

## **To Develop Problem-Based Learning within the Nursing Curriculum**

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### **Introduction and Background**

The clinical experiences of student nurses exposes them to a variety of patients /clients from multi-cultural backgrounds who, not infrequently in today's society, have multiple health problems. To care for them therefore requires the student to have knowledge and skills, which will enable them to deliver care that is responsive to both their cultural background and health care needs. The complexity of such care requires a different curriculum –both in terms of what the teacher teaches and what is learnt and experienced by the student.

Problem based learning (PBL) is a relatively new concept within UK nursing education (ENB 1998) but has been predominant in nursing programmes within Australian Higher education (Alavi 1995) It has its origins in health sciences and the medical curriculum (Boud & Feletti 1991) and is used successfully within local medical schools.

Within problem-based learning students are encouraged to 'learn how to learn' and there is an acceptance that people learn in different ways. Teachers assist students to acquire knowledge and understanding by relating new ideas, circumstances and events to their existing knowledge and to problems that are as close to real life as possible. Reflection and reflective skills are central to learning and encourages students to share their own experiences in 'solving problems' in the 'swampy lowlands' (Schon 1983) of the reality of clinical practice. Engel's view of PBL as a 'means of developing learning for capability rather than for the sake of acquiring new knowledge' appears well suited to future health care delivery.

Developing an awareness of the cultural needs of individuals is considered to be an essential pre-requisite for working in today's NHS due to the need to ensure equality in care giving and offer equal opportunities for carers. (Gerrish et al 1996; Beishon et al 1995; Baxter 1997; Holland & Hogg 2001) The School of Nursing is committed to both of these through its philosophy and its practice.

PBL however is a new venture for the School but it has already been recognised as having the potential to be of value in future curriculum development across pre-registration, post –qualifying and post-graduate programmes. This project focused on developing PBL as a method of teaching and learning in an elective Module –Cultural Awareness in Nursing, one of ten elective modules within the Diploma in Nursing / Registered Nurse programme.

### **Aims of the Project**

The Project had four main aims:

- To establish PBL as a new approach to learning for students pursuing courses /modules in nursing and health related subjects
- To develop the learning outcomes and problem-based scenarios for a teaching and learning resource package- with 3 clinical pathways in adult nursing, mental health and child health nursing.
- To establish the resources required to enable students to pursue all aspects of the care scenarios and to develop teaching and learning material to support the achievement of learning outcomes and assessment of these in both practice and college environments.
- To publish the package as a quality publication for use by both lecturers within the School and externally

## **Course /Programme details**

The course (module) was designed and validated in 1996 as part of a pre-registration Diploma in Nursing / Registered Nurse programme in the School of Nursing. The rationale and background to the module development included preparing the core teaching and learning material to enhance the quality of learning for student nurses undertaking the course of study. The Module development team consisted of the module teaching team and a group of practitioners whose role included community nursing, a link worker (Minority ethnic community) in a local District General Hospital, Children's play co-ordinators, an Ethnic diversity worker and a nurse manager. The team designed a set of learning outcomes, competencies and trigger material that reflected real life practical issues in nursing.

The aims and key competencies were written to reflect the importance of students bringing issues from practice to discuss in relation to raising cultural awareness. The module team also agreed to act as a resource for the students whilst in practice.

The students are introduced to Problem –based learning at the beginning of the course and are given clear and explicit guidelines as to what is expected of them as learners and the role of the facilitator.

To date 90 students have undertaken the module and evaluations, both verbal and written have been very positive.

The course (module) is not summatively assessed. This had been an important aspect of the project –in that we were introducing both a new course and a new teaching and learning strategy into the curriculum delivery. The added pressure of a summative assignment would not be appropriate. There was however a formative element to the programme as students was expected to demonstrate achievement of learning outcomes (See module Handbook for full details of the course content). This involved the following:

### **Portfolio development**

Students undertaking this module are required to develop their portfolio in relation to cultural awareness in nursing. This is demonstrated by:

- A minimum of two learning agreements at Level 5 (Steinaker & Bell Taxonomy)- one in relation to the trigger case study and one in relation to assessment of cultural needs of a patient in clinical practice
- A reflective diary summary in relation to specific cultural issues in nursing practice
- A diary summary based on the key competencies of problem based learning
- Significant events recorded in relation to the key outcomes and key competencies of the module

### **Description of Project Development**

The Project team set out their individual roles within the project and agreed how they would introduce Problem –based learning (PBL) to the first group of students. Two members of the course team were undertaking Masters level study in Nursing Education and chose to pursue their dissertations on aspects of the module development and problem based learning. One undertook a case study on introducing PBL into the curriculum and the other, the role of facilitator in PBL. It was acknowledged that the Project Lead would support their studies in a mentor role. The other two members of the team were at the time writing a book on cultural issues in nursing (Holland & Hogg 2001).

