

# **Student experiences of reflection in learning in graduate professional education**

**Jane Gamble, Hal Davey and Philip Chan**  
**University of Sydney**

*This paper explores student experiences of the use of reflective learning strategies in the context of a graduate professional entry course, the Master of Occupational Therapy (MOT). By exploring student experiences of reflection in the learning process, a greater understanding of reflection as a learning strategy and the learning context in which reflection occurs will be gained. Student experiences are explored through analysis of their written experiences, using a qualitative approach. Greater understanding of student experiences of reflection will contribute to knowledge about the nature of reflection in learning.*

## **Background**

The context for our research is the first professional entry master's degree in allied health in Australia – the Master of Occupational Therapy offered by the University of Sydney since 1998. The Sydney Master of Occupational Therapy provides an alternative way for students with a previous degree in related areas to become occupational therapists, by completing two years full time study in a course designed around a capability education framework which uses a problem-based learning approach to teaching. The research illustrates the core educational and professional values which underpin the Master of Occupational Therapy curriculum.

These values provide the foundation for the curriculum structure and teaching and learning processes in the MOT.

Core teaching and learning values, include:

- problem-posing education which reflects authentic professional practice;
- focus on the process of learning rather than primarily focussing on learning content;
- learning in groups, as a means to develop future teamwork skills and utilise prior learning; and
- a move from teacher-directed to self-directed learning.

As a professional education program, core professional values include:

- respect for individual differences amongst service users and co-workers
- participatory approaches to service provision
- consideration of social, political and economic contexts for service provision
- accountability as reflected in outcomes
- reflective professional practice
- practice based on sound theory, supported by life-long learning

The Master of Occupational Therapy (MOT) curriculum uses a capability education framework (Stephenson & Weil, 1992) and a problem-based learning (PBL) process, to address the changing workforce and therefore education needs for beginning occupational therapists. The curriculum specifically addresses current and future workplace needs identified in a study of requirements for health science graduates (Adamson, Harris, Heard & Hunt, 1996) which include workplace management,

knowledge of the health industry and the ability to apply an evaluative approach to service delivery, in addition to specific professional interventions. The greater emphasis on conceptual and theoretical foundations for occupational therapy service delivery consistent with Master level study, further supports therapists ability to understand and effectively communicate the rationale for their services to service users as well as to employers, funding organisations and the community in general.

The MOT curriculum focuses on the process of occupational therapy (OT) service delivery as reflected in the philosophical framework for the curriculum. Six foundation capabilities for OT practice form the foundation content and curriculum organisers as well as the foundation for core MOT subjects (School of Occupational Therapy, 1997). The subjects include: problem identification, activity analysis and adaptation, OT intervention, evaluation and research, professional management and professional presentation. These subjects are taught and assessed in an integrated fashion.

As part of the capability education framework students spend the first 6 weeks of their studies formulating their conceptualisation of the capabilities of an OT. At the end of the course, student assessment is designed to determine whether students have met the professional capabilities required for beginning OT practice. The problem-based learning (PBL) structure of the course introduces students to learning within the context of ambiguity consistent with the realities of practice. The PBL approach also provides the flexibility for student learning to be directed in part by students themselves, and provides flexibility necessary to cater to individual student learning needs. Consistent with workforce requirements for therapists who demonstrate reflective practice (Adamson, Harris, Heard & Hunt, 1996) the curriculum is designed to facilitate reflection in learning.

Reflection may be defined as firstly, the process by which an experience is brought into consideration, while it is happening or subsequently; and secondly, the creation of meaning and conceptualization from experience. Critical reflection may develop one's potentiality to look at things as other than they are (Brockbank & McGill, 1998).

The importance of reflection in learning has been identified by a number of writers (e.g. Schon, 1987; Boud & Walker, 1990). Boud & Walker (1990) propose a model of learning from experience, which consists of three key phases: preparation before the event, the experience or experiences in which students engage, and subsequent reflection on the event. Reflection-in-action takes place in the second phase whereas reflection on the experiences after the event takes place in the third phase. The implication is that there should be a shift of focus in higher education from teaching to learning.

Morrison (1996) proposes two complementary models to assist higher degree students develop reflective practice. Model one is reflection-in-action and reflection-on-action, while model two is reflection, development and empowerment, with the focus on critical reflection (Habermas, 1974).

