Problem-based learning in health care management: reflecting the world out there

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Abstract

Health care management teaching at De Montfort University focuses on the delivery and implementation of policy within the English context; this is very much directed by the government onto organisations and managers working within them. Tutors can only do so much to get across the contextual nature of the English NHS and its associated managerial issues, whilst, by contrast, pedagogic styles, such as problem-based learning (PBL), can offer students an opportunity to explore self-directed issues within a contextually defined framework, allowing them to engage in deeper learning. In addition, such a learning style mirrors the workplace by introducing students to uncertainty, independence and the need to engage with a changing political context. This paper focuses on how PBL can offer a model of learning that aims to meets students' and employers' needs.

Introduction

PBL was first adopted in the context of a third-year undergraduate health care financing and planning module in 2008 and has been used subsequently in another third-year undergraduate module on health and social care management since 2009. Both modules form part of a wider programme in health studies, which practises numerous pedagogic approaches, including lectures in the transmission mould, student-led seminars, workshops and group work, electronic-based learning, guided reading, problem solving and action learning. In its first iteration, the PBL approach was based on a fictionalised case study scenario drawn from the tutors' previous experience as a manager in the NHS as well as the then ongoing modernisation reforms within the NHS that had been started by the New Labour government in 1997 (Department of Health, 1997, 2000, 2001, 2006), which aimed to move services away from hospitals and into the community and applied as part of a mixed teaching and learning approach over a 12-week module. For the past two years, it has been based on a national report into a poorly performing hospital organisation and applied over the first eleven weeks of a year-long module. The Healthcare Commission report into Mid Staffordshire NHS Foundation Trust was published in March 2009 following an investigation into unexpectedly high mortality rates amongst emergency patients at Stafford Hospital. The investigation took place between March and October 2008 and the final report was heavily critical of the hospital's management team regarding insufficient scrutiny of mortality rates, low staffing levels, poor standards of care and ineffective systems for responding to complaints and managing risks (Healthcare Commission 2009).

In both instances, the modules only partially adopted PBL, whilst maintaining more 'traditional' methods alongside it. Dewey (1938) highlighted that traditional methods were about transmitting skills, facts and standards in order that future generations could be successful. Traditional methods, therefore, and in this case, can be characterised by Magennis and Farrell (2005) with reference to the transmission model, whereby the activity of teaching is considered to be the imparting of knowledge and the activity of

learning as the absorbing of knowledge. Adopting of a mixed approach was due, initially, to concerns over the tutor's ability to get to grips with module and curriculum design in the field of health care financing and planning and the desire to step cautiously towards another form of learning whilst the remainder of the wider health studies programme continued with other non-PBL methods. Latterly, the mixed or 'hybrid' approach allowed the health and social care management module to reflect the 'real-world' experience and combined the use of PBL alongside invited visiting tutors, all of whom are managers in health and social care, so that students had the opportunity to explore and understand issues relating to the challenges facing managers in this field. This paper will focus on the benefits and disadvantages of using PBL in student learning and outline further the aforementioned two case studies where it has been used, as well as providing 'snapshots' of student evaluation and feedback to assess the use of PBL in higher education (HE).

The role of PBL in student learning: advantages

The motivation behind the adoption of PBL as a learning style comes from its starting point as a model of enquiry-based learning (Kahn and O'Rourke 2005). In addition, Kiley *et al.*, (2000) suggest that PBL incorporates many of the desired elements of modern teaching: it is student-directed, promotes active learning and deep learning, motivates students, builds on existing knowledge and encourages reflection. Savin-Baden (2003) and Alavi (1995) suggest that PBL can be applied to an entire course, a whole module/unit or parts of a course or module/unit. By adopting a 'hybrid' approach, students would be exposed to 'traditional' teaching methods with which they would have familiarity and confidence, as well as meet their current expectations of learning in HE; at the same time as 'learning to learn' in a different style.