The Module handbook was developed and the timetable agreed. This included the fixed resource sessions. Resources that could be used by the students were accumulated and case study triggers were developed. It was decided that one trigger would be piloted as part of the project as this was the first time we had attempted to write a PBL trigger. The work of

Alavi (1995) had been particularly valuable in helping us to determine the content that would be appropriate to stimulate the students learning to meet the learning outcomes to be achieved.

A multi-professional Cultural Awareness workshop was also organised for colleagues in the School and clinical practice in order to begin dissemination of the project activities. A small focus group from the workshop helped to develop the first PBL scenario for the pilot.

Once the Project team (who were also the module teaching team) were made aware of the course participants an agreement was obtained from all students undertaking that first module, as it was to be a pilot study.

In order to ensure our own learning and development three members of the Project team attended a three-day Conference – working with enquiry based and problem based learning at the University of Southampton in April 1999.

This was an International event and enabled the team to learn more about the implementation of PBL and the issues it raised for curriculum developers and organisational delivery of PBL programmes. It was evident from the Conference that PBL was new to many Schools of Nursing in the United Kingdom and that in fact there were still major differences of opinion as to how it could be delivered in particular, given the large student numbers in pre-registration programmes. Some had, like us, decided to start with small modules rather than whole curriculum, which were favoured by the Australians. However, we were pleased that we had received support to at least test out its usefulness in a nursing curriculum rather than rely on anecdotal evidence or the literature.

It had been intended that the end result of the project would be a learning package that could be used by lecturers teaching cultural awareness using a problem based learning approach.

### **Carrying out the Project**

The module was piloted with the first cohort of students in August –November 1999. The experience was not without its problems as we soon realised that introducing the students to PBL at the same time new module expectations was unrealistic. Despite overall positive outcomes a number of them had been 'stressed out' by the roles they would have to undertake in a PBL group. We had in fact introduced them to these without a staged development process and had assumed that because of their stage of training that they would be able to cope with responsibilities such as being a chair or secretary, and also work closely in small teams.

The material we used in the delivery of the module was also revised and prior to the second intake of students six months later we ensured that a pre-course workshop was held for the students undertaking the course.

### **Evaluation**

Evaluation of the module took place formally and informally over the first year and two intakes of students. In addition the evidence from the MSc dissertations have been invaluable in contributing to our understanding of PBL and its value as a teaching and learning strategy.

Student evaluations of the PBL approach have been undertaken and these have been very positive in terms of the approach to learning adopted by the PBL team. The students from the first cohort expressed the view that this should have been introduced much earlier in their course. They also recognised the need for better preparation for their roles in a PBL group. The team introduced a debrief session at the end of every study day which was well evaluated and the teaching team also benefited from their own debrief sessions. The students valued the small group approach and felt that they were also valued.

Being a PBL facilitator also evaluated well although we all recognised that we were in a learning situation and testing out the facilitator role was not without its drawbacks. For example, relinquishing the role of teacher and becoming a co-learner was initially perceived

as threatening but this was soon overcome as it became apparent that the students were happy to take responsibility for their own learning. The teachers were seen as the 'experts' however in the fixed resource sessions where students valued them as a resource in their learning experience.

### **Examples of student feedback taken from a planned focus group session as part of ongoing evaluation of the Module and PBL**

Question: What are your views and feelings about the module and the way it is delivered?

Student 1:

I think the positive aspects for me anyway are about the amount of involvement we've had. Like going away and doing your own research and bringing it back together and sharing it. We seem to have done a lot of that in this module, don't we, whereas in other modules, you get the information and you go away and get your own and you're on your own-this is a group thing.

Student 2:

I feel as well, like that the approach that the tutors have taken to teaching has made a difference because I don't feel like the tutors just sat there, I feel like you're one of us, which makes a difference to us because you're not stood there dictating what we have to learn, you're sort of saying what do you think about this, you're actually asking for our opinions which makes a big difference---- (Q: so what is good about that?) ...we're choosing what we learn -we're valued for what we actually know.

