Reviews

edited by Philip Barker

Researching into Teaching Methods in Colleges and Universities by Clinton Bennett, Lorraine Foreman-Peck and Chris Higgins, London: Kogan Page, 1996. ISBN: 0-7494-1768-4, 136 (+ vii) pages, paperback. £14.99.

Although the range of research undertaken by universities and colleges covers a very wide spectrum, each of the books in this Kogan Page series is narrowly focused on a particular form of research, that of small-scale 'insider research'. This is defined as research into teaching and learning which is undertaken by tutors with the specific aim of improving their teaching practice. The series is intended to be quick and easy to read, to provide starting points for research into teaching practice, and to give pointers to ways in which outcomes may be recorded and published. It aims to deal with contemporary issues affecting teachers in colleges and universities, and to include a range of research methods with suggestions for how these might be used or adapted in particular circumstances. Each book in the series shares a version of the opening and concluding paragraphs. The opening paragraph introduces a concept of insider research based on the notion of the reflective practitioner of education: this model takes the view that teachers should play an active role in constructing and reconstructing knowledge with the aim of improving teaching. 'Research' is related mainly to the rating system defined by the Higher Education Funding Council for England (HEFCE).

The text is careful not to offer a blueprint for research activity. This would be unlikely to be of practical value, given the very wide range of contexts and activities in which readers would be engaged. It seeks instead to provide pointers to how to begin reflective research activity, and to the limitations of small-scale research, and stresses the need for objectivity. The kinds of group which might be suited to study, and their particular perspectives, are listed, as are the differences between the traditions of qualitative and quantitative research methodologies in education (there is also a useful appendix which introduces the use of IT in qualitative analysis). There is a synopsis of methods for data collection and analysis.

Chapters 2 and 3 deal mainly with the changing role of the lecturer, and highlight some contemporary directions for research into teaching. This again is mostly concerned with the situation in the UK, and highlights policy initiatives such as National Vocational Qualifications (NVQs), the influence of teaching-quality assessments, and problems of semesterization. The move towards a mass education system is related to problems in teaching large groups. Aspects of research into student learning include strategies for learning and students' perceptions of learning and of assessment. The extent to which students are able to take charge of their own learning is contrasted with views about the extent of teacher guidance. Open, resource-based, and distance learning are detailed, and the relative advantages and disadvantages are discussed.

Chapter 4 deals with approaches and issues arising from vocationalization of the curriculum, again specifically related to the UK. However, the rich literature on students' learning styles and its relationship to styles of

teaching and to personality is not indicated, and the referencing might have been enhanced by the addition of several key texts in this area. The use of computer technology for the delivery of educational materials is discussed, though IT is associated only with models of interaction classified as 'surface' or 'deep', and little is said about the evaluation of learning outcomes. The culture of educational organizations, as a focus for research, is a useful contribution in Chapter 5. An explanation of the various cultures, borrowed from Charles Handy's perspective on institutional cultures, is informative. Linked with this is discussion of institutional change and the management of change.

The concluding chapter is a synopsis of the processes leading to getting research published. This deals with the process from both the author's and publisher's points of view, and offers good advice on the negotiation of contracts. Finally, there is an annotated list of publishers. For those new to publishing, this chapter provides an excellent overview.

The book is well referenced, and reading lists are helpfully annotated with comments on the scope and suitability of the texts chosen. Each chapter also suggests a number of focused research tasks: these are displayed as separate tables.

This is a small book of only six comparatively short chapters. However, as an introduction to help tutors to begin researching into aspects of their own work, it is clearly written and informative at an appropriate level. It provides sound advice, and good pointers to the kinds of research which might be undertaken by tutors, though it does focus on the research-assessment culture which is current in the UK. It will perhaps be of particular value to those who are expert in the practice of their subject but not necessarily in its pedagogy, and who are approaching formal, publishable research for the first time.

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Designing Electronic Performance Support Tools — Improving Workplace Performance with Hypertext, Hypermedia and Multimedia by G. H. and E. F. Stevens, Englewood Cliffs, NJ: Educational Technology Publications, 1995. ISBN: 0-87778-283-0. 265 pages, paperback. $39-95.

Electronic performance-support systems (EPSSs) are becoming an important mechanism for providing on-the-job, just-in-time training at appropriate points of need within both academic and industrial/commercial organizations. They are also important as a support facility within organizations which undergo dynamic change in order to meet the demands placed upon them. As the benefits of this approach become more widely realized, there is a growing demand for their use. Unfortunately, in the past there has been a distinct shortage of appropriate tools and methodologies to enable the rapid creation and application of performance-support techniques. This book is therefore a welcome publication.

