

Review of Barrett, Terry (2017) *A New Model of Problem-based learning: Inspiring Concepts, Practice Strategies and Case Studies from Higher Education*. Maynooth: AISHE*

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For me the first take-home message of the book is the centrality of dialogue to the PBL process. In fact a quick search for the word 'dialogue' shows that it occurs 51 times throughout the book. Its quite fitting therefore that the research study at the core of the book is a discourse analysis study of the naturally occurring talk of the PBL tutorials of two teams of students.

On reading the book, the reader also quickly realizes the centrality of dialogue to the process which Barrett used in both researching and writing the book with each chapter opening with an experienced PBL practitioner's vignette on the chapter topic and culminating in the same PBL practitioner's response to the chapter.

The second take-home message of the book is that of connectedness. That is the connectedness of the problem with the entire curriculum rather than with just one module on an otherwise fragmented programme. This theme is also referred to as *the interrelationship of concepts/dimensions/models/theories*.

Another clever feature of the book is that Barrett structures it in line with the four key characteristics of PBL namely: the problem, the PBL tutorial, the PBL process and learning.

* Reflection. URL: <http://ojs.aishe.org/index.php/aishe-j/article/view/333>

Throughout the book, the reader is presented with a wealth of PBL case studies which help to adapt and apply the PBL concepts to the reader's specific context. In this sense the book is perhaps more of an experience than a straight read. In keeping with the core principles of PBL, the reader is also regularly encouraged to stop and reflect on their experience of adapting and applying the PBL concepts in their teaching practice. This reminds us of John Dewey's famous quote – *we don't learn from experience, we learn from reflecting on experience.*

A very common and most unfortunate misconception about PBL which Barrett addresses early and emphatically is that *PBL consists solely of students working on problems in tutorials and doing independent study. This is not the case.* Instead best-practice PBL must be integrated into the whole curriculum design in such a way that the students can make connections between the problem which they're working on and the various other curriculum inputs including lectures, seminars, skills training sessions, work placements and practicals.

In chapter two, Barrett introduces an interesting concept which she calls the liminal space. For me an analogy would be a construction site. Imagine learning is like building a house from a green field site. You can't go from green field site to finished house in one step. There needs to be an interim state during which the place looks like a construction site – because it is a construction site – a knowledge construction site. So it is with a well designed PBL experience. The students need to work together to construct the knowledge associated with orienting, framing and eventually hopefully solving the problem. But its not just knowledge construction that happens in the liminal space. Its also a space for the development of important skills such as communication, teamwork, project management, critical thinking etc which are all too often neglected in higher education but as Barrett points out are central to the students' professional development. This chapter is also packed with really practical templates, suggestions and step-by-step guidelines to help structure and facilitate the PBL process.

Another nugget in this chapter is the idea of involving the students themselves in the design of the problem. This aligns well with the idea of the ill-structured problem which gives the students scope to orientate the problem to their specific interests and connect their PBL work with other curriculum inputs. Reinforcement is one of the most effective learning interventions and I was delighted to see Barrett reinforce the 'whole curriculum' point in suggestion 14 chapter 2 where she reminds the reader that *it is crucial to view PBL as a total approach ... the curriculum timetable needs to be designed to prompt students to make links between the problems and the other curriculum inputs.*

Chapter three is all about promoting student dialogue which as noted above is for me the take-home message of the entire book. Again, packed with practical guidelines on how to help the students maximize their social constructivist learning and skills development in engaging and learner-centred ways. This includes a 7-step PBL process guide to help the students to break the problem down and tackle it systematically. Barrett also gives a very clear overview of the role of the PBL tutor or facilitator which all revolves around being the *guide on the side* who observes, comments and questions in perhaps decreasing order. That is, the effective tutor observes a lot, comments as appropriate and encourages the students to question themselves. This is a subtle point! It's a bit like the proverb:

"Tell me and I forget, teach me and I may remember, involve me and I learn" (attributed to Benjamin Franklin) but with the added element: *"step back and I will act"* (attributed to Aalborg University where they've been doing fully integrated PBL since 1974).

In this chapter, Barrett also gives very practical summaries of the various typical roles of the students working in an effective PBL team. These include the chairperson, the scribe/recorder, the reader, the timekeeper and the observer. She also gives some interesting background on the power of student dialogue in terms of so-called *dialogic knowing* i.e. *the means by which people create and recreate acts of knowledge together as "dialogue unites subjects together in the cognition of the object that mediates them"* (Freire 1985: 49). Again, Barrett break this down into manageable bites and offers really practical possibilities on how to foster dialogic knowing. Central to this crucial phase of the PBL process are concepts such as shared control and democratic social relations.

Chapter four builds on many of the earlier concepts and practical strategies to address some issues which I would associate with deep problem based learning, namely, creativity, flow and mindfulness. Barrett cites a number of definitions of creativity including the *process of using the imagination to produce new or original ideas*. Flow, she describes as *a state of optimal performance* and mindfulness she describes as *paying attention in a particular way*. These are subtle concepts but they're also central to giving the students the freedom to get the most out of their PBL experience. Its said in sport that to appreciate winning you have to experience defeat and Barrett makes the point that to appreciate flow that you have to experience the frustration of non-flow. Perhaps its only through mindful experience of non-flow that the students can find flow but this end sure does justify the means. The practitioner's response to this chapter rounds it off beautifully with the word freedom – freedom to think, to be creative, to experience flow and to learn.

The final chapter makes the point that although PBL isn't easy, it can nonetheless be fun. Many conventional learning activities can be lonely experiences and yet such individual efforts are every bit as critical to PBL as are the teamwork and group dialogue elements. However, the teamwork and group dialogue elements are such a balancing contrast to the individual research that they can actually feel like fun. Of course, there are other huge benefits to the teamwork and group dialogue elements in the sense that *to teach is to learn* and its often when a group member explains their individual research findings to their team that they really develop their understanding of the inherent knowledge. The mindful student will acknowledge this deep learning experience and adopt it as a future learning strategy. There's also no reason why the hard fun element can't be real fun including joking, having a laugh (having the craic!). I was reminded of a favourite saying of my Dad's – *the days that make us happy make us wise*. As in the other chapters, Barrett offers a number of practical suggestions to enhance the hard fun element of the PBL process. At the heart of many of these are interactivity and dialogue.

In the final chapter, Barrett pauses and reflects (just as she has encouraged the reader to do many times throughout the earlier chapters) on the overall PBL process and on pulling it all together. In many ways the book is more of an experience than a straight read and the mindful reader will quickly recognize it as such and have a go at adapting, applying and reflecting on the many practical suggestions throughout the book. And its then that the fun starts!

Enjoy the experience!