LTSN Bioscience Book Review

Reviewer:

Name: Professor E J Wood
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Details of Book:

Title: Virtual University? Educational Environments of the Future

Publication year: 2001

Edition: 1st edition

Author(s): (Editor) J H van der Molen

Publisher: Portland Press

Supplier of courseware for review: Portland Press Ltd

Address: 59 Portland Place, London W1B 1QW, UK

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Price: £ 75.00

ISBN: 1 85578 145 X

Short description of content:

Proceedings of a workshop held at the Wenner-Gren Centre in Stockholm (1999). The book comprises 12 chapters from and international group of educationalists, academics and ICT technologists. The text is also available electronically at http://vu.portlandpress.com

Further Information:

Intended audience level (tick all that apply):

☐ General	☐ HE Advanced/ Postgraduate
☐ A Level / Access	☒ Staff development
☐ HE Introductory	☐ Not classified
☐ HE Levels 1-3	
☐ Undergraduate Level 1	☐ Not applicable
☐ Undergraduate Level 2	
☐ Undergraduate Level 3	Other (please specify): academics, administrators and planners, those interested in distance education

Main discipline area of application (chose from list below):

Other discipline areas covered (check boxes applicable):

☐ Agriculture	☐ Anatomy and Physiology
☐ Animal Science and Management	☐ Biochemistry
☐ Aquaculture and Management	☐ Bioinformatics
☐ Crop & Grassland Science & Management	☐ Cellular and Molecular Biology
☐ Food Science & Technology	☐ Ecology
☐ Forestry	☐ Genetics
☐ Horticulture	☐ Immunology
☐ Soil Science and Management	☐ Microbiology
	☐ Neuroscience
☐ Education in Bioscience (e.g. maths for Bioscientists	☐ Pharmacology
	☐ Plant Science
☒ Generic Learning and Teaching	☐ Systematics
	☐ Zoology
Other (please specify):	

Summary:

Academic Content:	☐ Poor	☐ Below Average	☒ Average	☐ Above Average
Usefulness to student:	☐ Poor	☐ Below Average	☐ Average	☐ Above Average
Usefulness to teacher:	☐ Poor	☐ Below Average	☒ Average	☐ Above Average
Meets objectives:	☐ Poor	☐ Below Average	☒ Average	☐ Above Average
Accuracy:	☐ Poor	☐ Below Average	☒ Average	☐ Above Average

Review:

What will the university be like in the next millenium? The premise in this book is that in the future cyberspace will determine how people learn, socialise and work, and that therefore universities must rethink their organisation. Until now universities have had a monopoly in creating and brokering knowledge: this is no longer be the case. Information and communication technology (ICT) has changed the way in which people learn. Students are now much more likely to go to the Internet than the Library.

The book, the outcome of an October 1999 Workshop will be of interest to university planners and to anyone thinking about converting a course to distance delivery. Chapter 1 ("Universities in the network society") provides an overview of where we are today contrasting the university with which we are familiar (buildings, libraries, classrooms and laboratories) with the virtual university where the whole world of learning is connected with you through your computer. Chapter 2 is about the real options for virtual universities: the cost of establishing a virtual university is now low compared with a bricks-and-mortar establishment. If a *real* university is a place where minds can meet, a scholarly community, not merely a repository of information, is ICT is creating such a community even as it destroys the importance of physical place? Anyone with an Internet connection can now enjoy the pleasure of meeting with like-minded individuals outside one's own institution.

Chapter 3 states what needs to be done in converting to distance education, including IPR issues. The author suggests that institutions should ask: "Where are we now?", "Where do we want to be *n* years ahead?", and, "How do we get there from here?" These are questions that the average academic or academic manager can comprehend. The author of chapter 4 points out that the importance for education of information technology is that it enables the objectification of knowledge thus making knowledge storable, transmittable over distance and interactively accessible. Chapter 5 deals with models for web-based education and draws on experience in Dutch universities (the Open University of the Netherlands) and chapter 6 deals with assessment. It will have to be recognised that effective and efficient systems for performance assessment and of ways of

assessing different aspects of students' competencies will have to be developed. The systems of assessment mostly used in the Western world so far are characterised by (i) instruction and assessment being separate activities, the former being the responsibility of the teacher and the latter the responsibility of the measurement expert; (ii) the test plan and the criteria for evaluating test performance, etc, are not usually shared with students and remain a mystery to them; (iii) the items and tests are synthetic, being unrelated to real life experience; (iv) the majority of test items are of the choice format, examining knowledge in a decontextualised way as discrete units of subject matter; and (v) tests are usually administered as pen and paper tests under time constraints and where the use of helping materials and tools is forbidden (almost the complete opposite of how people in the real world solve problems).

Chapter 7 deals with teaching by combining handbooks and websites, giving more examples of the Dutch experience for example with the project coordinated by the Institute of Medical Informatics in Erasmus University, Rotterdam. Chapter 8 is about action to drive learning for innovation in Small and Medium Enterprises, and chapter 9 deals with institutional and societal implications of the virtual university. Chapter 10 is about experiences in Korea: the author uses the term *andraversity* (from *andragogy,* learning by adults, compared with *pedagogy,* learning by children). Chapter 11 deals with the developments in virtual universities and their implication for university policy and how traditional concrete universities will react to the threat of the e-university, and Chapter 12 is a summary mentioning challenges for the future The conclusions are that ICT will have a major impact on teaching and learning, and that different institutions will have to develop strategies to react to this challenge.