assessment of professional learning. Although claims are made that portfolios promote reflection, the nature of such reflection and the mechanisms that promote it in the portfolio process are not well understood. A four-year action research project investigated a professional practice portfolio for high stakes assessment in a post-graduate programme for special education resource teachers (RTs) that was preparing them for a paradigmatically different role. This paper focuses on the requirement to submit a personal theory (PT) statement in the portfolio. Although tension between the summative and formative purposes of the portfolio was evident for some RTs, a more comprehensive understanding of reflection was evident and many RTs reported that articulating their PT (often for the first time in their career) impacted positively on their ability to reflect on practice.

Keywords: portfolio; assessment; personal theory; professional practice

Introduction

Since its first appearance in teacher education in the 1980s, portfolio assessment has gathered momentum. As it is theoretically consistent with the aim of promoting deep learning, it is widely used in many countries in a range of professional education programmes, especially teacher education. One of the arguments for the use of port-folios is that they are a tool for reflection. However, there is a lack of agreement about what counts for reflection (Klenowski and Lunt 2008) and limited theorisation about the way in which the process of portfolio preparation may involve reflection. One of the reasons for this is that the notions of reflection and reflective practice have entered into the rhetoric of professional education in ways that are often ill-defined and unquestioned (Ecclestone 1996; Edwards and Nicoll 2006). In support of Davis's (2006) call for 'productive' reflection, the following definition is offered: reflection is a process of critically examining one's present and past practices as a means of building one's knowledge and understanding in order to improve practice.

Portfolio construction will not automatically result in reflection as defined above (Orland-Barak 2005). One mechanism for assisting in the process of reflection is the requirement to articulate a personal/practical theory (PT). Handal and Lauvas, using the term 'practical theory', define it as 'a person's private, integrated but ever-changing system of knowledge, experience and values which are relevant to teaching practice at any particular time' (1987, 9). In a recent study of written PT by 94 post-baccalaureate teacher candidates, Levin and He (2008) identified family background and educational experiences, observation and experience of teaching and course work in teacher

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education as the three main sources of beliefs. Their analysis indicated that the writers were able to make explicit links between their beliefs about teaching and the sources of their beliefs. They also confirmed that although teacher education programmes can influence beliefs, strong influences from prior experience persist. This paper focuses on the impact on reflection and reflective practice of a PT statement as a requirement in a professional practice portfolio.

Much of the literature about portfolios is advocacy for the approach, explanations of how to undertake portfolio assessment or accounts of personal experience (Antonek, McCormick, and Donato 1997; Johnston 2004; Meeus, Van Petegem, and Engels 2009). Critical examination of the trustworthiness of portfolios and the capacity of the approach to meet the requirements of rigorous assessment of professional practice is made difficult by the diverse interpretations of the concept (Meeus, Van Petegem, and Engels 2009; Smith and Tillema 2003). The portfolio in this study required compilers to collect evidence of their practice, to attach statements that explained how this evidence demonstrated achievement of the learning outcomes of a professional development programme, and to reflect on the practice from which the evidence was derived. There have been calls for systematic longitudinal research into the relationship of course and portfolio design (Pleasants, Johnson, and Trent 1998) and the impact of portfolio assessment on professional learning (Borko et al. 1997; Klenowski, Askew, and Carnell 2006; Smith and Tillema 2003; Stone 1998; Tierney et al. 1998), especially the nature and quality of reflection involved (Lyons 1998; Klenowski and Lunt 2008; Zeichner and Wray 2001). This four-year action research project, investigating a professional practice portfolio for high stakes assessment, attempted to address these issues. The study had two aims. The first was to identify the features of both the design of the portfolio and the supporting teaching programme that promoted learning and practice. Second, it sought to identify how engagement in the process of compiling a portfolio impacted on professional learning and practice.

The professionals were experienced teachers undertaking a two-year post-graduate programme to train for a new role as special education resource teachers (RTs) that required a reconceptualision of the RT role, involving a shift from the deficit/functional limitations paradigm in special education to the inclusive paradigm (Moore et al. 1999). The RTs (many of whom had been working as special education teachers prior to appointment to the new position) were required to work in new and challenging ways. A portfolio was selected by the programme designers to promote the paradigm shift through transfer of learning, enhanced performance and reflective practice.

