

# TLQIS FINAL REPORT      AUGUST 06

## Educational Events with marker potential

### Reflection as a Core Skill for Undergraduate Students

### Problem Based Methodology

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## INTRODUCTION AND BACKGROUND

This project has been developed to record significant events in student educational experience, to evaluate the reflective diary as a tool which captures key events in the students experience and develops reflective skills which inform their application of problem based learning (PBL). In addition to this, it has also contributed to the design of the new problem based learning curriculum, enhancing the quality of the learning experience for students.

## RATIONALE

Students possess many competencies as they commence training and a student centered curriculum will facilitate development of those competencies, for students of the Health Care Professions reflection is one such competency (Lancee et al 2004). Boud (1988) emphasizes the importance of the reflective process as a way in which students explore their experiences.

Reflective learning encourages students to truly explore and understand the learning process and its impact upon them, leading to new understandings, deeper learning and enhancement of the learning experience. According to Roseneder (2004), reflection means:

*“A comparative and evaluative process of thinking”.*

Roseneder (2004) p.45

Kolb's Experiential Learning Cycle (1984) maps learning via the experience of concrete activity followed by reflective observation. These principles assist educators in making links to useable models of PBL.

Occupational Therapy educators embrace reflective learning in their quest to develop truly reflective practitioners who are competent to meet the needs of the Health and Social Care services in the new Millennium, whilst maximizing the learning potential of the educational environment.

In order to reflect upon and review educational events and experiences it is necessary to identify those events perceived as significant by the student, that is to say those events with marker potential. Educational events with marker potential are those identified as being significant for the learner. An educational marker event is an event that stands out in the memory can be positive or negative, pleasant or unpleasant. It can change personal priorities, view of the world and self. It usually involves concrete activity and reflection,

(both doing and thinking) and it results in personal growth and/or development (Culver et al 1998).

*“Marker events have a notable impact on a persons life. Markers are considered in terms of the adaptation they require. They change a mans life situation and he must cope with them in some way”*

Levinson (1978)

Whilst empirical evidence relating to marker events is limited, consideration of the work of Rogers (1983) confirms that consideration of the emotional dimension of experiential learning is of major significance in the promotion of effective learning. Support can also be drawn from the growing body of work around intellectual competency. The ability to reflect upon and understand one’s own emotional experience in order to promote intellectual growth is a specific ability identified within the framework of Emotional Intelligence, (Mayer & Salovey 1997). Achenbach and Howell (1989) and Goleman (1996) also evidenced the predictive value of Emotional Intelligence as an indicator of success and educational achievement.

Effectively applied and well-understood problem based learning strategies can enhance student learning and development by providing a systematic and methodological way to deal with problems (Lancee et al 2004). The student’s ability to utilize problem based learning strategies and methodologies will be supported and enhanced by proficient application of reflective skills and assist in maximizing the learning potential of the educational environment.

### **COURSE PROGRAMME AND DETAILS**

The BSc (Hons) Occupational Therapy is one of the programmes of study offered by the School of Health Care Professions within the Faculty of Health and Social Care, at the University of Salford, Manchester, England. The programme offers both full and part time routes to a BSc (Hons) in Occupational Therapy, which provides eligibility to apply for registration with the Health Professions Council.

### **ORIGINAL PROJECT AIMS, OBJECTIVES, OUTCOMES AND BENEFITS**

- To utilize the marker events review schedule (MERS) to identify educational events with marker potential.
- To utilize the reflective diary (RD) as a record of significant events.
- To compare results of MERS and RD.
- To evaluate the validity of the reflective diary as a record of significant educational events and as a demonstration of reflective skills which may be applied to the PBL process.

Researchers have so far disseminated research findings at National and International conferences and were invited to facilitate a workshop around the findings at the European Network of Occupational Therapists in Higher Education meeting in Vienna June 2004.

World Federation of Occupational Therapists Conference – Stockholm, Sweden June 2002 Poster Presentation.