The book is organized into ten chapters, a glossary, a bibliography and a subject index. The major topics covered include a discussion of human performance in relation to electronic performance support; the important constituent technologies that make up an electronic performance-support environment; the anatomy of an application; planning information structures and file structures; navigation; end-user interface design; the design and use of embedded tools; implementation techniques; hardware and software issues; and a series of case studies that deal with performance support and organizational change.

Chapter 1 starts off with a discussion of a range of background considerations relating to the need for and use of EPSS tools within organizations. An important aspect of this chapter is the mapping of generic performance-support tools onto organizational functions. In Chapter 2 the authors provide a description of various approaches to the design and development of EPSS facilities. They suggest an object-oriented approach involving rapid prototyping, and the chapter provides a useful checklist for selecting a development tool based on the characteristics of the application involved and the environment in which it exists.

Application characteristics are further discussed in Chapter 3, which goes into hypermedia and object-orientation in greater depth, while Chapter 4 deals with the essential planning issues that need to be considered as part of hypermedia design. These issues include analysis of opportunities for performance support; planning how information in an application should be organized and labelled; and selecting file structures which will be effective for the application.

Chapter 5 considers the important topic of navigation. It outlines some of the common navigational problems associated with applications and design tools. Some of the challenges that designers have to meet are discussed; they include end-user orientation; focusing users' attention; and providing contextual understanding of the information in an application. Tools available to manage these challenges are described.

Chapter 6 deals with end-user interface design for performance-support applications – primarily for screen displays. It provides a set of guidelines for creating a consistent and effective user-interface. The authors also present a nine-step systematic methodology for interface design, along with checklists for using this approach. Embedded tools to improve end-user productivity and performance are important aspects of all EPSS facilities. This issue is discussed in Chapter 7. Typical examples of some of the types of tool considered include note-taking utilities; calculation and analysis tools; and auditing tools that can be used to track users' navigation and use of facilities.

Previous chapters in the book have each presented essential design strategies for all application areas. In Chapter 8 the authors elaborate on selected guidelines for specific types of application. The three broad types of application considered are instructional, on-line reference and job task automation. The issues considered within the examples presented include optimizing navigational design; feedback; information structuring; user access; identifying what should be automated; and helping clients to define and communicate their expectations.

Chapter 9 deals with the hardware and software tools needed to create hypermedia and multimedia applications in EPSS environments. Within the context of selecting hardware and software resources, the authors consider three main perspectives: what is needed to create applications, what is required in order to run applications, and what is the best way to disseminate them. The MPC (Multimedia PC) standard is briefly discussed, and there are also some useful sections on the design implications of using digital audio and video.

The final chapter is used to present three case studies relating to EPSS and organizational change. They are rooted in the areas of claims processing in a health/medical insurance company; company reorganization to achieve an optimal information environment based on the use of EPSS; and fleet management within a large automobile leasing company. These case studies serve to illustrate the positive benefits of EPSS facilities, and the importance of understanding the interaction between EPSS tool design and organizational structure.

Nowadays, the use of EPSS facilities is starting to challenge conventional approaches to the use of computers in education and training. For those wishing to get involved in this area, this book contains some very useful tips and techniques.

Philip Barker, University of Teesside

Educational Telecommunications, 1996: Proceedings of Ed-Media/Ed-Telecom 96, edited by Patricia Carlson and Fillia Makedon, Charlottesville VA: Association for the Advancement of Computing in Education (AACE), 1996. ISBN: 1-880094-22-3. 395 pages, paperback.

It would be impossible, even if the space available here were much greater, properly to describe the contents of this weighty volume, the proceedings of Ed-Telecom 96, an international conference focusing on educational telecommunications, held in Boston Massachusetts in June this year. There are 58 full papers and 46 short papers, covering the complete range of telematics in education, everything from evaluating distance-learning programmes to creating a virtual campus. These papers were selected from over 300 presentations at this leading conference.

