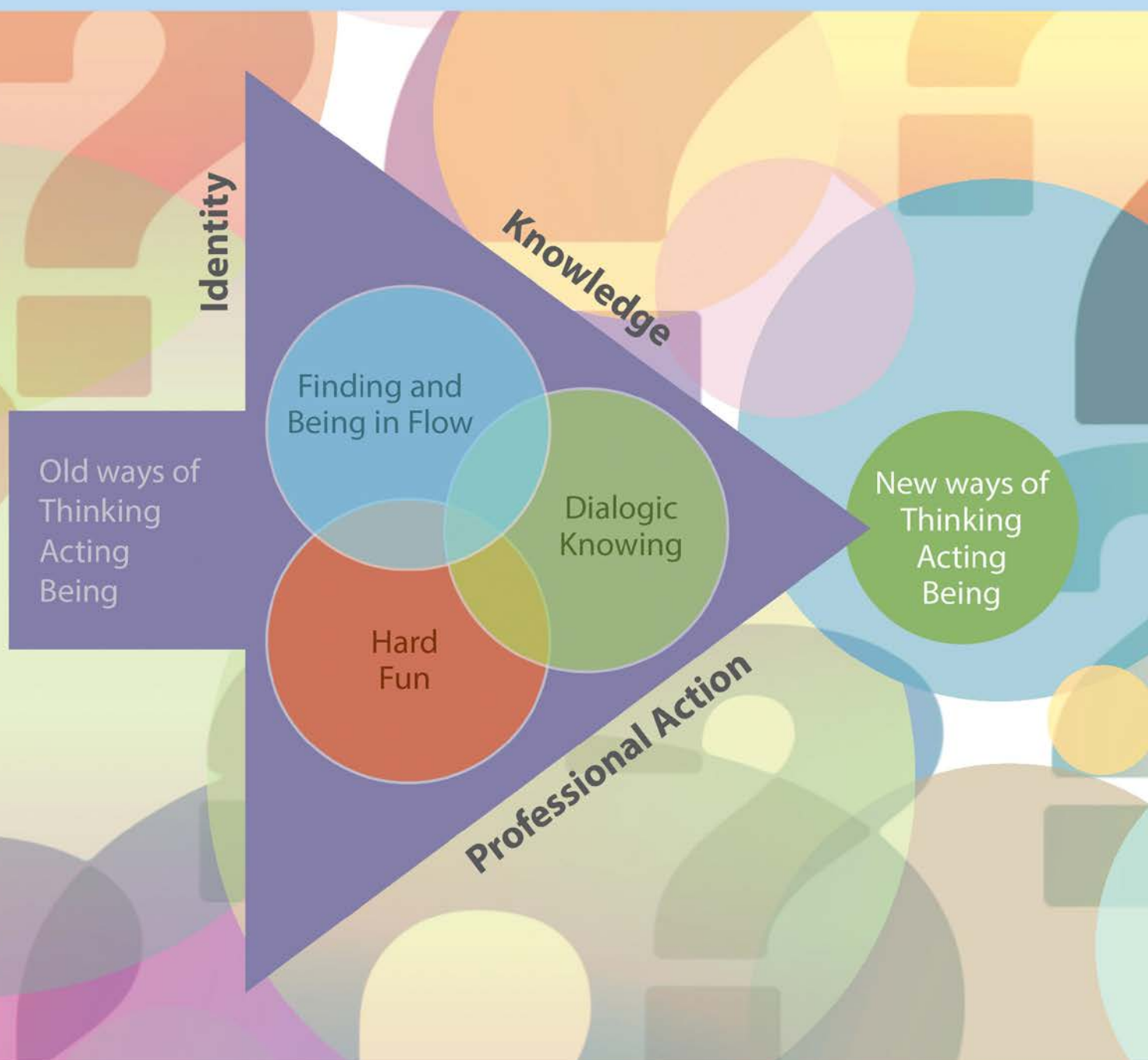


A NEW MODEL OF PROBLEM-BASED LEARNING

Inspiring Concepts, Practice Strategies
and Case Studies from Higher Education

Terry Barrett



AISHE

The All Ireland Society for Higher Education

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Publisher: All Ireland Society for Higher Education (AISHE)

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ISBN: 978-0-9935254-6-9

Recommended Citation:

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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Terry Barrett is an Assistant Professor in Educational Development at University College Dublin. She has over twenty years experience of working with problem-based learning (PBL) as an education developer, programme coordinator, tutor, researcher and research supervisor. She has worked in the design and implementation of PBL initiatives in a range of disciplines including nursing, medicine, physiotherapy, ultrasound, science, computer science, English literature, liberal arts, business, agriculture, community development, education, hospitality, tourism and policing. She has worked as a problem-based learning consultant in Ireland and abroad. She has presented keynote papers on PBL in Ireland, England, Finland and Australia. In addition to problem-based learning her research and teaching interests include curriculum design, creativity, academic writing and mindfulness and compassion in higher education.