Drawing on Schon's (1987) work, Brockbank & McGill (1998) propose a hierarchy of levels and dimensions in reflection. They are: 1. Action, 2. Reflection-in-action, 3. Description of the reflection-in-action, 4. Reflection on the description of the reflection-in-action (reflection on action), and 5. Reflection on the reflection on action. Levels imply a separateness between levels whereas dimensions imply they are related and overlapping.

Although reflection and reflective practice form central components in many professional courses, Boud & Walker (1998) identify a number of problems that have arisen from the application of ideas about reflection in higher education courses. Some examples are: recipe following, reflection without learning, intellectualizing reflection, inappropriate disclosure, and uncritical acceptance of experience.

This study aimed to explore students' experience of reflection in learning and the context in which this occurs. This study is the first part of a larger study, designed to enhance understanding of the role of reflection in learning through students' experience, and seeks to establish empirical findings to support the theoretical constructs, which define reflection in learning. The larger study also seeks to identify educational strategies, which enhance reflective practice both within a graduate professional entry course and in professional practice.

### **Research questions**

The research questions which this study addresses are:

1. How do students perceive their experience of reflection in learning?
2. How do contextual factors influence students' experience of reflection in learning?
3. What does reflection contribute to student learning?
4. What methods of reflection are used by students?

### **Methodology**

This qualitative study uses a phenomenological research approach, consistent with exploration of the lived world experiences, events and relations, in this case, of students' experiences of learning and reflection in learning. Aspects of phenomenological inquiry identified by Van Manen (1990) form the basis of this research which focuses on researchers writing about students experiences of reflection in learning.

Participants in the study are students from first and second year of the Master of Occupational Therapy (MOT), a graduate professional entry course offered by the University of Sydney since 1998.

Data about student experiences of reflection in learning is to be collected in three stages. The first stage, which is the focus of this paper, has involved collecting students' written responses to an open-ended question and use of three different student essays completed by participants in the study. Data for the second stage, will involve the audiotaped focus group discussions conducted with two separate groups of students. The third stage will involve audiotaping in -depth interviews for a stratified sample of 10 students. The results of this first stage of the larger study will inform and direct the questions to be used in data collection in the following stages of data collection.

This paper reports on the results of data collection, involving analysis of students' writing from eight first year and eight second year MOT students who have consented to participate in the study. Data includes responses to an open-ended question and three different student essays which involve reflection.

Data collected has been analysed using the constant comparative method of analysis (Strauss & Corbin, 1990). Concurrent data collection and analysis or ongoing coding will drive ongoing data collection, uncovering areas for further exploration or clarification, and may lead to reshaping of perspectives and questions for subsequent data collection (Miles & Huberman, 1994). The constant comparative method (Strauss & Corbin, 1990) is being used to analyse data and involves three types of coding, open coding, axial coding and selective coding. For the study being reported here, the first two levels of coding have been used. The key categories and themes identified have been used to respond to the research questions and allow the development of composite descriptions of students' reflection in learning. These descriptions will be further developed by the following stages of the project, namely results of focus groups and in-depth interviews. Theory about reflection in learning will be developed based on these themes and descriptions, within the context of established knowledge about reflection in learning. Student stories have been selected from the data collected, as examples to illustrate the emerging theory.

Student writing collected for analysis has been framed by the following:

1. an open-ended question asking students to write about an unforgettable learning experience
2. an essay about students conceptualisation of the capabilities of an occupational therapist
3. a critical summary & analysis of students own reflective journal at the end of semester 1 year 1 (based on Boud, Keogh & Walker (1986) model of reflection)
4. a critical summary & analysis of students own reflective journal at the end of semester 1 year 2 (based on Morrison's (1998) questions for reflective journalling)

## **Results and discussion**

Student writing reflects a number of emerging themes which we have identified from data analysis. They include reflection to cope with change, reflection in development of new insights and reflection as a valued process.

### *Reflection to cope with change*

Student use of reflection to deal with change is demonstrated across a number of themes which relate to the MOT curriculum structure. These themes are also indicative of some of the underpinning values statements previously mentioned.

