Reviews

edited by Philip Barker

John Bowden and Ference Marton, *The University of Learning: Beyond Quality and Competence in Higher Education*, London: Kogan Page, 1998. ISBN: 0-7494-2292-0. Hardback, x310 pages, £35.00.

There is something curious about a book title that associates the terms 'university' with 'learning' – at least in the way Bowden and Marton have chosen. While most would agree that universities serve society through 'teaching, research and community service', it is the simple description of a new breed of institution that is about learning – not teaching or research or community service, that is disconcerting. The authors have a principled reason for so doing. After all – what is the outcome of teaching – but learning? What is the outcome of research if not better informed debate and 'learned' scientists? What is the outcome of community service if not people better able to make sense of the world in which they live? But a University of Learning . . . that is a different matter – or so it has been up to now. Universities must address the needs of learners. Learning as we now tend to see it – is about '. . . the process whereby knowledge is created through the transformation of experience' (Kolb, 1984). The needs of learners require teachers to construct challenging opportunities. Opportunities for learners to puzzle and reflect. Through experimentation and conceptualization, learners transform events, ideas, experiences into testable hypotheses – setting their reflections against personal frameworks.

This book is about learning. It is also about the way we need to rethink university teaching (c.f. Laurillard, 1993). Teaching and the design of teaching needs to be freed from simplistic transmission models. Such models still pervade higher education and often underpin so-called 'innovative teaching'. Students do not have hard-wired Nurnberg Funnels attached to their heads (cf. Carroll, 1998)! Learning technologists need to address three fundamental questions when they are involved in innovative teaching developments. First, in what way does the design of courses, modules and classes draw on what is known about the process of learning and the experience of learning? Second, can innovative teaching methods that use communications and information technology make the most of the opportunities for learners to transform experience into personal understandings? Third, in what way will those who seek accredited membership of the ILT (Institute of Learning and Teaching) begin to transform higher education into an experience that serves students' needs and interests?

John Bowden and Ference Marton have drawn together a rich and rewarding set of ideas that not only make us ask questions about our rush into competency-based education (see below) but redefines 'quality' to mean quality of experience for the learner. A quality of experience that is facilitated by learning technologists and teachers who grasp two simple yet powerful observations. First, learning is the result of designed experiences. Second, learning

is the result of active enquiry by active minds that reflect on and make sense of such planned and designed experiences. Universities will more and more be assessed in terms of the learning they bring about. This output is not the simple transmission or communication of knowledge. The output is as yet unknown! Just as able and scholarly researchers make sense of their domain through scientific enquiry, so too, learners approach learning with many questions and incomplete conceptual frameworks.

This book is not easy reading. It is not easy because it redefines some familiar ideas of 'teaching, learning and scholarly enquiry'. It is not easy because the narrative is a logical reflective analysis of what the authors see around them – transformed by research findings and empirical investigation. Just as Diana Laurillard's book *Re-Thinking University Teaching* (1993) transformed the vocabulary of teaching – this book will transform the way we see learning.

The book comprises eleven chapters and 310 pages. In this brief note I can only select two sections for comment. First, there is a very complex argument about Collective Consciousness and the Ethics of Learning (Chapter 8). The authors assert '. . . we grasp the world more fully by taking part in each other's differing ways of seeing it . . . not only are students supposed to learn from their teachers *but also teachers from their students*; as in research, we are supposed to learn from each other . . .' (p. 208) [reviewer's emphasis]. This brief challenge to our collective consciousness as learning technologists should be written above the doors of Learning Support Units and the new ILT. Imagine learning from our students or with our students! What more challenge is there for us as learning technologists than to make the most of communication and information technology, curriculum design and good sound common sense to create Universities of Learning. Now there is an outcome that the ILT planning group did not anticipate!

