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An evaluation of the teaching and learning of reflective practice at the Centre for Textile Conservation, University of Glasgow

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Abstract
The value of reflective practice in both professional education and lifelong learning is well established. In conservation the concept is fundamental to our ability to make informed decisions: to develop the cognitive and affective skills necessary to implement appropriate conservation strategies confidently, competently and ethically in wide ranging and dynamic contexts. Beyond the broad understanding of reflective practice as a process of learning through and from experience in order to gain new insights, it can have a considerable diversity of meanings. Its complexity can make it intimidating and, for conservation students, it has been found to be a challenging task. Through an evaluation of the learning, teaching and assessment of reflective practice at the Centre for Textile Conservation and Technical Art History (CTCTAH), University of Glasgow (UoG), this paper aims to peel back the layers of complexity to consider why it is challenging for students and how learning can be developed and assessed effectively.

Keywords
Reflective, learning, education, profession, conservation, textile

Textile conservation education - defining the balance
Conservation education has both an academic and professional focus and the balance between them is constantly being evaluated and debated not only within the CTCTAH but more widely in the profession as we aim to provide the best training for emerging conservators (most recently Henderson 2016 and Ashley-Smith 2016). One aspect that is agreed is that practical conservation skills should be central to the curriculum, underpinned by conservation science and supported by professional attributes. In a university context, academic skills advance, enhance and evidence this development. For emerging professionals, it is important that from
the outset their training encourages them to integrate theory and practice, to exercise critical judgment, and independence of thought and to deepen their experiential learning through reflection. Conservation educators have a responsibility to nurture reflective practice in students by ensuring that it is well taught and adequately supported.

Reflective practice at the Centre for Textile Conservation

Reflective practice is embedded in the MPhil Textile Conservation programme and from the outset students are encouraged to use it as a tool for personal development through the use of day books (personal note books), peer group discussions and tutor feedback. In five practice based courses (Principles and Practice – Core Skills, Developing Skills, Advanced Skills and Conservation Projects, and Placement outlined in Table 1) enhancement of reflective practice is addressed specifically. Students are introduced to Schön’s (1983) framework for thinking and models or cycles of reflective practice by Kolb (1984, 21), Gibbs (1988, 3) and a reflective thinking pyramid (Taggart 2005, 189-190) (Figure 1). These models are excellent teaching and learning tools, providing easily assimilated structures for integrated, holistic thinking. Critical reflection, i.e. reflection distinguished by its challenging of assumptions and having a social as well as an individual focus (Reynolds, 1998), is introduced in the context of these models and reflective writing styles are discussed. These models are explored in a conservation setting using case scenarios. Teaching aims to:

- Encourage self-evaluation that moves beyond the descriptive or narrative and to promote scrutiny and questioning.
- Develop awareness of the value of the integration of the academic theory and practice.
- Locate this learning within a wider professional/ethical/socio-economic context.
- Enable students to identify outcomes of their learning as a way of informing continued development of their skills both on the course and as emerging professionals.

As part of the learning process, students submit summatively assessed critically reflective accounts for both courses. However, these submissions often lack critical elements and rely on self-evident description or self-justification. This has been a particular issue in the Placement reflective account where being out-with the university environment sometimes leads to less academically rigorous and critical thinking. The accounts often tend towards the introspective, missing a valuable opportunity to look at the wider context in which they are working and the
profession as a whole. Structural changes to the assessments required by the university provided an opportunity to review the learning and teaching strategies for effective reflective practice.

Research and investigation
Development of a successful strategy was contingent on:

- Understanding perceived and actual barriers students face in developing reflective skills, with particular focus on writing.
- Researching alternative strategies for teaching and assessing reflective practice to enhance learning.

This was achieved through learning from students and graduates through a questionnaire, other disciplines and professional standards (Table 2).

Discussion of the results

Learning from the students
On the face of it, the ability to reflect should come quite naturally to intelligent, articulate and engaged students keen to gain experience and expertise on a vocational programme. However, the reality of reflective practice as a sophisticated concept requiring both cognitive and affective skills combined with processes of self-awareness, critical analysis and synthesis is often the source of initial anxieties. Colleagues in the Veterinary School and School of Nursing both commented on the challenge of teaching these skills and the time it takes their students to master reflective writing. In taxonomies of learning ‘critical reflection’ is acknowledged as being one of the higher order thinking skills and learning activities (Biggs and Tang 2007, 27). Little wonder then that such habits are not intuitive or learnt spontaneously and are some of the most difficult to teach!

Students routinely record their practical conservation activities in personal ‘day books’. These are often quite detailed accounts and form one of the principle methods by which they consciously develop practical skills. When used well they help to substantiate, explain and evaluate their conservation activities with reference to relevant theoretical underpinning, literature and research. In reflective models and frameworks this stage of theoretical comparison is represented in different ways. For example, in Schön’s framework, ‘reflection-
on-action’ allows for the experience to be clarified, understood and interpreted through engaging with theoretical underpinnings. Similarly, Kolb’s model of experiential learning acknowledges the need for theoretical research in the ‘Abstract Conceptualisation’ stage and it would be here that critical reflection, i.e. reflection not only on the experience but on the underlying assumptions, would be drawn-out [1]. Day books are not assessed at the CTCTAH, but their outcomes are discussed with staff and form the foundation for both documentation and formal pieces of reflective writing.