PBL also emanates from a semi-rejection of those so-called 'traditional' teaching methods, as described above. The 'transmission model' of teaching works well where the tutor can clearly explain the subject and the learner acts attentively and with an interest to learn. It can also work well – and efficiently – for communicating facts and simple ideas. Where it breaks down is in developing understanding of abstract ideas and concepts, with this method also assuming that the learner starts with no or limited knowledge, in contrast to the constructivist view (Piaget 1977, as cited in Gray 1997) that learning is an active process in which learners construct new ideas or concepts based on their current or past knowledge (Kearsley 2012). It was Piaget (1977) who believed that learning occurred through an active construction of meaning, rather than by passive acceptance and Richardson (2003: 1623) outlines how constructivism could be seen either as a model of knowing (Thompson 2000) that helps to build a theory of learning, drawing on the work of Resnick (1989), where "...individuals create their own understandings on the basis of an interaction between what they already know and believe and ideas and knowledge with which they come into contact."

Thus, there are differing expectations of the role of lectures and other forms of face-to-face student-tutor contact: although both tutor and student expect them to be informative, the level to which students actively participate and create their own meaning and knowledge (Gray 1997) or how much knowledge is imparted by the tutor are just two of the areas that are up for debate. In such a case, PBL can lend itself to these situations, but perhaps better with a problem or scenario that spans more than just a single topic or week of the module, to allow critical thinking and relationships to real events to develop. However, this is dependent on a number of complex factors, such as the academic

discipline to hand; the way in which the PBL process is staged, set-up and facilitated; as well as the extent to which students themselves adopt the roles of practical, real-world problem solver, expert decision-maker, self-directed learner, team player and so on (Savin-Baden and Howell Major 2004).

A further advantage of this approach is the active nature of student learning. Due to its intrinsically inquisitive nature, students adopting PBL are constantly challenged with communicating with each other, passing on information they have discovered, sourcing information from the library, internet and, in some cases, other human subjects; for example, experts in the particular field. There is no doubt that in these instances, some learners benefit from teaching others and through this process of explanation or demonstration, not only do the 'learning' students benefit, but so too do the 'teaching' ones. When advocates of PBL at Flinders University in Adelaide were contemplating adopting this teaching and learning method for their medical school in 1991, it was precisely this kind of practical demonstration and discussion by students from another university already using PBL, to display sophisticated thinking skills, reflect upon and articulate their learning processes that ultimately led to the change in the curriculum (Prideaux *et al.* 2001).

Part of this process involves students going through a period of reflection where they need to internally process any new information and add it, in collaboration or on their own, to the "melting pot" of ideas. It thus emphasises the aforementioned deep learning approach, which can lead to longer retention of knowledge and the development of learning for capability rather than just for the sake of acquiring knowledge (Feather and Fry 2008, Boud and Feletti 1997). Entwistle (2009) describes the concept of 'deep learning' as one that helps students to learn actively by relating ideas and looking for patterns and principles, as well as using evidence and examining the logic of various arguments as a way to extract meaning.

In addition, students undertaking PBL have the potential to develop excellent applied knowledge for use in real-life situations. For example, in the field of medicine, the ability to work out what is wrong with a patient, who, for example, presents with shortness of breath coupled with an inability to communicate with the health care team, will make those practitioners much more effective and efficient in carrying out their work. For those students who may not have a medical knowledge base on which to apply their learning, getting them to relate it to a body of knowledge as close to their field of learning would also be beneficial. For example, if students have no concept of what it is like to deal with patients, the scenario may be set up in such a manner to get them to relate it to their experience of being a patient in hospital or at the GP surgery, an experience they, a relative or a friend are likely to have had at some point in their lives.