Second, the authors make a point to deconstruct 'competence'. About time – the Enterprise in Higher Education movement was never fully thought-out and its descendant – 'Transferable-Skills Push' – is still a conceptual minefield. Bowden and Marton distinguish between competence as units of behaviour in the work place (cf. transferable skills) and 'competence' as 'capabilities for seeing and handling novel situations in powerful ways . . .' (p. 114). The question of what is to be learned in higher education is not a closed question. If we are to have Universities of Learning, then we must begin to articulate through curriculum design, ideas that grow with reflection and conceptual challenge. Designers will have to become involved in what is learned – as well as how and when and where, questions that so influence innovation programmes.

Read this book – with an open mind; it is worthwhile changing one's views on teaching and learning in higher education – better still it is rewarding to bring about the circumstances to create a University of Learning.

References

Carroll, J. (1998), *Minimalism beyond the Nurnberg Funnel*, Cambridge, Mass: MIT Press.

Kolb, D. (1984), *Experiential Learning*, New York: Prentice Hall.

Laurillard, D. (1993), *Re-thinking University Teaching – a Framework for the Effective use of Educational Technology*, London: Routledge.

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M. Eisenstadt and T. Vincent (eds.), *The Knowledge Web – Learning and Collaborating on the Net*, London: Kogan Page, 1998. ISBN: 0-7494-2726-4. Hardback, vii295 pages. £35.00.

The use of the Internet and intranets for knowledge management and the delivery of courses is now becoming an 'everyday' phenomenon. Indeed, most organizations now host a variety of web sites to facilitate both their internal and external activities. In this book, various staff members and affiliates of the Open University's Knowledge Media Institute describe their experiences of using these and other related techniques for the development of 'innovative approaches to sharing, accessing and understanding knowledge'.

The book contains an extended overview, sixteen contributed chapters and an extensive reference section. In the overview, the editors outline the contents, relevance and significance of the various contributions made by the many different contributors to the volume. The main chapters of the book are then organized into three basic parts that are entitled: Learning Media (chapters 1–6); Collaboration and Presence (chapters 7–11); and Knowledge Systems on the Web (chapters 12–16). The book

is 'accompanied' by an associated World Wide Web site (http://kmi.open.ac.uk/knowledge) that is intended to enable readers to experience the systems that are described, obtain news about updates and the latest research results and offer critical feedback.

The six chapters that make up the first part of the book cover a range of different issues relating to the use of various types of media for the support of learning, communication and educational delivery. The opening chapter in this section is taken from the text of a keynote address that was delivered (remotely) by the Vice-Chancellor of the Open University (Sir John Daniel) to delegates at the 1997 International Distance Learning Conference in Washington, DC. In the transcript of this talk he identifies three important educational and training crises: access, cost and flexibility. He goes on to extol the virtues of both his 'mega-university' paradigm and the techniques that are currently being used by the UK's Open University (OU) for helping to resolve these crises. Subsequent chapters in this section then address the relevance and potential of the Web for the support of learners with physical disabilities and its use for providing appropriate infrastructures for facilitating large-scale distance-learning activities. Media integration through the use of meta-learning environments (involving interactive course-maps and study guides) and the use of virtual science laboratories are also discussed.

Each of the chapters in the second part of the book deals with using Web-based technology to support collaborative activity and/or telepresence. The first of the five contributions in this section discusses various techniques for promoting learner dialogues on the Web. Most of this chapter deals with a conferencing system called 'EBBS' (Extended Bulletin Board System), although some mention of another popular system (FirstClass) is also made. The concept of dialogue is further continued in the following chapter – but from a slightly different perspective. This chapter describes and discusses a Web-based publishing toolkit called 'D3E' (Digital Document Discourse Environment) which is being used to support scholarly publishing and debate within an electronic, network-based medium. D3E can automate many of the editorial tasks involved in electronic journal publication. For example, it can facilitate the dialogues that can take place between editors, reviewers, authors and readers. A number of examples of its use are presented – including the OU's Journal of Interactive Media in Education (JIME). Subsequent chapters in this second section of the book deal with the 'KMi Stadium' webcasting facility (for the support of telepresence on the Web), 'KMi Planet' (an automated, Web-based news server) and the OU's 'Internet Software Visualization Laboratory' (which is used to support the teaching of Prolog programming).