Mckenna,J. and Supyk,J. (2002) “A Reflective Review of Educational Events with Marker Potential on both full and part time Occupational Therapy Degree Programmes”

“Pleasure By Learning” - International PBL Conference Cancun, Mexico. June 2004. Paper presentation.

Mckenna,J. and Supyk,J.(2004) “Using problem based methodology to develop reflection as a core skill for undergraduate students”.

International Problem Based Learning Conference at University of Salford, September 2004. Paper Presentation.

Mckenna,J. and Supyk,J.(2004) “Using problem based methodology to develop reflection as a core skill for undergraduate students”.

(Article written and accepted for publication in conference proceedings).

Education in a changing environment conference at University of Salford January 2006 Paper Presentation.

Mckenna,J. and Supyk,J (2006) “Identifying Significant Student Experiences Using Reflection and Developing Reflection as a Core Skill for Undergraduate Students Within a Problem Based Curriculum”

The Twelfth International Conference On Learning, University Of Granada, Spain, July 2005 Virtual presentation and subsequent publication in International Journal Of Learning.

Supyk J and Mckenna,J. (2006) “Using problem based methodology to develop reflection as a core skill for undergraduate students”. *The International Journal of Learning* Vol. 12, No 6. pages 255-258.

International Conference on PBL Peru July 2006 – Paper accepted for presentation.

Mckenna,J. and Supyk,J (2006) “ Reflections and PBL”

(Unable to attend due to workload commitments and lack of funding).

The focus of the study remains on reflection and its impact on the process and experience of learning via PBL. Researchers have also been consistently encouraged to evaluate the effectiveness of PBL methods and during presentations and networking experience have discussed the importance of effective evaluation with colleagues in education both in the U.K. and across Europe. Consequently the need for the development of methods of evaluation of the effectiveness of PBL and its impact on student learning and successful development of additional key skills which are transferable to the workplace has emerged as a priority for the next stage of this research.

Abstracts have recently been submitted to the National College of Occupational Therapists conference for June 2007 in Manchester:

Mckenna,J. and Supyk,J (2006) "Using problem based methodology to develop reflection as a core skill"

Mckenna,J. and Supyk,J (2006) " Developing the competent learner within problem based pedagogy"

### **DESCRIPTION**

Purposive sampling was used and the participants were volunteers drawn from a cohort of full time Occupational Therapy students at the University of Salford. This sample equated to 48% of those students who commenced the three year full time BSc (Hons) in Occupational Therapy in 2001 and completed their studies in summer 2004. All students on the Occupational Therapy degree programme complete a reflective diary during year one of their studies, the participants continued to complete a reflective diary during each of the subsequent years of study, three years in total. At the end of each academic year they were asked to use the diary entries in order to identify the most significant events and to answer a number of questions relating to the events selected. On their final day of University attendance, participants completed the Marker Event Review Schedule (Supyk and Mckenna 2006), adapted from Culvers' unpublished schedule), and piloted as stage one of this study). A simple guided fantasy relaxation technique was utilized facilitating relaxation and encouraging the students to focus on events across the three years of their programme of study. Participants were asked to reflect upon their experiences and answer a number of questions related to each event identified. The results were analysed using basic descriptive statistics and thematic analysis.

Results from both measures indicated that all student identified events fall into three main categories:

- Clinical experiences (experiential placements),
- University experience (assessment/classroom events)
- Personal learning/growth issues.

Placements in the clinical field were more significant at levels one and two of the programme. In the final year assessment, (which evidences competence via the professional portfolio) personal learning/development issues became most significant with reflections from clinical placement having less of an impact.

### **EVALUATION**

Initial findings supported the validity of the Reflective Dairy and the Marker Events Review Schedule and informed the development of the new PBL curriculum for the BSc (Hons) Occupational Therapy subsequently validated in March 2004. The reflective diary remains at level one linked to practice

placement 1 contained within the newly validated 20 credit “Reflection in Practice” module. Students receive formative feedback on their reflections to promote the development of reflection as a core skill and must pass the placement using evidence within their reflective diary to demonstrate achievement of placement objectives. A key learning outcome achieved via the reflective diary within this module is “Demonstrate the skills of reflection” (Programme document 2004).