Due to its "building blocks" approach, where new knowledge is added to presenting or existing knowledge, students' understanding of a particular topic or field may be enhanced through PBL. Raising the concept of PBL with students in an introductory session to elicit their existing knowledge of a subject and then getting them to reflect on that process as an example of how to build on their existing knowledge recognises that students are not empty vessels, or as Freire (1970) put it, "depositories" for knowledge, and therefore is a useful way for any tutor to begin to embed both PBL and a deep learning approach with students. Being able to involve current students with experience of PBL into any such introductory sessions, as the University of Liverpool medical school does (Taylor 2001), adds to the sense of confidence with which students new-to-PBL adapt to this learning style.

Finally, and returning to Kiley *et al.*, (2000), the gaining of knowledge within a context and then applying it gives students transferable skills that are valuable to their life after formal learning has finished. The ability to reason critically, problem-solve and learn for future experiences represents a level of skill and independence that is well suited to the world of work (Clouston 2005). To succeed in any work environment, the development of such higher order cognitive skills (Hughes and Overton 2008) as well as the ability to communicate is crucial.

It is clear that, if seen under a more worldly view, PBL has the potential to help the student to develop themselves as learners *per* se through the process of discovery and exploration. A holistic benefit is that PBL offers students a safe environment for exploring ideas. Due to the tutor adopting more of a facilitative role under this approach, they are more than likely to begin by stimulating discussion as a means of enabling the student group (Savin-Baden and Howell Major 2004) and subsequently withdrawing during group-based activities, which may, in turn, help students to put forward 'stupid' or 'unconstructed' ideas without the fear of making mistakes or getting things wrong. The student group is more likely to debate those ideas, allowing weaknesses or strengths in an idea to be built upon before choosing to accept or reject them. In this case, they become negotiators of differences and take on the roles of communicator, educator and humanist (Savin-Baden and Howell Major 2004).

The role of PBL in student learning: disadvantages

Turning to disadvantages, the most apparent problem with PBL is its unfamiliarity. Woods (1994) describes the process of adapting to PBL as a "grieving process" for more traditional means of teaching. Students who are used to more 'traditional' teaching methods may be uncomfortable being 'set free' to explore and discover information that is, firstly, new to them (in respect to the first case study, those students will not have been exposed to financial management in health care before); and, secondly, they expect the tutor to provide them with, either from a perspective that they are the designated 'expert' or increasingly because students are paying for their education and therefore have a set level of expectation of what they should be getting for their money. Given that no single learning style exists for all students, there is potential for a clash of learning styles and subsequent conflict that may impact on the ability of the student group to function and learn.

The tendency not to use PBL in mainstream pre-HE education, coupled with it still not being adopted on a wider basis within HE itself, although there are notable exceptions in the cases of medicine and health science based courses, means that students experience varying states of emotion, such as anger, shock and anxiety at the move towards PBL, as they may not have developed adequate knowledge structures and therefore struggle to make sense of what they have *learned* from their university experience (Ryan 1997).

Unless they have already "learned to learn", rather than "learned to pass the module or assignment", as can be the case, students may not see the relevance to them of this learning method. Depending perhaps on their pre-university academic experience, they may inherently adopt a 'surface' or 'strategic' approach, adopting actions which are focussed on coping with tasks and characterised by an intention to obtain high grades, use previous exam papers to predict questions and concentrate their effort where they

feel it will bring the greatest benefit (Entwistle 2009, Savin-Baden and Howell Major 2004).

In contrast, there are concerns that adopting a PBL approach, with its associations towards deep learning and constructivist thinking, will leave no room for objective, established scientific knowledge within certain disciplines. One danger is that students will equate learning solely from a practical or instrumental perspective, which may derive from too narrow a construal of the problem (Ryan 1997).

In addition, there is also some concern over the loss of control that tutors may experience in 'handing over' responsibility for learning to students under the PBL approach. Even if they adopt a facilitative approach, they may still be uncomfortable with handing over too much influence to students and thus may embrace a hierarchical style of facilitation, where they covertly decide the objectives of the team, challenge resistances and provide too much structure for student learning (Savin-Baden and Howell Major 2004). Their ability to tread the thin line between cooperation, autonomy and hierarchy is one of the key factors in deciding how and whether PBL could be adopted within the HE sector.