Rationale for portfolio assessment for the promotion of reflective practice

Competent professionals need to add to their theory of practice through experience, critical analysis of the knowledge on which they base their practice, and ongoing knowledge generated within their profession. Professional programme developers must ensure, therefore, that their students engage in deep learning, are able to make transformations in their existing beliefs and understanding to develop new theories of practice and in the process of such learning, enhance their personal autonomy as learners and practitioners, capable of sound judgment and ongoing self-directed learning and critical autonomy. To achieve this aim, the teaching practices (including delivery methods, in-class and out-of-class learner activities and assessment methods) need careful planning to create rich teaching–learning contexts.

Professional knowledge is a complex combination of propositional, process and personal knowledge (Eraut 1994). Much of this knowledge develops meaning only in the context of practice, becoming the action knowledge on which professionals make their decisions. Expert professionals are able to frame and solve nonstandard problems, are analytical, and are able to use principled and abstract approaches to problem-solving and decision-making (Bransford 2005; Torr 2005). The development of professional competence depends on the ability to act at a level of automaticity with knowledge that enables efficient, effective and unselfconscious practice. However, the development of competence also depends on the ability to review existing knowledge in order to acquire new knowledge and skills to solve new problems. When professionals examine the theoretical and research knowledge that informs their practice, and engage in enquiry of their own practice, they are able to develop a well-elaborated and improving theory of practice (Korthagen and Lagerwerf 2001). The ability to see both theory and practice as problematic, and to develop an attitude of systematic enquiry and knowledge building needs to be promoted in professional education programmes (Eraut 2004).

As the anticipatory schema of the learner affects the learning of new knowledge, a professional's current theory of practice influences further learning (Eisner 1985). Much of such theory is tacit and not well elaborated, and provides the basis for the intuition demonstrated by experienced professionals. However, tacit knowledge can also impair performance and act as a barrier to new understanding and necessary change. It may perpetuate actions that cannot be supported at levels of efficacy and/or ethical or social appropriateness. Therefore, to the extent that it is possible, professionals need to develop the ability and inclination to make tacit knowledge available to scrutiny (Sternberg 1999).

Effective professional education in higher education will be achieved if the design and delivery of programmes are 'constructively aligned' (Biggs 2003) with the goal of achieving professionals with both the confidence and ability to apply specialised knowledge and skills in new and challenging situations. Professionals need to add to their theory of practice through experience, critical analysis of the knowledge on which they base their practice and ongoing knowledge generated within their profession. Boud has argued for sustainable assessment 'that meets the need of the present without compromising the ability of students to meet their future learning needs' (2000, 151). Some have argued (e.g., Biggs 2003; Knight and Yorke 2003) that a portfolio is an assessment task that is consistent with such a purpose. However, the degree to which a portfolio fulfils the requirements of sustainable assessment will depend upon its design.

Method

This study investigated the development, teaching and evaluation of a portfolio used as the final assessment tool in a two-year professional development programme for RTs. Four year-long cycles of action research were undertaken during which data were collected, the portfolio requirements and teaching programme were reviewed and changes to both were implemented.

The portfolio was compiled by RTs during the second year of the programme. They attended eight workshop days throughout the year, designed to ensure RT understood the requirements of the portfolio and to provide them with explanations, models and opportunities to practise the processes of selection, annotation and reflection on evidence from their practice.

Participants

Participants were drawn from two groups: the RTs enrolled in the programme's portfolio paper during its first four years (91 RTs (54%) accepted an invitation to participate); and the four members (including the researcher) of the faculty team that was responsible for the planning and implementing of the portfolio programme.

Data collection

Data were of two types, those that were products of the programme (i.e. course evaluations, course materials, completed portfolios, minutes of planning meetings) and those specifically designed for the study. All RT participants completed a pre- and post-portfolio questionnaire. The first questionnaire elicited RT current understanding of reflection, the concept of reflective practitioner, how they currently engaged in reflection about their practice and their expectations of the portfolio process. The post-portfolio questionnaire repeated some questions from the first questionnaire to enable comparison of the RT understanding and practise of reflection following the portfolio process. The other questions focussed on the portfolio process, and how aspects of developing the portfolio, including the PT task, had been experienced by the RTs.

Fifty-seven RTs participated in semi-structured individual or focus group interviews after the return of the marked portfolios. (In the first two years of the study, participants from one geographic area only were invited to participate in interviews for logisitical reasons. In the last two years, all participants participated.) Interviews explored issues identified in the questionnaire responses and solicited RT views on possible changes to the portfolio requirements and teaching programme. All members of the faculty team participated in an individual debriefing interview at the end of the fourth cycle to discuss their views on the portfolio as an assessment and learning tool, and to check the researcher's perceptions.

