

Problem Based Learning (PBL)

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INTRODUCTION TO PBL

The use of technology enhanced learning (TEL) in the classroom is an area of great diversity and varied approaches for most teaching establishments. As early as 2005 The National Educational Technology Plan (2005) highlighted the abilities of students to access technology to support their own learning far outpaced that of the teaching world. There is now great opportunity for educational institutions to use a variety of TEL approaches including visual learning environments (VLE), web tools such as podcasts, wikis, and blogs (Richardson 2015).

Pickering (2015) states that students enjoy using new technology or having lectures delivered in a way that is different, provided it is of benefit to them. The pedagogical approach to this style of learning describes the flexible benefits of TEL as creating an archived and shared resource of information, and participation from students which can include the use of pictures, audio, video as well as written text for example (Richardson 2015).

This poster will focus on a problem based learning (PBL) method which was incorporated in the Year 2 (level 5) module 'Care of the Older Person'. This method was used to encourage students to identify and develop a variety of clinical assessment skills based on a short 10 minute video of Peter Thursby's (Innovations in Dementia, 2010) autobiographical account of his life and career.

PBL links into the Staffordshire University Graduate Attributes strategy to promote and develop skills, such as enquiry based approaches, team work, problem solving and life long learning which will reach out into the future work place of students.

WHY USE PBL?

The BSc (Hons) Nursing Practice programme for pre-registration nurses is over a three-year period, where students develop and demonstrate academic evidence based knowledge, skills and assessed clinical practice within the academic arena and clinical practice area. The programme is validated by the Nursing and Midwifery Council, and in their document Standards for Education (NMC 2010).

The NMC states:

"As autonomous practitioners, nurses will provide essential care to a very high standard and provide complex care using the best available evidence and technology where appropriate" (p4, 2010)

It is incumbent upon nurse educators to ensure that student nurses have exposure to a variety of different learning experiences including TEL. Shepherd's (2009) paper discussed degree level education for pre-registrant nurses, and focused not only the age range of students (averaging 30 years old), but adding that nursing is emotionally and academically demanding, requiring commitment to professional values.

Using a method such as PBL to promote learning which can be applied to the clinical area is advantageous and will equip students in their future roles as nurses. Furthermore, it will bridge the gap between answering concerns about such programmes lacking sufficient practical clinical exposure. Clouston et al; (2010) and, Boud and Feletti (1997) highlight PBL as creating learning opportunities for students by presenting realistic problems from the practice area and thereby educational theory is linked to practice.

WHAT IS PBL AND HOW WAS IT DELIVERED? (TEACHING METHODOLOGY)

PBL and how it was used. The use of PBL was incorporated in a pre-registration nursing programme, it was introduced at Year 2 in 'Care of the Older Person' module. This module runs twice a year and across two University sites (Royal Shrewsbury Hospital and Blackheath Lane Centres of Excellence) simultaneously. The module is shared between Adult and Mental Health nursing students. The size of the groups per module launch can range from 35 to 70 students per group. The module assessment requires students to create a portfolio of relevant evidence to support five learning outcomes with an older persons focus, the work is presented via a Viva Voce examination.

PBL is used as part of a formative assessment to assist students to develop their skills in a variety of ways. These include team-working, searching and evaluating information, decision-making and formulating a presentation to deliver their findings of the enquiry to the module cohort Albanese and Mitchell (1993). Students are asked to achieve learning outcome three:

Demonstrate the knowledge, critical understanding to systematically carry out accurate holistic assessments of older people using appropriate diagnostic and decision-making skills, providing effective care for service users and carers who may have complex care needs (this includes both mental and physical health).

The purpose of the PBL is to encourage students to explore a range of materials and information about a specific case, which should reflect holistic patient care, assessment and possible interventions. The use of Peter Thursby's 'Listen to Me' video creates a 'real' person scenario for students to focus their attention and develop lifelong learning skills in a real team work context (Clouston et al 2010).



The film was shown at the launch of the module and an introduction to the work resource pack to allow students to discuss and explore the requirements of the PBL exercise with the lead lecturer. The resource pack provided guidance on the work, timelines, the related learning outcome, and critical questions to assist the groups in their thinking. Dates were embedded in the timetable to enable students to self-direct their studies on the PBL and the feedback date where their groups would provide a 15 minute presentation of their outcomes at the end of the taught module. This formative work would be marked via a semi structured peer group feedback sheet which students are required to incorporate within their individual larger summative piece of work as part of the evidence portfolio.

The cohorts were divided into small work groups, no larger than seven students per group. The rationale for this approach was to replicate workplace teams, which are made up from various disciplines based

on their skills/knowledge and not personal friendships. This is to promote and reflect collective skills, collaborative working, common purpose and diversity (Matheson and Haas, 2010).

A folder was set up on the specific module VLE with links to the film and the resource pack, to provide 24 hours access to the learning materials. Individual groups formed their own approaches to TEL such as text, email/skype, some setting up closed group Facebook pages to promote communication for example, supporting Gordon's (2014) view of flexible pedagogical approaches to learning.

Presentations were varied, creative and used a range of media. For example, groups used role-play, acting out a case conference modelled on professional practice (Kingsland, 1995). Other groups used PowerPoint presentations to a varying degree to reflect their learning, further supported by handout materials such as assessment tools and advice sheets. There was the use of video films, where students acted out the roles of the multi-disciplinary teams and recorded this to play to the entire cohort on the presentation day. Interestingly, one group recruited their own grandparents to play the main character roles.

EVALUATION & FUTURE DEVELOPMENT

The PBL evaluation is incorporated in the overall end of module evaluation process. The evaluation is a feedback form, anonymized with the exception of identifying whether the student is on the 'Adult' or 'Mental Health' nursing programme, asking them to highlight three things that went well and three things that could be done differently. This was used before the University adoption of EvaSys module evaluation. Examples of comments from students have included:

- *"I enjoyed the build up to the presentations, using the PBL groups to understand how competent other members of the group were in the understanding of elderly care".*
- *"PBL work: some people put more effort in then others, it was often unfair."*
- *"PBL group work - new challenge working together with adult students. It was good to get to know other students and have varied input of experience and interests"*

To determine a detailed examination of the use of PBL within the module a structured evaluation would be of benefit, going beyond the EvaSys questionnaire. Evaluation methodology would be used to capture feedback via a questionnaire from students at the end of the academic Year 2, when the module has been completed. Questions would include key themes related to the following areas:

- PBL, introduction (launch) to group work, and how their group developed and was managed.
- What TEL was utilized during the period of the PBL, including accessing VLE, resource pack and video.
- What learning was derived from the entire process, including collaborative working, leadership, application of theory to practice and use of TEL.
- The relationship between this type of learning and correlation to the Staffordshire Graduate Attributes.

The focus of this evaluation questionnaire would be to ascertain the level of learning the student has gained, it is hoped that a 'deep approach' would have been achieved, through using the skills of PBL to demonstrate qualities such as engagement with the subject matter, deriving an understanding of ideas and create meaning attached to the subject explored (Biggs and Tang, 2011).

The extended evaluation of the students experience of PBL would require Ethical Approval, as it will seek further information from students beyond the established audit and evaluation processes of

the module. Utilization of the University's Qualtrics Survey Software would be used to develop and operationalize the questionnaire.

CONCLUSION

The use of PBL as a learning tool for students has been demonstrated to enhance their evidence based knowledge and linkage to practice. However, current evaluation feedback remains limited and the recommendation is for this work to be further explored using a specific and detailed questionnaire.

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FURTHER INFORMATION

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