Moreover, the adoption of PBL in its purest sense in HE is fraught with a number of potential complications. To begin with, coming to a 'true' definition of 'pure PBL' is important in deciding what some of the barriers might be in its adoption within a university setting. A number of authors (Savin-Baden 2000, Kiley *et al.* 2000, Alavi 1995), who have extensively researched the field and attempted to make sense of PBL, continue to struggle to provide a single definition, yet all accept that the increasing amount of knowledge being developed in every academic discipline makes it difficult to see how "traditional" teaching methods can provide students with everything they need to know about a subject; hence the need for the development of something like PBL, which at its core provides a student-directed, independent and interdependent learning experience (Kiley *et al.* 2000).

If we accept that what is more important in PBL is the learning process rather than the learning outcome, the goal is therefore no longer to acquire a specific answer to a pre-determined problem or to memorise the content matter of the course (Kiley *et al.* 2000). This leads to two significant questions: firstly, how will students be assessed and, ultimately, awards granted if the process becomes the point rather than the outcome; secondly, will this shift in focus towards process rather than outcome ever be culturally accepted by the established HE sector? Resolving such pragmatic issues as these, especially when they are so heavily based on different conceptions of knowledge, means that conventional assessment methods would be virtually worthless, thus challenging the very role university has as the standard bearer for graduate qualifications and academic excellence.

In addition, there are concerns about the increased time element attached to taking on PBL (Woods 1994, Aldred 1997, Barrows 1985), with a need for staff and students to ensure adequate preparation prior to teaching and learning sessions. Embarking on any sort of curriculum redesign or modification will, by its very nature, mean a 'front-loading' of time and effort for the participants. Some of the specific requirements include 'skilling-up' tutors as they make the transition to becoming facilitators, commit to this method of learning, become flexible and collaborate more explicitly with others (Hillman 2003). This, in turn, throws up the specific issue of providing enough skilled facilitators to maintain quality (Hmelo-Silver 2004), as well as ensuring that they do not suffer burn-out (Savin-Baden and Howell Major 2004). Moreover, adopting PBL means accepting reduce

content and reduced class sizes but with more of them (Hughes and Overton 2008), presenting wider logistical problems to university administrators and academics in terms of resources, facilities, personal and institutional costs, such as training and equipment (Savin-Baden and Howell Major 2004).

Such is the student-centred nature of PBL (Savin-Baden 2000), will module and course organising academics be able to cede control to students as well as organise their teaching and the students' learning around problem scenarios rather than discrete subject areas? Beyond that, will faculty colleagues support the move towards this approach to learning, given that numerous enthusiasts have previously described problems with faculty-wide acceptance (Prideaux *et al.* 2001, Clark 2001, Drinan 1997)? Any context for learning is dependent not only on the culture of the specific academic institution but also the broader framework of HE and thus the way PBL is situated within such systems and frameworks will affect what it means to be a learner in such a context (Savin-Baden and Howell Major 2004). Will sponsoring bodies therefore really support a move towards this focus of teaching and learning, given what appear to be far greater external controls being placed upon academic institutions?

Applying PBL in health care management

It is clear that this type of learning – and teaching – can add real value to the student and tutor experience. There is more opportunity for self-directed learning, critical thinking and application to our own knowledge and experiences because PBL is set in the context of an approach to learning and not a teaching technique (Boud and Feletti 1997). However, in light of the above discussion, choosing to adopt this approach was not without its complications.