The five contributions that make up the final part of the book all deal with Web applications related to knowledge handling – primarily from an artificial intelligence (AI) perspective. The section commences with a discussion of the use of the LispWeb server for supporting access to AI applications over the Web. This is followed by a contribution that discusses knowledge modelling using approaches that are based on the use of ontologies. The ontological approach also forms the basis of the next chapter that deals with 'The World Wide Design Lab'; this is an environment that has been created in order to support distributed collaborative design activity. The design methodology that is embedded within this system is illustrated by means of a case study involving the co-operative design of a new motor vehicle. The final two chapters in this section deal with the use of software 'agents' to support various online activities. Three example systems are described: a scheduling agent for meetings (called 'Luigi'); a 'virtual librarian' for use in a digital library facility; and an automated assistant for helping OU tutors handle electronic conferencing with large groups of students. The latter system forms a 'Virtual Participant' that has access to an electronic archive of past discussion threads and uses these to drive a case-based support strategy.

Overall, I found the sixteen chapters in this book both interesting and stimulating. Indeed, the book contains a wide range of useful topics and techniques relating to the many growing applications of Web-based technology and artificial intelligence for the support of teaching and learning within the context of distance education. Although many of the techniques are described and discussed in terms of the Open University's own particular interests, it is easy to see how much of what is described in this book could be applied to other situations involving teaching and learning practices within conventional college and university environments.

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Henry Ellington, Monica Gordon and Joannie Fowlie, *Using Games and Simulations in the Classroom*, London: Kogan Page, 1998. ISBN: 0-7494-2566-0. Hardback, xiii159 pages. £19.99.

In today's world of student-centred education and experiential learning, teachers are on a constant lookout for methods and techniques that will provide interesting and exciting learning opportunities for their students. Simulations and games are ideally suited to the task. They can be used in a very wide spectrum of learning situations and they engender high levels of commitment, involvement and more than a little competitiveness from students, attributes sadly lacking in more traditional teaching approaches.

What might a teacher ask of a book claiming to introduce them to classroom simulations and games? Several key questions come to mind:

- What is the difference between a simulation and a game?
- How can I justify the resources needed to develop or learn a new simulation?
- How effective are they as a tool for teaching and learning?
- What subjects can they be used for?
- How are they used in a classroom?
- How easy is it to find or develop them for a specific course?

How well does this book address these questions? In a word, admirably.

The authors' 'opening gambit' is the development of a typology of simulations and games. A glance at this opening chapter quickly dispels any fears about what is meant by the term 'simulation' as the relationships between simulations, games and case studies are explored and placed in a sound conceptual framework. If the mere mention of 'simulation' conjures up images of computer-based models, complex manuals and steep learning curves then this book is for you. While occasionally making reference to more sophisticated alternatives, this text is clearly focused on less resource-hungry, simpler, 'paper-based' simulations and games.

Chapters 2 and 3 address the educational value of simulations and justify their use. They cover such issues as strengths and weaknesses, effectiveness, type and format selection, and the preparation and running of educational simulations or games. If you need to justify the use of a simulation (whether on educational or resource grounds) then the information in these chapters will help.

The strong opening is developed in the 'middle game'. Making heavy use of examples and case studies (one of the book's main strengths) the authors explore the use of simulations and games in each of four age brackets: nursery, lower primary, upper primary/lower secondary and upper secondary. Each has its own chapter (Chapters 4–7), each with a tripartite structure. Each opens with a brief discussion of the educational needs of the age group, then covers how appropriate simulations and games may be integrated into the curricula, and ends with a number of case studies (often with enough detail to be able to run the simulation for oneself). Collectively, these chapters offer both depth and breadth of insight into how simulations and games can work with almost any learning material, from simple association and sequencing at nursery level, through personal health care at primary level, to accounting and economic principles at upper secondary level, and beyond. In the process they illustrate the practical aspects of running simulations in the classroom.