The overriding concerns expressed by the students focused on writing rather than thinking and in particular the requirement for the writing to be at post-graduate level: One student commented: “I find talking and thinking reflectively far easier than writing reflectively. Reflection intuitively feels like a transient process that I act upon, rather than a process by which I commit my thoughts to paper”. Another said: “I feel I spend a lot of time thinking and being critical about things in my head. The most difficult thing is making it fit in the academic criteria.”

An associated issue was the difficulty of making writing both a personal account and a critical analysis. One student expressed the difficulty of “seeing an experience in a personal and analytical way.” Another stated “I’m very uncomfortable with qualitative assessments, especially when they are personal.” This challenge is also borne out in studies involving students from scientific and analytical/clinical backgrounds who often struggle with a writing style in which they are encouraged to use their own voice (Black and Plowright, 2012).

Some learners develop these reflective skills naturally however others require explicit assistance (Sambell et al, 2013). Writing is a powerful learning (and teaching) tool that effectively fosters critical thinking through formalizing of thoughts and opinions. It is an essential component of active learning. It enables students to step outside of their learning and reflect critically on their experiences and thus prioritise their own needs based a greater (deeper) level of understanding (Beveridge 1997; Sutton et al 2007). Cannady and Gallo’s 2016 research into the use of reflective writing with architecture students, traditionally unfamiliar with writing, showed that writing helped develop critical thinking, promoted deeper understanding and improved their writing. Writing gives the experience longevity, although
not permanence, and thus opens opportunities for it to have a long term benefit beyond that of any internal dialogue.

Models of reflection are an important tool that can help students to structure writing (Finlay 2008, Larrivee, 2000). In addition, use of questions can help frame an account and provide a means to see how and when looking beyond our own views would be useful. Questions described by Jay and Johnson (2002) for teacher training provide a useful way to approach reflective practice (Table 3). Recognising different levels of reflection, making the thinking explicit and considering reflective practice in three dimensions (descriptive, comparative and critical), can help students to structure their thinking and writing to make them both critical and informed.

On the positive side, the student surveys emphatically endorsed the value of reflective practice in textile conservation, despite finding it, as one respondent described ‘painful’ - not an uncommon comment as observed by others involved in practice based learning (Finlay 2008). Most student survey responses appreciated the role of reflection in advancing their individual practice and felt that through formative and summative assignments they gained both knowledge and expertise. As one student put it:

“Overtime I found it easier to link up the academic and anecdotal in my reflective writing. At first I’d seen it as something entirely informal and separate from the essay writing I was used to, but now I think they’re more related than I’d realised.”

They saw reflection as a professional responsibility and applicable in their future careers, both in terms of continuing to consciously learn from their own experience, to contributing meaningfully to dialogue with colleagues and clients and in preparation for accreditation and competency based reviews.

The graduate survey broadly supported the on-going relevance of reflective practice in the workplace and confirmed that whilst it may take a different format it involves the same processes. They added that reflective writing is a useful training tool for future systematic reflection that might not be expressed in formal writing, a point also noted in other disciplines (Black and Plowright, 2010):
My reflection is not as structured and does not take a shape of an essay, it is instead either incorporated in my treatment reports or in the quarterly appraisals which I submit to and talk through with my line manager. In other cases, even though I do not write things down, I critically assess my steps and evaluate in my head.”

As would be hoped, the process becomes internalised as practitioners become more experienced.

Learning from other disciplines
Discussion with colleagues in other disciplines was an ideal opportunity to share pedagogic concerns about teaching reflective practice. It was both reassuring and inspiring: confirming the potential of reflective practice to cross both intellectual and personal boundaries and suggesting creative ways to support and assess the development of the necessary skills. In particular, discussions focused on the form and function of writing as evidence of reflective thinking.