She was joint co-ordinator of the Enquiry and Problem-based learning Project and is currently the Programme Director for the accredited programmes in University Teaching and Learning at University College Dublin. She facilitates a scholarship of teaching writing group and academic writers' retreats.

Terry was a founding member of the All Ireland Society for Higher Education (AISHE) and is the co-chair of Facilitate (The Irish Enquiry and Problem-based learning network) and a SEDA (Staff and Education Development) Fellow.

Acknowledgements

I would like to thank Marja-Leena Lahteenmaki, Tara Cusack, Jon Yearsley, Naomi McAreavey, Carmel Hensey and Jane Ostrander for their problem-based learning (PBL) practitioner vignettes at the start of chapters and/or their responses at the end of chapters. Thanks to the PBL practitioners who attended my workshops and contributed case studies.

The completion of this book was greatly helped by support from our writing group who provided peer review and feedback on draft chapters and accompanied me on this creative journey. I am grateful to Tara Cusack, Jennie Hussey, Alison Clancy, Jane Uygur and Marie Stanton. A very special thank you to Shelly Barrett who did the beautiful hand drawings for the book and Sean O'Domhnaill who did the artistic cover and the computer graphic of the new PBL model. Thanks to Helen Fallon, Fiona Ahern and Shelly Barrett for proofreading. My understanding of the power of problem-based learning has developed over the years from conversations with many people including Maggi Savin-Baden, Ray Land, Charlotte Silen, Gaynor Sadlo, Wim Gijsselaers, Willem De Grave, Anette Kolmos, Karen O'Rourke, Anna Raija Nummenmaa, Sarah Moore, Deirdre Connolly and Geraldine O'Neill. I appreciate the work of the All Ireland Society for Higher Education (AISHE) in publishing this book and their continued commitment to publishing open access books on teaching and learning in higher education.

The PBL students I have facilitated have inspired me as to the potential of PBL for dialogic knowing, creativity and hard fun and I am grateful for that.

Dedication

May this book contribute to providing challenging, collaborative and creative learning environments for students across the globe and across a range of disciplines.

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Chapter Six

Reflective Pause

A New Model of Four Interrelated illuminative Concepts for understanding Problem-based Learning

In this final chapter it is time to have a short reflective summary and pause. This book has presented and explored four illuminative concepts to stimulate fresh and invigorated thinking about problem-based learning and inspire your PBL practice.

Concepts are essential to advancing understanding and for the development of practice. We create them as we understand and organise our environment and our place within it. And we organize our environment and practice through developing our concepts... Concepts permit us to make sense of the world and apply this sense making to new contexts and circumstances. This is the power of concepts... (Jackson and Shaw 2002:1).

My model consists of four interrelated concepts that are each presented in separate chapters. These are namely:

- 1) The problem as a provoker of a liminal space (chapter two)
- 2) The PBL tutorial as a potential site for dialogic knowing (chapter three)
- 3) The PBL process as finding and being in flow (chapter four)
- 4) Learning as hard fun (chapter five)