The 'end game' (Chapters 8–10) is equally strong, offering guidance on adapting or developing simulations. Two approaches are explored. Chapter 8 looks at the 'top-down' or algorithmic approach in which the learning objectives and basic design criteria are specified first, followed by decisions on content and format (e.g. card game, board game, computer based game, role play, etc.), and ending with the development of a total package (manuals, instructions, playing materials, etc.). Chapter 9 outlines the alternative, 'bottom-up', more inspirational approach to development. Here the developer uses an existing 'technology' as inspiration (e.g. Monopoly, Scrabble, Trivial Pursuits, etc.) and builds an educational experience on familiar foundations. The authors' use of simple examples (e.g. a 'health' game based on the 'Snakes and Ladders' principle) make the ideas very accessible and only a little lateral thinking is needed to understand how such ideas might be applied at any educational level. Chapter 10 addresses today's educational 'holy grail' – a truly student-centred approach to learning. This final chapter explains how to involve students in the simulation design and development process whereby the learning experience is not limited to participation in the

game but is extended to understanding and modelling of the process needed to develop the game.

The book ends (as a good practical text should) by offering guidance to those wishing to further their interest in simulations through a very useful (although not comprehensive) list of additional readings and a list of contact addresses for publishers of the 32 simulations referred to in the text.

Like most introductory texts it has its limitations although in this case they are relatively minor. Firstly, it is clearly targeted at the primary and secondary teacher. However, Chapters 8 to 10 clearly demonstrate how simple formats can be extended to any educational level. Secondly, most examples are drawn from the authors' own experience of integrating simulations into the Scottish educational system. However, this offers a very complete illustration of how easily local industries can be used as a basis for (say) a business studies simulation. A little lateral thinking is all that is needed for the simulations to be adapted for use in any area, educational system, or at any level (and some will transfer directly). In the final analysis, the primary and secondary education focus does not limit the usefulness of this book to teachers in just those sectors. If this book has one real oversight, it is in its limited coverage of the more sophisticated, computer-based simulations, more often used in higher education and training, although even this limitation is partially addressed through the listings in the bibliography. In addition, given the cost and resource requirements of these simulations, the vast range of available simulations, and the book's focus on the primary and secondary education sectors, this oversight can be forgiven.

Overall, this a very practical, well-written, accessible and readable book, which offers a fascinating introduction to the use of simulations in education, and has four very strong attributes that recommend it to teachers at all levels:

1. It offers a sound framework for classifying simulations, games and case studies.
2. It provides justification for and guidance on using simulations and games for educational purposes.
3. It is full of examples and practical illustrations of simulations and games in use in the classroom.
4. It offers highly practical and easily implemented suggestions on how a teacher might develop course-specific simulations and games.

For anyone new to, or interested in, alternative learning technologies or simulations and gaming in education, this book will make a useful addition to their library. It certainly makes a useful contribution to the literature in both fields.

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N. Longworth and W. K. Davies, *Lifelong Learning – New Vision, New Implications, New Roles for People Organisations, Nations And Communities in the Twenty-first Century*, London: Kogan Page, 1996. ISBN: 0-7494-1972-5. A5 paperback, xii179 pages. £18.99.

This book was first published in 1996 but has since been reprinted. It is an interesting publication in that it provides many useful perspectives on the currently popular topic of 'lifelong learning'. Those who are new to this area would find the nine chapters and three appendices in this book a useful introduction to the subject. However, because it is now almost three years old, this volume does not cover the latest trends and developments that are now taking place in this exciting area. The book is not a technical one; it deals, instead, with the important ideas, concepts and educational philosophies relating to learning as an ongoing, lifetime process and activity in which anyone and everyone can participate.

Following two Forewords and an Introduction, the first chapter of the book serves to introduce the concept of lifelong learning. It defines and discusses the meaning of the term and outlines the basic nature of this approach to self-improvement. A strong case is made for adopting the central ideas underlying lifelong learning in all aspects of life, work and family. In the following chapter the authors introduce eight paradigm changes that they feel will be necessary in order to facilitate this mechanism of pedagogy in the forthcoming 'lifelong learning age of the 21st century'. Chapter 2 also identifies four important trends for enabling lifelong learning and then goes on to discuss a learner's charter – based on the ELLI principles of learning; ELLI is an acronym for the European Lifelong Learning Initiative.