Data analysis

Completed questionnaires were read for issues and themes to be followed up in more depth in the focus group and individual interviews. Records of all questionnaires were entered into a qualitative data analysis software program, and an inductive approach (Miles and Huberman 1994) was used for coding the responses to the open-ended questions. A topic code was created for each question. The responses were read several times and using sentences as the text unit for analysis, the records were examined to identify meaning units that were then named as analytical codes and descriptions for each code were written. Responses were frequently allocated to several codes. Transcripts of individual, focus group and debriefing interviews were analysed in the same manner. Coding was undertaken by the researcher for all data sources, but a sample of transcripts were coded independently by a colleague, coding discussed and refinements made to descriptions for each code.

Findings

In the first year of the portfolio course the PT task was introduced on Day 1. As the process was expected to be unfamiliar and possibly daunting, guidelines were distributed (see Excerpt 1).

Excerpt 1.   Personal theory task handout, Year 1.

PERSONAL THEORY TASK

The purpose of this task is to enable you to articulate some aspects of your personal theory that impact on your work as an RT. By writing this statement early in the year you will have the opportunity to reflect on your work in relation to this statement and to discuss it with your colleagues and tutor.

Write a statement of your educational philosophy and how it impacts on your work as an RT.

Include in this statement your view on:

- how children learn;
- why children behave as they do;
- the role of education in a diverse society;
- the implications of the Treaty of Waitangi for education in New Zealand;
- the role of the teacher; and
- the role of the RT.

(500–1000 words)

In the interviews and post-portfolio questionnaires at the end of the first year, RTs reported that having to write their PT for the portfolio had raised their awareness both of the fact that they had such an underlying theoretical basis to their practice, and of the content of their theory.

However, in one of the focus groups, several RTs mentioned that they had not found writing the PT very helpful as it appeared to them from the task description that they needed to produce a 'politically correct essay' rather than 'write from the heart'.

> But writing the personal theory was just writing a thousand words because you were asked to do that and it had to go in the portfolio and it doesn't feel personal to me it was just … (grimace).

In another focus group, RTs also mentioned that several of them had responded initially to the task by referring to 'the text books' to find explanations about how children learn. For example:

> I had a theory and that's important to have a theory but I didn't really realise the implications of how personal it needed to be to become effective and for it to reflect all your work really because I thought, oh yeah this person has written about this, this person has written about this …

The faculty team concluded that many RTs were unfamiliar with the notion of PT and found it difficult to come to grips with the idea of searching 'within' for its expression. The PTs often lacked content of a personal nature. RTs followed the suggested topics in the task sheet and included little about personal life experiences, beliefs and values that would reflect a unique perspective. The introduction of PT to the second cohort

was therefore given more attention. The task was introduced by a lecture, the task sheet was changed to encourage RTs to take a more personal approach (see Excerpt 2), and a session was included in which the RTs interviewed each other in pairs to help them articulate their PT in relation to some work-related scenarios. The RTs were also encouraged to develop critical friendships or peer-mentoring relationships with classmates or colleagues to support their portfolio development, including the articulation of their PT.

When marking the portfolios in the first year, faculty noted that some RTs wrote reflective statements that were descriptive rather than reflective. We had included lectures and workshop activities about reflection and introduced van Manen's (1977) three levels of reflection: technical, contextual and dialectic. We presented them as foci for reflection rather than as a hierarchy (LaBoskey 1993). For the second year, we developed a prompt sheet with questions to provide focus when RTs were considering the practice from which their evidence was drawn. The following were the prompts to encourage reflection in relation to PT (contextual focus):

(1) What were my beliefs/values that most influenced what I did in this situation?
(2) How well did my actions match what I believe to be 'the right thing to do'?
(3) How well did my actions meet with my expectations of myself as an RT?
(4) How can I explain my comfort/discomfort with this situation in terms of my personal theory?

Many from the second RT cohort reported the value of articulating their PT. That year there were no comments in the post-portfolio questionnaires or focus groups about the task being too academic or 'politically correct'. While there was significant

Excerpt 2. Personal theory task in Year 2.

PERSONAL THEORY TASK

The purpose of this task is to enable you to articulate some aspects of your personal theory that impact on your work as an RT. By writing this statement early in the year you will have the opportunity to reflect on your work in relation to this statement and to discuss it with your colleagues. A final statement of the personal theory that informs your practice is required for the portfolio.

