Book Review

A review of *Teaching Learning for Educational Change*, by Gary F. Hoban, 2002. Buckingham: Open University Press, 192pp. ISBN: 033520953X. \$45.95 USD.

Reviewed by:

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Garry Hoban has a background as a high school teacher, in Australia and overseas, and as a teacher-educator in the Australian higher education system. He confesses that while in the role of teacher-educator his belief that he had "mastered" teaching after 14 years as a practitioner was threatened. Observing student teachers on practicum led him to be confronted by a myriad of creative approaches to teaching used in early childhood and elementary school settings. In short, he realised that his teaching in high school had been "mundane". This epiphany and subsequent postgraduate studies led Hoban to become interested in the relationship between teaching and learning. This interest led to his doctoral study about teacher learning and, ultimately, to this book, which is based on his doctoral thesis. In generalising his personal realisation about his limitations as a practitioner to the teaching profession at large, this book concerns the central question, "What conditions will help to establish a framework for long-term teacher learning to support educational change?"

Part one of the book is a very useful, timely, and largely scholarly rationale arguing for a change in how we understand teaching and learning. In this pursuit, Hoban draws together two important theories: complexity theory and systems thinking. The notion of complex adaptive systems has been around for a long time and has a number of dedicated followers in several disciplines. I would therefore argue that Hoban is not presenting an altogether new way of thinking. Nonetheless, it is exciting to see it presented

Complicity: An International Journal of Complexity and Education Volume 3 (2006), Number 1 • pp. 115–118 • www.complexityandeducation.ca in a form that makes its central tenets accessible to the average reader and with relevance to everyday practice in teaching.

Unlike systems thinking, complexity theory is less elusive as a concept because most people can immediately see its relevance given the current environment in which we live. Hoban does well to weave systems thinking and complexity theory together to argue for approaches to teaching that are less linear, enable greater adaptability in the face of constant change and complexity, and that can cope with unpredictability. Chapters 2 and 3 are good explanations of these two theories in relation to learning and will be of great value to both practitioners and academics alike interested in the dynamics of change.

However, scholars of systems thinking in particularly will be disappointed that there is no mention of the Tavistock Institute or of Fred Emery, Merilyn Emery, and Eric Trist, for example. This is particularly important given the Australian heritage of the Emerys. It is disappointing to see Senge given the status as an authority when he merely popularised the work of people like Fred Emery and Eric Trist who had pioneered systems thinking and the work of others such as Chris Argyris and Don Schon. There is also a significant literature in Australia and internationally concerning the application of systems thinking and complexity to learning, particularly in relation to work that Hoban has ignored and which may have added to the book's theoretical depth and relevance to practitioners.

In Chapter 2 Hoban introduces the metaphor of a spider web to demonstrate the interconnectedness and non-linearity between elements in complex systems. In this chapter he examines educational change as a complex system and posits leadership, context, culture, structure, politics, teacher learning, and teachers' lives and their work as the key influences on change. In a spider web a change to one of the elements affects the others because of the interrelatedness of the fibres. This metaphor is maintained throughout the book. In Chapter 3 Hoban develops a systems thinking approach to teacher learning. In doing so he revisits the fragmented nature of thinking about learning theory as consisting of two main schools: psychological perspectives and situated perspectives. Consistent with thinking among some researchers and educationalists, Hoban argues for a pragmatic model that incorporates both theoretical positions. To support this position he invokes the key tenet of systems thinking, which focuses on the interrelatedness of elements within systems. Hoban suggests the term, "individual-in-social-action" to represent a means of analysing the cognitive and situated interaction. The spider web metaphor for "individualin-related-action" consists of the following elements: purpose; knowledge stored in the learner's mind; social context; school culture; new knowledge; politics; physical setting; and leadership.

Hoban completes the chapter by suggesting a number of conditions for teacher learning that can be taken from the two main perspectives and integrated. These are: reflection; the teaching community; action which involves experimenting with ideas in context; conceptual inputs, which involves accessing resources that present new ideas; and student feedback as feedback loops. This conceptualisation is useful but it is surprising that Hoban did not link these conditions to some well-established learning models such as action learning, action research, and communities of practice, for example.

The second part of the book provides an application of what Hoban calls the "professional learning system" to support educational change in a complex system. This system is based on the framework provided in Part 1. At the beginning of Part 2, the conditions for teacher learning (listed above) are unexpectedly expanded to include: a conception of teaching as an art or profession; the need for teachers to have a purpose for learning; and a long-term time frame. Nonetheless the system is coherent and draws together elements in a useful and meaningful way for practitioners and academics alike. The next three chapters are highly readable case studies that demonstrate the application of the "professional learning system". The first is provided by Hoban and consists of a high school science project. In what is essentially an action learning/research process, although this is never mentioned by the author, student feedback about teaching and their learning is used to guide changes in teacher practice. Teachers are later interviewed about the process and the changes they underwent in their professional practice. The main outcome of the project was a dramatic change in the teaching program over a four year period.

The second case study is provided by Jan Turbill and concerns the role of the facilitator in a professional learning system aimed at developing elementary school teachers of literacy and language. Turbill presents a "Frameworks" model for professional learning consisting of four knowledge domains, which she identifies as personal theory; personal theory in practice; theories of others; and theories of others in practice. However, it is when these four domains interrelate as a system that sustained, long term learning can take place. The case study describes how the relationship between these domains can be developed through a facilitation process.

Rob Walker then presents a case study of a professional learning system for the teaching of information and communication technologies in elementary schools in Christchurch, New Zealand. The chapter presents a discussion of the importance of a professional learning system for change and how a system can be used to support teachers. However, the key focus is the use of reflective practice by teachers to enhance their learning within the professional learning system framework. Walker provides some useful practical information about facilitating reflective practice. The case study component concerns some examples of journal entries from a teacher involved in teaching computing and the change that this enabled. My own reflection is that this was a very useful example of "how to do" reflective practice.

Part 3 of the book consists of two chapters that deal with the issues around designing a professional learning system. Specifically, Hoban examines the use of new technologies, such as the internet (although one would hardly call this a new technology now), in establishing and maintaining a framework. The final chapter is a more general discussion of designing a professional learning system. This is a logical and thoughtful conclusion to the book for the person who might be thinking of applying the concept. It would be interesting to see whether practitioners actually do use the framework after reading this book or whether this is more an exercise in theorising.

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