*A shift from traditional classroom learning to PBL* is evident as a student writes:

“Case 4 David Kendall, highlights the method of learning MOT students engage in during the course.... It is a case I use to explain to interested people how this course operates, as it clearly depicts the structure of the course. This is not one single moment so it is hard to write about. It just occurred to me one day how excellent I find the use of learning thru case studies to be. The learning was gained not at the actual moment of engaging, but later on, when I reflected about the case” (Respondent 5a)

“... the lack of direction given became part of my learning experience. I also began to realise that the lectures we were given should not only be relevant to the case and the specific assignments but rather to practicing occupational therapy in general.” (Summary 3c)

The following student has written about the *change in focus from content to process* as

illustrated by this written description of an unforgettable learning experience exploring the influence of culture, where content was not the main emphasis:

“ It was a 1 or 2 hour sessions but most of us were talking very passionately and the discussion could have continued for a lot longer than the time we had. In the end we did not come to a conclusion or agreement, but had explored our own cultural views and others” (Respondent 10a)

Quotes from a first year student illustrate a *shift from individual effort to group work*:

“We were acting as a private company and had to present a proposal to a board of directors of a retirement village. Each person in our group (most people in our group) researched particular areas in relation to falls prevention. We organised meetings to discuss our research. We debated issues, brainstormed. One person in the group didn't provide much input, didn't turn up to meetings, did little research. All the others did so.” (Respondent 4a)

Both the following quotes demonstrate a *move from prescribed to self-directed learning*, in addition to student use of a reflective journal:

“One learning experience that helped me throughout the last session with my learning was the keeping of a “reflective journal”. I found that by writing down what I had experienced that day not only served as a record for what I felt significant but also made me analyse what I had learnt. I also found that often in writing down the learning experience helped me to answer certain questions that I had – it also allowed me to see the significance of what I had just learnt, as well and allowing me to describe how I felt towards such learning; which may otherwise have not been analysed had I not had the chance to keep this reflective journal. I also feel that in reflecting, I determined what was important to me – with me often being able to write & write with areas of learning that interested me. (Respondent 2a)

“...One of the patients I was working with got quite emotional one day and stated that he was considering committing suicide.  
...I went home that evening and looked at my notes in the reflective journal. The notes indicated that the intervention strategies I was providing were mainly focussed on physical aspects. This realisation enabled me to broaden my thinking in terms of proving motivational and positive self-talk strategies. Through changing the direction of my intervention strategies, the client demonstrated significant improvements in his outlook in life, which in turn had a positive impact on his physical rehabilitation. If it wasn't through using this reflective process, the question still remains, “Would the client have had a good recovery?” (Respondent 6b)

Students report the need to make considerable adjustments as learners as they undertake MOT studies consistent with the findings from a recent American study about OT student experiences of a PBL curriculum:

“I don't know what I know ... I feel the more I know, the more I don't know” (Hammell et al, 1999)

The process of adjustment to learning in a PBL curriculum is frequently mentioned by students in both their writing and in conversations. It is apparent from the data that reflection helps students to process adjustments required of them as learners in a capability and problem-based curriculum.

### *Development of new insights*

Student writing provides evidence of new insights about themselves, learning and about occupational therapy resulting from their reflective learning. The following examples illustrate themes of new insights gained by students:

“Through this analysis I realized that I should not accept the given tools in occupational therapy, rather the skills of critique that I learnt in my undergraduate degree should be valued and adhered.” (Summary 1c)

“The new insights that I gained, is not to do the papers last minute, and not to be afraid to ask for help.” (Summary 7c)

“With reflection, this feeling was more a fear of not being able to interact with children on their level, rather than not liking children.... Overall, I feel that this placement allowed me to learn mostly about myself. That is, to keep an open mind about who, and where, I see myself working in the future.” (Summary 2d)

“There are many such awkward times in an occupational therapist’s job where the patient must be told something they don’t want to hear or where disturbing information must be imparted, an embarrassing interview conducted, or even a change suggested to an old person’s routine. For this reason, I feel strongly that good communication skills are essential to make these situations as comfortable and effective as possible for both parties.” (Essay 1)

The above quotes demonstrate the outcomes of learning, as students create new meaning and for some (for example, summary 2d) of seeing things as other than they are (Brockbank & McGill, 1998). These new insights are illustrated in student’s reflective writing.

### *Valuing reflection*

Students frequently described the importance of the reflective process as a tool for learning.