The origins of PBL are generally claimed to be in medical education, although Alavi (1995) suggests that evidence for this approach can be traced back to Plato. To date PBL has been used in a diverse range of subjects, including medicine, nursing and midwifery, engineering mechanics, social work, architecture, legal training and computer science (Boud and Feletti, 1999). The introduction of PBL in a nursing degree facilitated the transition to *competent professional practitioners* (Alavi, 1995) and the potential of PBL to develop professional competencies was considered particularly significant for students entering careers in the dynamic field of health and social care, an area that has been and will continue to be subject to emergent change (Department of Health, 1997, 2000, 2001, 2006, 2010; Darzi, 2008). Furthermore, individuals need to be able to adapt to these changes, work across professional boundaries and adopt a lifelong learning approach (Department of Health, 2000; Balloch and Taylor, 2001; Leathard, 2003). In the case of this topic area, it was felt that a move towards a PBL approach in a health care context would help students to understand better the demands of this ever changing political environment of work and, within the realm of critical pedagogy (Freire 1970), help them to account for underlying social contexts, ideologies and rationales. In order to assess whether this really was the case, as part of the plans for module evaluation, students were asked to capture their experiences of this learning approach in a number of different ways: firstly, reflection on the role of the tutor as well as self in the form of Likert scale questionnaires (adapted from Queen's University School of Medicine 2009), focusing on factors such as how much encouragement was offered by the tutor regarding the PBL learning process and how well prepared students were and how actively they participated in group learning; secondly, generic written module feedback, which asked students about aspects of the module they liked and how it could be improved, as well as

how vocationally relevant it was; and thirdly, using optically-scanned module feedback, which again used Likert scales to assess students' perceptions of the module in terms of its relevance to their future careers; how well planning, structured and organised it was; whether its content met the learning outcomes; and whether they had received sufficient advice and support.

Case study 1: "De Montfortshire" health economy

This fictional case study was adopted as part of a mixed teaching and learning approach and was based on both the tutor's experiences as a former manager in the NHS as well as ongoing modernisation reforms within the NHS (Department of Health, 1997, 2000, 2001, 2006). The first session was given over to setting the context for financial management in health care and the second on the PBL exercise, which focussed on three interwoven elements: commissioning, business planning and budgeting, which also involved outlining the PBL approach (using the University of Maastricht's Seven Jump Approach, adapted from Barrett, 2005; Schmidt & Moust, 2000 and Gijselaers, 1996; see figure 1 below). Students were advised that their project was a process of discovery, of learning to learn about financial management in health care and they were encouraged to actively participate in the group work and independent study sessions in order to gain a better understanding of financial issues.

Figure 1: What is Problem-Based Learning (PBL)? (Gijselaers, 1996)

A teaching and learning strategy used as a means of engaging students with material, developing collaborative learning, building independent learning and encouraging deeper learning.

There are some key principles involved with PBL:

1. Problems serve as a stimulus for learning
2. PBL is based on three important principles of learning:

a. Learning is a constructive and not a receptive process - learning occurs as new learning is associated with existing knowledge networks

b. Knowing about knowing (metacognition) affects learning - What am I going to do? How am I going to do it? Did it work?

c. Social and contextual factors influence learning - understanding how and when to use knowledge is as important as the knowledge itself

3. Problems reflect real world situations or professional practice
4. Small group work encourages student collaboration and independence
5. Students learn to share their ideas and share responsibility
6. Students learn to question their own assumptions about their reality
7. Conflicting views as part of discussion facilitate understanding
8. Educators must have confidence in the students that they will use their time wisely and can be trusted to carry out the required tasks on time
9. Problems are encountered before all relevant knowledge has been acquired, not after it

Students were given three 'project sessions' spread throughout the module to work together in their groups on the PBL scenario (see figure 2 below) and these were interspersed with more traditional sessions on related topics, such as the impact of patient choice, the emergence of NHS Foundation Hospitals and marketing in health care.

Figure 2: The Group Project Scenario – Commissioning, Business Planning and Budgeting: DeMontfortshire Health NHS Trust

You are three members of the above organisation: the Chief Executive, the Clinical Director for Surgery and the General Manager for Surgery. You currently perform 1000 operations each year at DeMontfortshire Health NHS Trust in the City of DeMontfort. Your budget for doing this is £10m.