The following three chapters describe and debate

different approaches to the realization and promotion of lifelong learning. Chapter 3 (entitled 'Where Lifelong Learning Begins') discusses the roles that schools can play in 'seeding' and nurturing the development of sound lifelong learning principles and techniques while chapter 4 ('Learning for Earning: Learning for Survival') is concerned with work-place activities relating to the realization of personal empowerment using this mechanism of study. Chapter 5 deals with 'Learning Organisations' and how interest in these has grown during the last decade or so. The rationale underlying this approach to lifelong learning has been motivated by the potential it offers for improving an organization's performance through 'the development of the human potential in the workforce'. As well as listing and discussing the ten chief characteristics of a learning organization, this chapter also includes a case study based on the Rover Group in the UK. Two important recommendations put forward by this case study are: 'personal empowerment in industry demands certain responses from schools, universities and colleges . . . some serious thinking needs to be done on the sorts of lifetime skills, curriculum content and learning methodologies that these organisations encourage' (p. 83); and 'Schools, universities and colleges must also become learning organizations, learning from the experience of industry, the requirements of employability and the demands of the wider society' (p. 84).

Bearing in mind what was said above, the two subsequent chapters then discuss how various groups might respond to the need to promote lifelong learning on a wider and more effective basis. Chapter 6 is therefore concerned with the role of teachers and teacher-training organizations as 'change agents' in the context of promoting human development. It discusses issues of teacher education and how this can contribute to the urgent need for promoting lifelong learning skills both in schools and in the community. Chapter 7 then considers some of the challenges and opportunities offered by various approaches to the realization of lifelong learning in higher education. Particular emphasis is given to the roles that universities should play. These roles are embedded within (and illustrated by means of) a conceptual model that reflects the central co-ordinating function that universities could perform in facilitating the creation of various types of learning community. In this chapter the authors provide a list of important areas where useful future research is needed and might be conducted; they also emphasize the importance of university/industry partnerships.

In chapter 8 ('Lifelong Learning and the Quality of Life') the authors start off by discussing various mechanisms for the creation of learning communities and how these could in turn form the basis of a 'Learning Society'. They then bring together many of the threads of previous chapters into a set of actions to stimulate the wider vision of a learning society. Chapter 9 (the 'Valediction') is a relatively short one. It discusses some of the more important learning challenges that we will need to face in the forthcoming learning age. Throughout the book, frequent reference is made to ELLI's Action Agenda for Lifelong Learning. This arose as an outcome from the First Global Conference on Lifelong Learning; it is documented in some detail in Appendix 1. The second appendix gives details of WILL (the World Initiative on Lifelong Learning) while Appendix 3 describes 'Odyssey of the Mind' – an international schools' tournament that is designed to promote the skills of lifelong learning in school children.

Having read this book from cover to cover, I would willingly recommend to it to anyone who wants to find out more about lifelong learning and its implications for the design of future educational systems. This is both a visionary and a seminal book. It is therefore not surprising that it was chosen for distribution to delegates at the theme conference of the European Year of Lifelong Learning in 1996. Looking back, in retrospect, I believe the essential messages embedded in this book are probably best summed up by two quotations taken from it: 'What we have tried to describe in this book is the end of education and training and the beginning of the era of lifelong learning' (p. 145); and 'Lifelong learning will be essential for everyone as we move into the 21st Century and has to be made accessible to all' (p. 23).

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Leslie Rae, *Using People Skills in Training and Development*, London: Kogan Page, 1998. ISBN: 0-7494-2575-X. Paperback, vii243 pages. £19.99.

Anyone associated with technology in education is acutely aware of what is coming to be called the 'crisis in support'. Machines do not repair themselves (yet), nor does software install itself, or a network administer itself. Worse, users do

not learn how to use complex hardware and software by osmosis. Rather end-users need to be assisted and trained, and a growing number of computer assistants need, themselves, to be trained.

This is where *Using People Skills* can help. The book applies psychological models of interpersonal relations to the training process. To give a notion of the book's scope, some of the models covered include Kolb's Learning Cycle, Maslow's Hierarchy, the Hertzberg Approach, the Johari Window, Behaviour Analysis, T-Groups, Transactional Analysis, Neuro-Linguistic Programming, and the Beblin Model.