“Although the other two had different ideas on what was important in the articles, to me this was not disturbing. I found it did two things. Some points I considered more deeply than I had before and other points I found served to help me clarify my own position. Holding a different opinion was fine as I found I could support it.” (Respondent 6a)

“Writing a reflective journal has provided me with an opportunity to explore some of my learning experiences in greater detail. It has highlighted to me that there are so many things to learn about OT and the world at large. This reflective process has further encouraged me to reevaluate my own opinion and also question those held by others.” (Summary 2c)

The value of reflection as a tool for student learning is encouraged in the MOT through theoretical and practical learning activities in the classroom and in professional fieldwork. Student assignments also require students to periodically summarise and critique their own learning as they become progressively more self-directed during MOT studies. This context for learning encourages students to use reflection, and at the same time, potential problems associated with context (Boud & Walker, 1998) are addressed. It is therefore not surprising that a theme emerging from student writing is the value they place on reflection.

### **Conclusions**

This study has provided new insights into student experiences of reflection in learning within the context of the MOT. As a result of our analysis of student writing, we have been able to identify that students use reflection to cope with the changes inherent in undertaking their studies in the MOT.

This professional preparation course for occupational therapists focuses primarily on the process of service delivery, encourages student learning in groups, and requires a more

self-directed approach to learning than in a more structured curriculum typical of current OT education in Australia. It is through their reflection on experience that many MOT students deal with change in this course.

The quotes above have been chosen as they are illustrative of student ability to use reflection on experience in order to create new meanings and gain new insights, and to use reflection as a strategy for dealing with changes required for learning in the MOT.

Arising from analysis of student writing are questions which relate to student use of reflection in learning. The following questions form part of our results and will be incorporated into questions used to stimulate focus group discussions in the next stage of the study. These questions arise as a result of our explorations of reflection in learning and consistent with findings of most qualitative studies which are exploratory in nature, we wish to conclude with these questions.

1. Some students consciously use a process of reflection and articulate this process and the outcomes in their written answers to our research questions and in their essays.

*Do these students use reflection consistently throughout the course and in wider personal and professional contexts?*

2. Some students appear to use a process of reflection which is reflected in learning outcomes, but is not articulated as a process of reflection in learning in their written work.

*Do they consciously use reflection to enhance their learning?*

3. Some students do not appear to use a process of reflection. Is this because they don't or is it because they present learning outcomes in a different way? For example, in the words of an authority such as an author or a professional, or writing solely in the third person.

*What are the implications of this for qualitative research on the use of reflection in student learning? Is this a methodological issue?*

## **References**

Adamson, B., Harris, L., Heard, R., & Hunt, A. (1996). *University education and workplace requirements*. Sydney: The University of Sydney.

Boud, D.J. & Walker, D. (1990). Making the most of experience. *Studies in Continuing Education*, 12(2), 61-80.

Boud, D. & Walker, D. (1998). Promoting reflection in professional courses: the challenge of context. *Studies in Higher Education*, 23(2), 191-206.

Brockband, A. & McGill, I. (1998). *Facilitating reflective learning in higher education*. SRHE and Open University Press.

Habermas, J. (1974). *Theory and practice*. London: Heinemann.

Hammell, J., Royeen, C.B., Bagatell, N., Chandler, B., Jensen, G., Loveland, J. & Stone, G. (1999). Student perspectives on problem-based learning in an occupational therapy curriculum: A multiyear qualitative evaluation. *American Journal of Occupational Therapy*, 53 (2), 199-206.

Miles, M.B., & Huberman, A.M. (1994). *Qualitative data analysis: An expanded source book* (2<sup>nd</sup> ed.). California: SAGE

Morrison, K. (1996). Developing reflective practice in higher degree students through a learning journal. *Studies in Higher Education*, 21(3), 317-332.

Schon, D.A. (1987). *The reflective practitioner: How professionals think in action*. London: Temple smith.

School of Occupational Therapy. (1997). *Course proposal for Master of Occupational Therapy, Draft VII*. The University of Sydney, PO Box 170, Lidcombe, Australia.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory techniques procedures and techniques*. California: SAGE

Stephenson, J. (1996). *Beyond competence to capability and the learning society*. International Programme of Seminars and Workshops on Higher Education. The University of Sydney, April.

Van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. New York: State University of New York Press.

### **Contact information**

Jane E Gamble,  
University of Sydney  
[j.gamble@cchs.usyd.edu.au](mailto:j.gamble@cchs.usyd.edu.au)

Hal Davey  
University of Sydney  
[h.davey@cchs.usyd.edu.au](mailto:h.davey@cchs.usyd.edu.au)

Philip Chan  
University of Sydney  
[p.chan@cchs.usyd.edu.au](mailto:p.chan@cchs.usyd.edu.au)