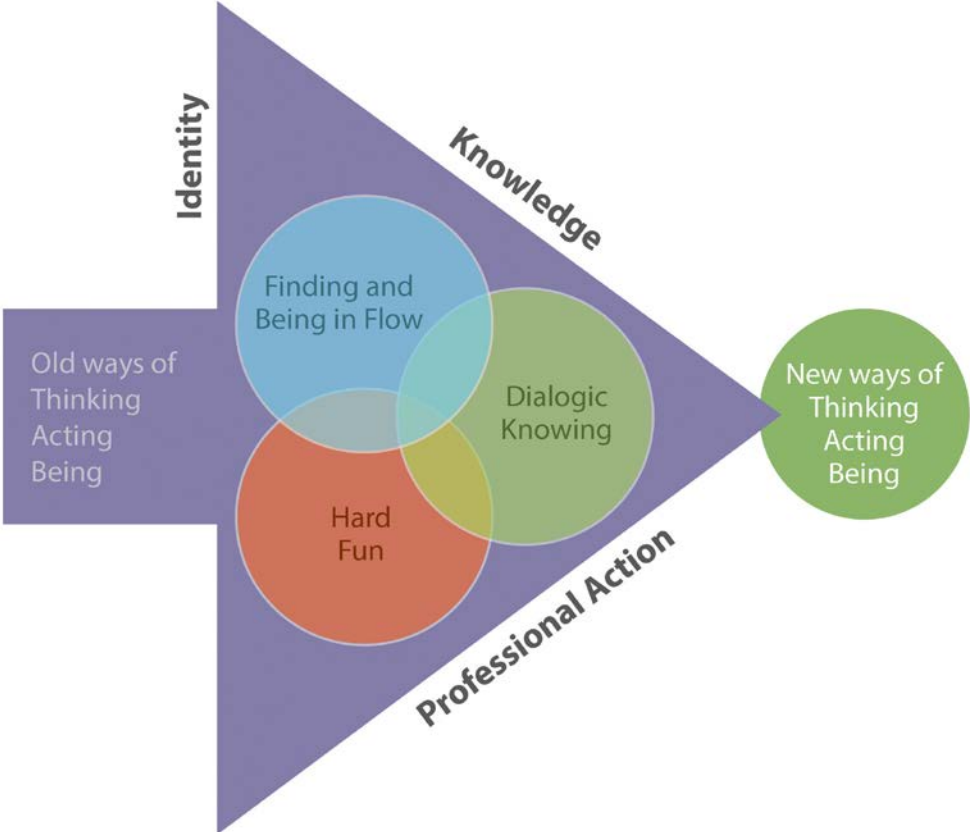
Each of these concepts together with related practice strategies and case studies are explored in the previous chapters. Each chapter has contributed to building up the model by presenting a new illuminative concept and its interrelationships with other concepts.

For the first time, in this chapter this new model as a whole is presented. The PBL problem can provoke a liminal or threshold space between 1) current levels of knowing and new levels of knowing, 2) habitual forms of professional action and forms of professional action new to the learner and 3) satisfaction

with current identities and a desire to explore other possible identities. This liminal space is represented by a triangle with these three dimensions. PBL students move within and beyond the liminal spaces prompted by the problem and learn and grow in three ways. These are: using the PBL tutorial as a site for dialogic knowing, developing flow, creativity and mindfulness in the PBL process and experiencing learning as both hard and fun at the same time.

The following figure is a visual representation of the model. These illuminative concepts are represented as interrelated and overlapping.

Figure 6.1 Barrett Model of Four Interrelated illuminative Concepts for Understanding Students' Talk about Problem-based Learning



In addition to representing the new model visually I also present it in terms of a new definition of problem-based learning.

New Definition of Problem-based learning

At the start of the learning process in problem-based learning, students are presented with a problem. Students work through the problem in small teams in PBL tutorials. The PBL problem can provoke a liminal space, a threshold space, between old levels of knowledge and new levels of knowledge required to work on the problem, between habitual forms of professional action and new forms of professional action and between current identities and new possible identities. PBL tutorials offer the potential for dialogic knowing. The degree, to which this is realised, depends on the extent to which students co-construct: democratic social relations, knowledge, and shared control, in the talk of the tutorials. The PBL process used by the students includes reviewing facts, brainstorming ideas, naming learning issues, engaging in independent study, reasoning through the problem and carrying out action plans. This PBL process, which includes the tutorial, independent study and learning from resources, is punctuated with times of confusion and times of boredom. The PBL process has at the edge of this chaos, the potential to create the conditions that lead to flow. Flow is a state of optimal performance where challenge and skill are matched and the students are fully and mindfully engaged in the task at hand. In the PBL process students can find flow and develop their creativities and mindfulness. The learning that emerges from this PBL process is hard fun, it is fun and hard at the same time. Play is a medium for learning in terms of the importance of playing with ideas as a prerequisite to understanding and play as development, imagination, and creativity. PBL challenges students and tutors conceptions of learning and teaching in higher education. A PBL approach encourages us to treat PBL itself as a problem and to interrogate our current definitions of PBL in the light of experience, research and lively honest conversations in an on-going debate.

Pause and Reflect

Now is your final opportunity for you to pause and reflect on your experience of engaging with the book as a whole.



- Which concepts did you find most inspiring? Why?
- How could this new model of problem-based learning inform the development of your practice?
- Which practice strategies are most relevant to your educational context?
- Which of the case studies did you find most useful?
- Which resources did you find helpful?
- What ideas from this book do you want to share with colleagues?
- What ideas of your own has this book stimulated?
- What is your next step for developing your PBL initiative?

References

Jackson, N, and Shaw, M. (2001) *Conceptions and Visual representations of the Curriculum* LTSN Generic Centre