In writing this statement you should consider formative experiences and deeply held personal beliefs and values that influence your thinking and actions. You might like to include your view of how children learn, why children behave as they do, the role of education in a diverse society, the implications of the Treaty of Waitangi for education in New Zealand, the role of the teacher and the role of the RT, professionalism and professional practice.

The above is not a definitive list of ideas. You should write about whatever issues are the most important to you. Your statement should show how your beliefs and practices are influenced by the body of knowledge that informs your profession.

(750–1000 words)

variation in the depth and individuality in the PT statements, the faculty team considered that the changes were beneficial and therefore maintained the same requirements and teaching programme. The following comment in a Year 2 post-portfolio questionnaire reflected the understanding the faculty team hoped would be achieved:

> As someone was going to read it, initially I had doubts that I was on the right track. As we learnt more I realised that it wasn't a right or wrong exercise. It was there to aid us in our reflections and critically identify how our PT influenced us.

RTs wrote personal theories for the Year 2 portfolios that included statements such as:

> The basis of the principles by which I live and my fundamental theory of life and learning can be attributed directly to L, my mother.

> The position of my birth … impacted on me in that I became the mediator during discussions that got out of perspective. Even now I am always trying to put the other view in order for understanding to develop.

> These educational experiences shaped my personal belief that children cannot learn if they are unhappy.

From the discussions in the post-portfolio focus groups, I learned that some RTs did not write their PT until near the end of the process. Although they reported that their PT became apparent to them through annotating and reflecting on evidence, the faculty team was keen to encourage RTs to begin to articulate their tacit knowledge and beliefs earlier, especially allowing them to reflect on any dissonance between their espoused theory and practice (Argyris and Schön 1974). Therefore, the faculty team decided, at the conclusion of the second action research cycle, that RTs would be introduced to the notion of a PT early in the first year of the programme, with opportunity and encouragement to begin writing it.

An ongoing general concern among RTs about the portfolio during the first three years had been the limitations posed by the word count. To ensure that this was not an impediment in writing the PT, the faculty team removed it from the word count of the completed portfolio, but set an upper limit of 1000 words for the manageability of marking.

In the fourth year, the prior introduction of the PT in the first year of the programme and the decision not to include the PT in the word count contributed to the most comprehensive and 'personal' theories to date. RTs continued to identify the PT as a significant feature in the development of the portfolio.

Themes

Throughout the four years of the study a number of themes in relation to the PT emerged.

Reflection on practice was more structured and deeper than previously

Prior to the completion of the portfolio, many RTs described reflection as a process of considering the outcome of practice (technical reflection). The following are examples from the post-portfolio questionnaires and interviews of an expanded notion of reflection on practice.

> A reflective practitioner is someone who, to assist decision making, regularly examines their practice in light of their own world view, current theory and the culture/s of the work environment.

> I think on a different plane now, a lot deeper. It was with an intuition before whereas now I'm relating it to research and theory and my own personal theory, established theory.

Often RTs had articulated their PT for the first time

For example:

> It was never part of my teacher training to establish the personal theory aspect and so for me … the biggest part really of the whole process, was having to sit down and think okay I've got all these thoughts but how am I going to draw them together to come up with some kind of concise and developed statement about where I'm coming from in terms of my practice.

The articulation of PT was important in promoting reflection

For many RTs the requirement to articulate some of the beliefs, theories and values that underpin their practice was the most positive aspect of the portfolio experience. In the last three years, comments related to the promotion of reflection and reflective practice in the portfolio end-of-course evaluations were in either first or second place for frequency. In the post-portfolio questionnaires each year, one of the most frequently cited positive aspects of the portfolio was that it developed reflective practice. For example:

> The requirement to think through and record my personal theory … was in many ways the most important aspect of the task. … having to bring … [ideas] together was critical to the reflective process. The awareness of personal theory is what allows effective reflective practice.

The writing of the PT statement helped RTs consider the consistency of their practice with their espoused theory:

> The process of writing a portfolio has made me match my practice to my beliefs … Through reflection, I was able to consider if what I was doing in the classroom matched what I believed in as an advocate for children's development. Where there was a mismatch, I found that there was usually an issue that was coming up against my personal theory.

While not all RTs considered the finished portfolio demonstrated their ability to reflect on their practice, the process of completing the portfolio was reported as enhancing their ability to engage in reflection. In the post-portfolio questionnaires and interviews, RTs reported that reflection was embedded in their practice. An RT explained:

> You can very easily just go along and drop into a mode and think, yes I'm doing fine with this but … the reflection that is required in the portfolio makes you reflect back on what you've done and whereas you think, oh that case is finished, good, go on to the next one … with the portfolio you think, now hang on, I've just got to re-look at this case and see how I would change things and how I would do things better, I think it makes you more reflective.