### **Developments**

The introduction of PBL as a strategy, together with it being a new module and a project at the same time did cause difficulties. The first course was a stressful learning experience but one that was worthwhile. The major issue was that we had not adequately prepared ourselves for managing the change process for either the students or us. We had some knowledge of the process and how to implement PBL but not enough. This was soon remedied after the experience of the first module. Our colleagues were also sceptical of introducing PBL as a teaching and learning strategy in the School, as they perceived this approach as not enabling the students to meet the requirements of their programme of study. We recognised that we had to ensure that they understood about PBL if we were to achieve any kind of success in using the approach within whole curriculum.

Since that first pilot the module has continued to be well evaluated and the success of the developments and knowledge of the team were reflected in the School decision to adopt PBL as a whole curriculum approach for the re-validated Pre-registration Diploma in Nursing course in 2000.

The Project also enabled the team to develop other skills in project management, writing for publication, presentation at conferences and collaborating with others.

The students themselves also gained new knowledge and more confidence to deal with their practice and cultural issues. For example:

Student 3:

I feel it has empowered me to want to go, I mean, I don't know - I didn't really come across any cultural diversity in my last placement but for this, for my job, I now feel as if I'm going to go and put a pack together, and try and make other people aware of things, and you know, not exactly take on a teaching role, you know, just to try and spread that awareness of things and possibly in the way that we have done it here.

## **Project outcome changes**

The main changes were to the project outcomes .We soon realised that we had been over ambitious in trying to have learning packages available at the end of 12 months. Instead we made sure that the module handbook contained information on PBL and how it would be used by students instead and developed the triggers further. It was also unrealistic to expect the other objectives to be achieved in that time. These have now been achieved in the development and implementation of PBL as a whole curriculum approach, with the involvement of teams of lecturers and practitioners rather than a small project team. (See Student / Facilitator Handbooks –Mental Health Branch)

The main outcome of establishing PBL as a new approach to learning was successful and the effects have had far reaching consequences for the team and the School (see Appendix for full details)

Due to overlapping developments between the project and the new curriculum developments it became difficult to identify specific funds against the work of the project team .It was agreed that the funds would be used to fund development of the project team in PBL and the admin support required to organise the handbook, reports, conference presentations and other activities.

## **Transferability**

Introducing PBL into the School has had a positive and negative effect. Within the module the main difficulties had been around lack of preparation of the students prior to commencing the course. This was easily remedied as was increasing the knowledge and practice of the project team. However introducing PBL as an approach that involved a three-year curriculum implementation involving around 50 plus staff was another issue. Lessons learnt regarding student preparation was valuable as a decision was made to ensure that the first year of the course was to be used to develop the skills of the student to take on PBL in its fullest sense in the 2<sup>nd</sup> and 3<sup>rd</sup> years when the students went into the Branch programmes.

Preparation of the teachers however, especially those who were to be facilitators was not without its difficulties. These were mainly focused on their perceived 'lack of control ' over the learning process and a concern regarding whether the students would learn everything needed to qualify as a nurse. Others were enthusiastic and saw it as a challenging experience.

A PBL consultant became part of the new curriculum team and assisted in the staff development programme. Two members of the Project team became facilitators and course co-ordinators in the first cohort and the other two had an active lead in the staff development programme due to their experience on the TLQIS project.

In view of the difficulties experienced by the Project team and subsequently their colleagues it is essential that any new development needs a period of 'settling in ' and evaluation before embarking on major change and that expectations need to be realistic if the long term impact is to have significance.

## **Reflection**

On reflection there should only have been one outcome for the Project, i.e. that of establishing PBL as a new approach to learning for students pursuing courses/modules in nursing and health related subjects, and that the team should have considered a staged approach. This would have included a second application to the TLQIS funds to develop the packages.

The project team could not have envisaged the long-term outcome of their small project. The developments, both personally and professionally, have been significant. (See Appendix) The funds gave them the opportunity to 'test out' what they believed to be one of the most effective teaching and learning strategies for a health care curriculum. Three years later this is proving to be the case as the evaluations of the new curriculum demonstrate. The importance of such funds to teaching and learning are evident in the outcomes of the project as a whole.

## **References**

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