A new module has been developed at level III ‘Development Of Role In Practice’. This module includes a role emerging placement and requires that students reflect upon their learning experiences. The assessment title now includes a quote from our published article (2006) explaining marker events and significant experiences.

The research will now build upon knowledge gained to date. This will involve the development of a new model of learning which encompasses reflection as a core skill to facilitate efficient learning, within the environment of PBL and practice placement.

Development of methods to evaluate the effectiveness of PBL and its impact on student learning have emerged as priorities for continued research. A package of evaluation forms for PBL was designed and has been utilized over the last academic year. Student evaluations of PBL modules continue to be gathered as we approach our first PBL graduates in summer 2007. To date student evaluations can be summarized generally as: deeper learning, holistic learning, able to integrate concepts better, students feel they have to work harder, think harder and can experience frustration, feeling that they don’t get enough information from tutors and rely too much on themselves. Whilst useful feedback this does not explore the specific skills utilized by students in participating in PBL and further research could explore this.

### **DEVELOPMENTS AND CHANGES**

The themes identified by the student sample clearly indicated their significant learning experiences and the impact these had. Whilst presenting in Vienna further data was collected from a group of OT educators in a range of European Universities. The methodology utilized was a focus group and an adapted version of the Marker Events Schedule. Using thematic analysis the data was categorized to reveal that learning within a PBL methodology is impacted by events in four areas: knowledge and understanding of learning process, self awareness and development, communication and emotions. These categories reflect those identified by the original student sample. This led to the researchers discussing conceptualization of this data in the form of a model of competent learning and currently this work is on going for presentation at conference in 2007. Identification of a competent learner model aims to enhance understanding of learning experiences and facilitate maximization of the learning potential of any experience or event.

## **TRANSFERABILITY**

Initial findings supported the validity of the Reflective Dairy and the Marker Events Review Schedule and informed the development of the new PBL curriculum for the BSc (Hons) Occupational Therapy subsequently validated in March 2004.

The staff team was already developing the programme for revalidation and welcomed evidence to support the validity of our reflective diary tool and its continued use within the BSc (Hons) in Occupational Therapy. The Reflective Diary was retained as a valid method of recording student learning experiences supporting the requirements of our professional body, the College of Occupational Therapy in ensuring that the theme of reflection is clearly evident within the design and delivery of newly validated programmes. A new level I module; Reflection In Practice, was designed which focused on developing skills and knowledge for reflective practice and the diary was developed further to provide a summative assessment tool for practice placement experience in level I.

## **PROBLEMATIC ASPECTS**

These have been mainly procedural and have principally revolved around securing time to carry out this research as funds allocated to buy out staff time remained unused due to difficulties buying into a PBL programme as external tutors and clinical colleagues who might normally provide sessional input are unfamiliar and untrained in these methods. Visits to other institutions in order to collaborate and explore findings have also been problematic due to time constraints and teaching commitments.

## **REFLECTION AND CONCLUSIONS**

The Marker Events Review Schedule and the Reflective Diary identified significant educational events around similar themes. The diary facilitates the identification of significant learning events for the student and is a meaningful record of student experiences. The reflective diary facilitates structured application of the reflective process, increasing student knowledge of the process and their skills in its application.

Findings evidence that the students are able to identify their learning in terms of skills, knowledge and personal development. The student's ability to utilize problem based learning strategies and methodologies within the curriculum will be supported by these reflective skills. Researchers suggest that professional knowledge and skill will transfer to the workplace and help develop reflective practitioners and life long learners. The results of this study and the desire to develop reflective practitioners have informed the decision to move to a problem based curriculum in September 2004. Identified events and their impact on learning will contribute to future curriculum design and alignment. The focus of our remains on reflection and its impact on the process and experience of learning via PBL. The themes identified by this study and subsequent data collection completed with educators across a

range of European Universities indicated that a similar range of factors impacted learning within PBL methodology. The researchers have begun to explore the concept of the competent learner and are developing a model to describe this concept.

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