Models of reflective practice were, for the most part, consistent with those to which conservation students are introduced, although in specific disciplines alternative models were also offered. For example, in Nursing and Health Care, Johns’ model for structured reflection (Johns 1995) and Kim’s model of critical reflective inquiry (1999) were used. In teacher training ‘critical incident analysis’ (Tripp 1993) has been used to help to address issues that need require more in depth reflection. Interestingly, in Advanced Health and Social Care Practice in the Healthcare Chaplaincy programme, students were expected to choose, and explain a rationale for, a model of reflection for three in-depth reflective accounts, making the link between the framework and the process very explicit and tangible. This level of reflection was well supported by an impressive range of resources including study days, formative assignments and supervisory meetings. This type of ‘Portfolio Based Learning’ including concept maps, education plans and reflective accounts, is a good example of one of the dominant themes to emerge from the dialogue with other disciplines - that a multi-faceted approach whereby learning is broken down into components or ‘building blocks’, all of which are submitted, is the most effective.
In the Veterinary School, portfolios are one of the forms of assessment used to demonstrate clinical competencies and reflection is a key component. Reflection is often personal but comparative and students are able to draw valuable conclusions to inform future practice. The evidence is collected and presented using an electronic portfolio (ePortfolio). This allows the students to create personalised records of their learning. The undergraduate students develop portfolios of this kind over their four years of study. In recognition of the time it takes for them to develop these skills effectively (Finlay, 2008), its contribution to the summative assessment mark increases over the period of study. The use of a portfolio has been found to be useful in other professions to enable students to learn more about their practice (Black and Plowright 2010, Ghaye 2007). In History of Art (Work Placement) a diary and portfolio work together. The work diary records experiences whilst the portfolio provides scope for discussion, reflection and demonstration of learning outcomes and skills development by the inclusion of types of evidence in support of identified learning outcomes.

Interestingly, a similar lack of connection with academic aspects was observed by the School of Education (UofG) when teacher training students worked away from the University [2]. As a response, sophisticated mechanisms have been developed to promote and maintain reflective practice during work placements. In addition to writing a reflective account at the end of each teaching and weekly session, students also take part in weekly seminars at the University to encourage active engagement and maintenance of links with theory and reflection. The use of dialogue forums and supervisory meetings also encourages on-going engagement in critical thinking. Whilst it is not possible to do this with our students as their placements do not all coincide and take place across the world, the importance of building in other means to maintain dialogue is important.

**Learning from and for professional standards**

One aspect that defines a profession is its commitment to continuing professional development (CPD). CPD takes different forms but usually aims to ensure on-going development of skills and experience through a process of review and planning, the assessment of which is either work-based (e.g. through performance and development reviews) or via a professional body. Accreditation schemes, such as the Professional Accredited Conservator-Restorer (PACR) designation administered by the Institute of Conservation (Icon) and the Canadian Association
of Professional Conservators (CAPC) accreditation process, have a somewhat different, although complementary, purpose – broadly aiming to provide an industry-wide recognition of the attainment of a defined level of professional practice. In whatever format, such review processes are essentially those of reflection - requiring a comprehensive and holistic self-assessment against a set of organisational or professional standards.

With experience this reflection becomes nuanced and the learning process less explicitly drawn out – for example, in the PACR process candidates are required to consciously focus on relevant professional standards, whilst in the CPD review the format and content is largely self-directed and there is less requirement for a formal evidence base. Such a shift parallels the progression from novice-to-expert and highlights the benefits of developing as a competent reflective practitioner at an early stage. By being able to reflect, and more importantly critically reflect, conservators have the opportunity to develop not only their own careers but also to advance the profession. It is therefore incumbent on conservation educators to instill the value of reflection and to teach the skills effectively and in a format which is flexible enough to be interpreted individually and sustainable in the long term.

Conclusions

Reviewing the information gathered, it was evident that the amount of theory currently introduced is appropriate, broadly in line with other disciplines and needed to be ‘revised’ rather than ‘rewritten’. It was also clear that the complex high order thinking and writing skills involved would take time to develop and that the students required more targeted support in developing these skills. ‘Scaffolding’ learning though discussion, modelled examples, questions and learning conversations would facilitate their development and enable them to gain in confidence and help them to overcome their anxieties (Wood et al, 1976). Posing questions was preferred over a more prescribed structure (such as Johns) as it was acknowledged that novices can tend to follow models mechanically as a result of lack of experience (Finlay 2008). This research also affirmed the importance of assignments providing a continuum in order to encourage the building of skills and the need to provide more opportunities for exchange and feedback with academic supervisors whilst the student is in a work place environment to help maintain the academic dialogue. This can successfully achieved via a dynamic platform such as an ePortfolio. It was considered that a portfolio based
approach would help to maintain flexibility allowing for individual learning styles and for the acquisition of skills to retain an element of self-direction, an important aspect of moving forward (Larrivee 2000).

Working in collaboration with the students and graduates, other disciplines and looking to our own profession’s aspirations has been invaluable in redefining the teaching of reflective practice on the MPhil Textile Conservation programme. Whilst it is clear that it can be as difficult to teach as it is to learn, having a clear understanding of the challenges this presents and strategies to support learning provides an important starting point to create a student centred learning environment conducive to facilitating the development of effective professionals who value the potential of reflective practice to transform practice.

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Endnotes
1. See Manti (2011, 3) for a useful diagram of the reflective learning cycle (based on Kolb) and the conservation process.

Figure 1. Reflective thinking pyramid (based on Taggart, 2005) and its application to conservation.

Table 1. Outline of the Principles and Practice and Placement Courses
Table 2. Research objectives
Table 3 Questions as guidelines for structuring writing

References


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