As with all the proceedings I have ever come across (and this, of course, is inevitable) there is good and bad. In these proceedings, however, there is very good and very bad. Many of the short papers are simply too short to tell us anything except that someone is working in such and such an area (though this can be useful in certain circumstances, I agree); others manage to put forward innovative ideas about which one would have liked to hear much more. But the real interest in this volume lies in the full papers which make up 337 of the 395 (large-size) pages. And here, the standard is even more variable. At one extreme, there are some exceptionally badly written, badly constructed descriptive pieces of the type which now makes me tear my hair out. They often open with something like: 'The use of the microcomputer to provide an integrated

learning environment for teaching a variety of disciplines has received much attention in recent years.' They then continue on the lines of : 'We did this, then we did that, and the students liked it [*positive feedback* is the correct expression], though there were a few students who had some reservations (see Figure 29 for a graphical representation).' At the other extreme, however, this volume contains some excellent analyses which reveal the real problems of distance education, and which suggest interesting solutions, as well as identifying and warning against not so obvious traps into which the novice distance teacher might fall.

The contents are not grouped by theme, and unfortunately there is no introduction to explain the thinking behind the order in which the papers appear (I could not work it out). This is surprising because the editors mention in their short preface the 22 major areas supposedly covered by the conference. But this criticism is not very significant: a glance at the list of titles (or at the list of authors at the back of the book, if one feels that is important) is all one needs in order to find the material most appropriate to one's area of activity. And anyone working in educational telematics will, for sure, find quite a lot of food for thought here even if they almost choke on some of it. So, if you are working in this field, or even just interested in it, I suggest you get an inter-library loan form as soon as possible.

Gabriel Jacobs, University of Wales Swansea

The Adventures of KC in London (five CD-ROMs) by Adrian Brockett, Arabesque Multimedia, 9 Woodland Road, Darlington, County Durham DL3 7BJ. Tel. 01325 350700.

Of all multimedia training applications, language-teaching programs are conspicuously unsuccessful. This is usually for one of two reasons. Often, they are designed by programmers without too much input from teachers, with the result that while the appearance is attractive with a variety of clever activities, the pedagogical content is low. The alternative is that they are designed by teachers with little experience of programming, and the result is that however worthy the content, the programming is dull and fails to take advantage of the opportunities offered by multimedia format. *The Adventures of KC in London* is quite exceptional in that it appears to be designed by a writer who is neither programmer nor teacher.

As a result, this program is unfriendly to use, and the language content (what little there is of it) lacks accuracy, purpose and direction.

The program is an EFL teaching application designed for use by native Arabic speakers who have completed four or five years of language instruction in schools. The material provided for evaluation consisted of a CD-ROM with a tutorial program and one out of five teaching programs or 'adventures'. The tutorial program not only explains the contents of the teaching programs and how they work, but also sets the 'scenario' which is that the crown jewels have been stolen from the Tower of London by thieves who are, for no obvious reason, the final six letters of the English alphabet. The jewels have to be rescued by KC, who is a suitcase. The adventure provided for review was number 3 in the series, *Sport in Britain*. The other four adventures are *Arriving in London*, *Shopping in London*, *The Houses of Parliament* and *The Tower of London*.

Much of *Sport in Britain* is not an adventure at all. Instead, the teaching program consists of four short texts in English, under 1,100 words in total, which appear in writing and which can be listened to. There are translation and notepad options. There is also a context icon which, when you highlight a word in the text, repeats the word and the text verbatim – quite why I have not discovered yet. There is also a facility to allow users to record any part of the text and compare their speech with that of a native speaker. The native-speaker recordings have a marked background hiss and are not performed by actors. There are questions at the end of each text, three or four questions of a gap-fill, multiple-choice or Yes/No type. When you get enough of these right, you can progress to a series of crosswords, listening and gap filling games where KC recovers the jewels if you get the answers correct. The program runs very, very slowly and there is no way of bailing out once it has started.

The real problems, however, lie in the teaching material. Four short reading texts and a handful of questions is very little indeed for a whole CD-ROM. The text itself is dull and artificial. This sort of exchange, taken from the text called 'conversation', is typical:

> Nick: Oh, I think football is much more exciting than cricket, don't you?
> Rob: Yes, I far prefer it. You can't beat a good game of football.

Nobody speaks like this in real life. Further, the writing – and the thought it represents – are sloppy. I found myself instinctively reaching for a red pen to correct it. For example:

> *Athletics and water sports have traditionally taken place in summer because of the weather.*

Floods may occur in winter because of the rain, but athletics in summer is not an inevitable consequence of heat and sunshine. The texts also include frequent factual inaccuracies. I shall confine myself to pointing out that the winners at Wimbledon do not receive large gold plates, the Charity Shield is not played between the winners of the FA Cup and the League Cup, and a member of the royal family does not always present the FA Cup. The questions on the text – and there are incredibly few of them – are ill thought out. Material for the answers is not always included in the text, and at least two multiple-choice questions have more than one possible correct answer with the result that one is marked wrong. The answers to the games appear to rely on memorization of the texts rather than ability in English. Of course, this may appeal to Arabic learners who will otherwise find the content and level of this program a great challenge.