Your local Primary Care Trust, DeMontfortshire PCT, is planning on taking 50% of these operations away from your hospital and instead performing them at local hospitals within DeMontfortshire. You stand to lose a substantial amount of income from the Surgical Department and the probability of having to cut back other services.

A meeting is planned for Thursday 2nd April 2009 at which you must:

- Assess the implications of this change in commissioning by the local PCT;
- Present a business plan for the future of the department;
- Analyse the effect on your department budget.

Aside from the session at the start of the module, the students were encouraged to develop the rest of the detail of their presentation guided by the requirements set out in figure 2 but otherwise according to a scope they set themselves.

<u>Case study 2: Healthcare Commission report into Mid-Staffordshire NHS Foundation Trust (March 2009)</u>

Returning to its origins in medical education, where students were given real life problems to solve, in contrast to case study one and due to a change in modules that were available to students, an opportunity arose to pose students a more appropriate real life scenario to investigate. In the absence of a placement, which could offer active exposure to the workplace, offering students the opportunity to investigate a genuine problem based on a 'real life' problem scenario seemed a feasible alternative (see figure 3). The Healthcare Commission report into Mid Staffordshire NHS Foundation Trust, which was published in March 2009 and subsequently received considerable media coverage, was chosen as the basis of this PBL scenario. The report was heavily critical of the hospital's management team regarding a number of areas relating to patient care (Healthcare Commission, 2009) and was deemed ideal for allowing students the opportunity to explore pertinent issues in health and social care management.

Figure 3: The Group Project Scenario – Healthcare Commission investigation into Mid Staffordshire NHS Foundation Trust, March 2009

You will work in groups to consider the above report.

The aim of the assessment is to work in your groups to identify the key issues contained within the report, the relevant areas of health and social care management they relate to and their implications for managers in health and social care.

A meeting is planned for Thursday 16th December 2010 at which you must:

- Present the key issues, as you have identified them from the report;
- Relate these to specific areas of health and social care policy, drawing on other resources and relevant theories; and
- Assess and analyse the implications of this report for the wider health and social care arena.

This case study was adopted as part of a mixed teaching and learning approach over a year-long module. The first and second sessions were given over to setting the context for PBL, including students working on a 'mock' scenario to help them explore the principles and ground rules of PBL. This again involved outlining the University of Maastricht's Seven Jump Approach (adapted from Barrett, 2005; Schmidt & Moust, 2000 and Gijselaers, 1996). Students were then given a further eight timetabled sessions in which to work together, with a mix of self-directed learning, tutor facilitation and an opportunity to present formatively. On this occasion, students were advised as follows:

> "It is worth noting that you are starting with an almost completely 'blank canvas' and it is up to you, with your fellow group members, to approach this assessment as you see fit. You will be given substantial time in class to work on this as well as have the opportunity for both informal support and formal feedback from tutors." (Module Handbook)

Student perspectives and discussion

Written feedback from students across the two case studies focussed on their experiences of engaging with the PBL process, assessing not only their own adaptation to it but also the role of the tutor in the process. In addition, in generic module evaluation feedback, students were asked as to the vocational relevance of the module. The aim of collecting this feedback was to gain a better understanding of whether the adopted 'hybrid-PBL' approach had helped to better develop their understanding of the subject area as well as to assess whether it had appeared a relevant approach for future careers.

In case study one, some students liked the PBL approach, whilst others disliked it. Those who liked it felt they gained from this method of learning and the assessment as they learned different perspectives they might not otherwise have seen.

> *I feel I have benefited greatly from this method of learning, I have researched more (broadly) than if researching 'one' PpR [sic]. The groupwork encouraged a lot of discussion and structure to the subject.*
>
> *The problem based learning approach is a really useful and informative way of researching the topics, not only by yourself but by able to liaise with others to get the most from the subject.*
>
> *I liked the assessments specially the Problem based learning which helped me find solutions for a particular situation and it test my ability to go and find information without notes from the lecturer.*

Those who disliked it felt that the approach was burdensome and heavy going.