The book is written in a general format, and could apply to any organization in which managers must train subordinates. I approached the book as the manager of a higher education computing laboratory, with the need to train a team of students to act as peer consultants who help other students and staff use the lab. Teaching my consultants the details of hardware and software is not sufficient. If I can also help improve my consultants' 'people skills' they will be more effective in their jobs helping others.

The first half of this book is titled 'Communication Aspects of People Skills', and consists of five chapters, entitled 'Communication', 'People Differences', 'Communication and Behaviour', 'Observing Behaviour', and 'Other Methods of Observing People'. The principal focus is on communication and recognizing the best way to reach an audience. The idea that different people learn in different ways is stressed, and Rae cites a number of ideas from educational psychology. He warns that the attention span of trainees is typically no more than 20 minutes, and in 'chalk-and-talk' training, attention may wane in ten minutes or less. In writing the book, Rae follows his own advice. He keeps his sections short and to the point, and frequently breaks up the text with the equivalent of overhead slides – indeed he suggests that his boxed lists and summaries might be useful visuals if the reader wishes to present this material in a training session for trainers.

The second half of the book is collectively titled 'Specific Aspects of People Skills', and has eight chapters: two on 'Coaching Skills', one each on 'Delegating and Mentoring', 'Role Plays', 'Some Group Approaches to People Skills', 'Team Building and Development', and two chapters on 'Dealing with Difficult People'. The book concludes with a list of over 100 references on training and people skills, usefully grouped into twelve categories.

As an example of the theoretical nature of the book, in chapter 5 ('Observing Behaviour'), Rae discusses 'Behaviour Analysis' (BA). After going through a brief history of BA, he describes the practice, which consists of an observer scoring a number of trainees simultaneously in up to sixteen categories of behaviour. Clearly such analysis requires considerable skill and experience and is not appropriate for readers who, rather than being behaviour analysts, have had training responsibilities thrust upon them. I was a bit disappointed here and elsewhere that the chapter is not more practical. I would prefer to see more explanation for why this technique, or others Rae discusses elsewhere in the book, should be used. After observing and recording, which behaviours are preferred, and which are to be discouraged? How can the trainer affect changes in trainee behaviour? Rae stops short of giving this sort of practical advice.

For all of the theory in the book, I found some useful pointers to help in organizing training sessions. The elaboration of different methods by which people learn, covered in chapter 3, is important to keep in mind in designing training sessions. Effective training should allow trainees to absorb material in a way that most suits them. The chapter on 'Team Building' was also quite helpful. In the area of learning technology, it is likely that individuals will have specialized skills. In order to provide help to end-users, a team of consultants will need to work well together, and building an effective team should be a high priority for the trainer.

Another useful pointer I gleaned from the book comes in the introductory chapter. Rae advocates that trainees be encouraged/required to maintain a 'learning log' throughout the training process. A learning log is essentially a structured note-taking process consisting of three parts. The first part is the raw notes taken by a trainee during training. The second part is a more thoughtful rendering of the notes, in which the important points are summarized and perhaps elaborated. Finally, the third part of the log is a set of implementation decisions, detailing how the trainee is going to put the newly acquired knowledge to work. Along with the log, Rae advocates setting aside time, at least daily during training, when trainees compare their notes to discover possible gaps in their understanding, and to see how others have

prioritized the preceding lessons. In the field of technical consulting, these logs compiled by trainees, along with handouts would become a basic reference manual in which concepts are explained in the trainee's own words.

In all, I found the book to be rather more theoretical than I had expected, or that I need in my role as a trainer, with relatively few specific practices to recommend. In particular, I found it a bit surprising to find almost no mention of the use of computer technology in the training process (but then, the book is about people skills). The book is pitched as a general overview of a wide variety of training theories, which should be quite useful to the full-time professional trainer. To such a person, the book would serve as an introduction or review of many psychological models of teaching and learning. Some background in educational psychology would probably be helpful to gain maximum advantage from the book.

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