As one of my colleagues commented on trying the program: 'If they try and learn from this sort of material in the Middle East, it's no wonder they're so bad at English.' This program will not teach anybody English, although you might enjoy playing with the games if you happen to know English already.

James Milton, University of Wales Swansea

Being Digital by Nicholas Negroponte, London: Coronet Books (Hodder and Stoughton), 1996. ISBN: 0-340-64930-5. 249 pages, paperback. £6.99.

This is quite an intriguing book from which I have often quoted material. As director of the Media Lab at MIT, its author Nicholas Negroponte should be quite well-known to anyone who has delved into or who is working in the field of digital multimedia. In this book, Negroponte attempts to popularize the digital world of computers by writing an accessible and readable pocket book that can be read as easily on a beach as it could in a library. The accessibility of the book is reflected in the fact that it has been translated into over thirty different languages.

Being Digital is organized into seven basic parts: an introduction; eighteen chapters arranged into three basic theme areas; an epilogue; an 'after words'; and an acknowledgements section.

The introduction is subtitled 'The Paradox of a Book'. Here Negroponte explains why he has committed his thoughts, ideas, comments and arguments to an 'old-fashioned book' when an electronic book (of the type described later in Chapter 5) might have been more appropriate. One of the three reasons he gives for publishing on paper rather than electronically is simply that 'there are just not enough digital media in the hands of executives, politicians, parents, and all those who most need to understand this radically new culture'.

Within the main body of the book, Part 1 deals with the fundamental nature of digital information, its importance, how it can be moved from one location to another, and the implications of shifting from an analogue (or 'atom-based') culture to a digital ('bit-based') world of information. Part 2 is devoted to end-user interfaces and human-computer interaction. It discusses numerous topics, many of which were extensively researched in the early days of the Media Lab. Some of the more important of these are interactivity, sensory richness and machine intelligence; multimodal interfaces (such as 'Put-That-There'); interaction devices; video conferencing; use of gestures; graphical persona; virtual reality; telepresence and remote manipulators; speech input/output; and intelligent interface agents. Part 3 deals with 'Digital Life'; it discusses the various ways in which 'being digital' is likely to influence our lives in the years to come. The major issues considered in this section include the post-information age; time-shifting and video-on-demand; wearable media; household robots; and email and the growing demand for and use of the Internet as a knowledge resource. Learning using LEGO/Logo systems is also discussed, as is the importance of personal computers as educational tools. According to Negroponte (p. 220), through computers, 'ten years from now, teenagers are likely to enjoy a much richer panorama of options because the pursuit of intellectual achievement will not be tilted so much in favour of the book-worm, but instead cater to a wider range of cognitive styles, learning patterns, and expressive behaviors'.

In the epilogue, Negroponte expresses some

concerns about the negative implications of the digital age – unemployment, the misuse of technology, software piracy, and so on – but is optimistic about what he believes are the four redeeming qualities of being digital: its ability to achieve decentralization, globalization, harmonization and empowerment.

Finally, in the acknowledgements section, the author gives a concise person-oriented summary of both the history of the Media Lab and of the production of *Being Digital*.

Although this book does not say anything exceptional or revolutionary, it does provide a helpful synthesis of many useful and powerful ideas relating to digital media and their use by current and future societies. Sadly, there is no bibliography, and not even so much as a URL link to a further reading list.

However, in his excellent review of the hardback version of the book (ISBN: 0-340-64525-3), Joseph (*The Computer Journal,* volume 39, number 3, 1996, page 252) suggests that *Being Digital* should be 'required reading for every computing student and professional'. I concur.

Philip Barker, University of Teesside

The Java Sourcebook – A Complete Guide to Creating Java Applets for the Web by E. Arnoff, New York: John Wiley and Sons, 1996. ISBN: 0-471-14859-8. 498 pages, paperback. £19.99.