> *The assessment using problem based learning I found very difficult and extremely time consuming to search and filter through items of use for the particular question.*

Module feedback indicated a high level of satisfaction with the module overall. 100% of students rated the module as very good or good, with all of them commenting that it was useful or relevant to their future careers, a finding that mirrors Clouston's (2005) research. It is also apparent from the above comments that some students actively engaged with their own learning and also took it upon themselves to seek out new information, which they could then discuss with their peers. All of these beneficial aspects of PBL can be found in and related back to the work of Savin-Baden and Howell Major (2004), Feather and Fry (2008) and Boud and Feletti (1997). On the other hand, the student who disliked the PBL approach reflects the findings of Woods (1994), Aldred (1997) and Barrows (1985) in terms of the increased time associated with this style of learning.

In terms of case study two, it was also reflected by students that, whilst some liked the PBL approach, others disliked it. Those who liked PBL reflected that it encouraged independent learning. Students also liked having control over what areas they studied in more depth. In particular they liked investigating real life problems and discovering more about the workings of the NHS as an organisation. Students also commented that it helped them relate theory to their own experiences and understand more about their own workplace.

> *I really enjoyed this experience as it was very new for me and gave me experience of how to work with unknown people. How we showed our ability and enthusiasm of working together.*
>
> *Allowed for creativity. Sufficient time for work to be carried out. Useful tutorial support at sensibly timed intervals. Felt I had more say in what I wanted to learn.*
>
> *Good to look at real life failings of hospitals*
>
> *Good to have a wide range of knowledge on problems in NHS.*
>
> *Very helpful- encouraging students to think.*
>
> *I reflected it to my work learned about several issues.*

These comments cover a range of experiences but amongst them do reflect the findings of Clouston (2005) and Prideaux *et al.* (2001) in terms of the ability of PBL to offer an experience that makes students think critically as well as be suited to the world of work. In contrast, those who disliked PBL found it confusing and difficult, especially at the outset. Problems with group work were also expressed – some group members did not contribute effectively to the process:

> *I don't think this worked for me because of the people I worked with and I would not want to do it again.*
>
> *Confusing, difficult.*
>
> *PBL process seemed an ineffective learning method to me as I still researched as I would normally.*
>
> *Perhaps something slightly more clearer on what PBL is and the aims of it.*

In this instance, the students were likely to have been experiencing what Woods (1994) described earlier as the "grieving process" for more traditional (transmission) models of teaching and familiar approaches to learning that, as a result, appeared to impact on their ability to benefit from PBL.

However, as with case study one, module feedback again indicated a high level of satisfaction with the module overall. 100% of students strongly agreed or agreed that the module was well planned, structured and organised and met the learning outcomes and likewise that they received sufficient advice and support.

Overall, in adopting the 'hybrid-PBL' approach, there was a great deal of encouragement to be taken from students' feedback that confirms both the potential benefits and misgivings of previous research relating to PBL.

Conclusion

This paper has attempted to identify key lessons from the implementation of a problem-based learning approach to health care management-related modules within a university context. Many of the advantages and disadvantages identified by earlier authors were experienced by students undertaking these classes over the past three years; notably, students took much greater ownership of their own learning, which they felt enabled them to better understand the subject area and found it relevant to study in this manner with respect to its 'real-life' nature. However, others adapted less well to this approach, finding it difficult and confusing. Within the wider health studies programme, the PBL approach outlined here adds to the growing number of both traditional and constructivist approaches to teaching and learning. On the basis of the feedback outlined above as well as comments from the wider programme team, the PBL approach has recently been applied for a fourth time in a health and social care management context, focussing again on a different but still 'real-life' investigation into care standards in private residential housing for vulnerable adults. Despite students' concerns over adjusting to this learning approach in their final year of study, by adopting a PBL approach, the module continues to aim to reflect the 'real-world out there' and thus prepare students for life beyond university.

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