The writing of the PT statement helped RTs to elaborate their theory of practice, in-cluding the integration of the formal theory

> It was important in that it helped inform my thinking so … it wasn't as if I had come up with theories of learning or whatever … it was more in terms of how do I practise, where does that fit in with theory and in terms of what are my personal values, what theory fits there and can I see those theories actually being expressed in my practice? So it was a big clarifying process of what fitted and what didn't and so therefore it allowed me to think more about … the [established] theory.

> Probably for the first time ever made me really think about what I have taken from others' theories and how all the bits make up the jigsaw of what I believe.

> In selecting and writing about evidence there was a strong thread of wanting to illustrate the unique practice I engage in while applying the collaborative problem solving processes.

There was a tension in all aspects of the portfolio, including writing of the PT, between the formative and summative purposes for which the process was being undertaken.

 For example, one RT wrote:

> Actually I forgot to write about my culture and how proud I am to be … [named culture] … I wrote what I thought they wanted to hear … I should have thought more about it.

Biggs (1998) argues that tasks such as portfolios will fulfil both formative and summative purposes because they engage the learner in reflective and metacognitive learning processes. From the perspective of both the faculty team and the RT, the port-folio in this programme has been a tool for metacognition and reflection, and the PT task contributed to this. However, throughout the four years some RTs wrote their personal theory, attending to what they believed to be the requirements of the faculty. As Boud and Falchikov (2006) warn, students who do this are not developing the necessary self-assessment skills for lifelong learning. There are two possible reasons for this. As this was part of a high stakes assessment task, RTs may have considered it to be prudent to write to conform to what they perceived to be faculty expectations. Another possible reason relates to the paradigmatic change from a functional limita-tions explanation of special need to an inclusive one that was required by the programme. For most of the RTs this change required transformative learning (Mezirow 2002), through which they engaged in a process of making their existing understanding and beliefs explicit, and then considered them in light of the new knowledge. Some RTs may not have undergone the transformative learning necessary to fully understand or embrace the inclusive paradigm, including an unwillingness to change their beliefs and/or practices. However, in a high stakes assessment task such as this portfolio, one could not expect them to disclose the inconsistency of their PT with the required practice.

Conclusion

One aim of this study was to identify features of the design of the portfolio and supporting teaching programme that would promote professional learning and prac-tice. A recommendation for practice arising from the findings is that the inclusion of

the requirement to write a PT statement that is not included in the word count, but that is supported by teaching, written guidelines, and peer interaction promotes the potential for productive reflection of the portfolio process.

The other aim of the study was to develop a better understanding of how the engagement in the process of portfolio development impacts on professional learning and practice. Importantly, the portfolio acted as a trigger for reflection that is often not present in everyday practice (Boud and Walker 1998; Convery 1998; Loughran 1995). Every aspect of selecting, annotating and writing reflective statements for the portfolio called on RTs to consider their practice critically. The requirement of a PT statement encouraged RTs to articulate beliefs and knowledge, some of which were tacit. This raised their awareness of the content and influence of their PT on practice. Articulation of PT enabled RTs to examine their *theory in action* against their *espoused theory,* and hunt for inconsistencies (Argyris and Schön 1974). RTs were also able to identify the relationship between their PT and the literature and research that were presented in the programme.

The reflective processes involved in portfolio construction appear to provide the kind of feedback that Perrenoud (1998) and Wiggins (1998) both suggested should be inherent in assessment tasks. In the process of completing the task, the learner is able to gain the kind of feedback on their actions that contributes to their learning. This is what an RT is describing here:

> … it's inherent in your thinking, your knowledge, you're drawing on that sort of … subconsciously, but the portfolio then allowed you to check that what you did matched the books, the theory, the evidence of best practice so yeah it helped – it was like that universal sort of exchange system, practice, theory, practice, theory – so the portfolio was there as a sort of chamber of journeying those things around.

The findings of this study strongly suggest that a portfolio in which students are required to select and annotate evidence from practice, and reflect on the evidence, is a powerful tool for the development of reflective practice. The articulation of a PT is an important aspect of the process. However, further follow-up study is required to investigate the longevity of the reflective practices that were reported at the completion of the programme. Only if the RTs continue these practices could this portfolio be considered to have met Boud's (2000) requirement for sustainable assessment.

Notes on contributor

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