Despite its popularity and pervasiveness, the World Wide Web (and many applications based on it) has a number of constraints. Two of the most significant of these are the limited interactivity of Web pages, and the often low responsiveness of many Web sites with respect to handling multimedia information. These limitations are inherent in the way in which client/server applications are implemented using the HTTP approach. In order to overcome these (and some of the other) limitations, Sun Microsystems introduced in 1995 the Java programming language for Web applications – and the HotJava browser. According to Sun, Java is a 'simple, object-oriented, distributed, interpreted, robust, secure, architecture-neutral, portable, high performance, multi-threaded and dynamic language'. This book provides a useful introduction and guide to the Java language and its use for the creation of Web applets.

The book is organized into four basic parts. Part 1 (the first two chapters) is the shortest; it describes how to get and install the Java development kit, run the HotJava browser (and Netscape), and visit Java-enhanced sites on the Web. Part 2 is the largest section (comprising Chapters 3 to 12) and covers the nuts and bolts of Java. Part 3 (Chapters 13 to 17) deals with building applets using a 'line-by-line' approach. Finally, Part 4 (three appendices) summarizes the reference material available in the SDK and API packages, the standard libraries for handling I/O and network communication.

Part 2, then, contains the details of the Java language itself. The early chapters in this section provide a basic introduction to Java (and object orientation), a description of how to build Java applications using an appropriate development platform (Unix, Mac or PC), and a review of Java-language basics. Subsequent chapters deal with more detailed treatments of various programming topics such as flow of control; objects and classes; interfaces; packages; managing data; handling exceptions; and threads.

Having covered the basics, the author uses Part 3 to cover the creation of applets that can be run within a Java-capable browser such as HotJava or Netscape 2.0+. The first chapter in this section provides an applet overview, and the following chapters deal with applet basics, user interfaces, graphics and multimedia. The important issues covered in these five chapters include in-line applets in HTML (the '<applet>' tag); parameter passing; alignment; the AWT display model; layout classes; containers and components; user-interface components provided by AWT; event handling; frames, windows and dialogues; drawing methods; use of images; using MediaTracker; and sound clips and animation.

Although this is a technical book, it is extremely readable, and is relatively free of typographical errors and coding mistakes. It contains lots of well-thought out examples to illustrate the points being made. In fact, anyone wanting to learn how to create dynamic, interactive Web pages will find it a useful starting point – provided they have at least some programming experience. Unfortunately, however, despite its usefulness, what this book does not do to any great extent is to point to any of the significant weaknesses of this approach to creating applets. For those wishing to follow up this issue, a useful diving-in point would be the discussion presented by Ted Lewis in the June 1996 edition

of *IEEE Computer* (volume 29, number 6, pages 8–9). Worth mentioning too, for those who are familiar with C programming, is that there is a companion book entitled *Java for C/C++ Programmers* (ISBN: 0-471-15324-9; also published by Wiley).

Philip Barker, University of Teesside

Learners on the Superhighway by Keith Yeomans, Leicester: National Institute of Adult Continuing Education (NIACE), 1996. ISBN: 1-872941-96-6. 112 pages, paperback. £6.50.

This is a report of a study-tour in North America, undertaken in 1994 by Keith Yeomans, of organizations and individuals involved in educational communications. The aim of the research was to identify areas of good practice and strategy which might be relevant to future developments in the UK and Europe.

In the opening chapter, Yeomans sets out a summary of his conclusions. Among the most important of these are that policy makers and researchers in the field should raise awareness of the educational potential of telecommunications, arrange for local and regional demand to be quantified, develop strategies to minimize costs, set up local learning networks, ensure that the communications industry make full use of cross-sectoral partnerships, and so forth. These and related suggestions are expanded in the next five short chapters.

It would be hard to find many people who would disagree with the views expressed. Who, besides the odd Luddite, would not concede that the Information Superhighway represents a new opportunity for teachers, and for students of all ages and in all locations? Yeomans does identify certain interesting differences in attitude between Europe and the USA, such as the fact that in Europe, with our public-service culture, we find it hard to understand the American commercial attitude towards using the Internet for education. And he does make some points which still need to be hammered home even though so many of us have aching arms, such as the danger that telematic education, despite its potential for wide dissemination of learning, may in practice widen the gap between the haves and have-nots. But the overall impression one has after reading this report is that one has been surprised about very little its author has said.

Although the book is 112 pages long, the body

of it ends on page 55. All the rest is given over to two appendices: Contributor Profiles, and Documents. The first is a 40-page descriptive list of North American companies, educational establishments and people contacted by Yeomans. The second is a list of books, reports and the like which he collected during the period of his research. Such lists can come in useful, but there is a great deal in them which – I am sure – nobody in the UK will ever need, and, in the case of the documents, would ever be able to obtain if they did need them, other than by contacting Yeomans personally.

The reader will have gathered that I have not been terribly convinced by the usefulness of this publication for ALT members. But it would be unfair and misleading to end my review negatively. For a start, Yeoman's pedigree as a specialist in the field is not in doubt – indeed, he is experienced, fairly well known and has done some excellent work. Certainly, a considerable amount of effort has gone into writing this report. Further, despite my reservations, some people may read it with interest, and may find it quite useful if writing about telematics in the USA, and/or to cite in learned articles (for that, all the right words and phrases are there for the taking). Finally, £6.50 is hardly expensive when compared with the price of some commercial reports which run to hundreds of pounds, which are written in clichés and platitudes calculated to provoke intense irritation, and which contain no new material at all.

Gabriel Jacobs, University of Wales Swansea

Using Activities in Training and Development by Leslie Rae, London: Kogan Page, 1996. ISBN: 0-7494-1891-5. 214 pages, paperback, £19.99.

This book catalogues and discusses the range of activities available for use in learning and training. Although it is not therefore about computer-based learning directly, I wondered whether it might act as a source of ideas or a set of guidelines for activities supported or promoted by computer-based learning technology.

There are two main sections. The first six chapters deal with factors common across all types of activities, beginning with a brief theoretical justification based on the ideas of Kolb, and Honey and Mumford, of why learning through activity can be effective. This is followed by a discussion of the practical decisions required in the planning, selection and

preparation of activities, such as ways of constituting groups and the use of instruction sheets. The rest of the section then concentrates on techniques for observing, recording and reviewing the actions of participants. We are reminded that 'in many cases as much, if not more learning emerges from a review or discussion of the activity as from the activity itself'. The section therefore considers strategies and methods for observing interactions between pairs and within groups. There is a chapter on the use of activity analysis for recording the incidence of agreed kinds of behaviour such as giving information, summarizing, and so on. All of this is presented at a firmly practical level that avoids the complexities usually introduced by texts on behaviour analysis and research methods, and is clearly pitched at practitioners rather than theorists. The last chapter in the section considers different ways of providing feedback to participants during debriefing sessions. The author identifies this as the most essential stage of all, and this chapter looks the most useful.

Section 2 consists of seven chapters describing specific types of activities. Most of these are concerned with interpersonal activities such as introductions and energizers, one-to-one activities such as role-play, group questions and discussions, and experiential activities such as T-Groups for raising sensitivity and awareness. These chapters have a common structure that includes a description of each activity, membership and timing requirements, planning and design, usage, examples and variations. There is plenty of practical guidance about different ways in which the activities can be organized and about the avoidance of possible problems. Much of this might be useful to lecturers in higher education considering alternative ways of running group tutorials, although there is little about dealing with stale and weary students, and the touchy-feely kinds of activities would be of limited use in many disciplines. There is an amusing section on how to run a bad discussion (e.g. start by going on at length with your own opinions and then interrupt and disagree with others' contributions), but then it is one thing to know the right and wrong things to do and another to apply them in practice.

Those of us interested primarily in computer-supported activities would probably turn first to the chapters on structured group activities, and case studies and simulations. Rae's only references to computers appear here, with a brief mention that simulation used to be an unwieldy matter before computers were available to present reports, statistics and other information, or to simulate more dynamic virtual worlds, or to act as analytical or communication tools. Given that many authorities now recognize that the success and effectiveness of computer-supported activities depends as much on their social and organizational context as on their supporting technology (e.g. Laurillard, 1992; Kaye 1992, pp. 14–15), Rae's practical emphasis on effective preparation and organization is appropriate. It is not a good idea to give students a computer-based activity and just leave them to get on with it. The checklists in the book might help in avoiding otherwise unforeseen difficulties, and the activity descriptions might help in the design of new activities, for example by applying the list of different kinds of documents that might be used in an in-tray activity.

Clearly the book is written from a great deal of personal experience of working with most of the activities it covers. It provides a gentle introduction to the wide range of activities available to lecturers and teachers. But in attempting to discuss learning activities in a subject-free way, independent of specific disciplines, the book tends towards far too many generalities. At the end is a list of published activity resources. The topic areas they cover, such as customer care, assertiveness, counselling, managing stress, communication and leadership, reinforced my feeling that the book is really orientated towards the development of personal and interpersonal skills for managers, trainers and the like. It is difficult to relate this to learning technology in the computer-based sense.

References

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