Book Review

Diane .Janes, Editor

Reviewed by Mary Anne Epp

This collection of short papers portrays a wide range of approaches to the implementation of technology in the elementary, high school, college and university classroom. The articles provide glimpses of practical applications in all areas of the classroom environment. The reports are written by university educators (most are professors) in many different colleges and universities in the United States. There are also three reports from other countries: Spain, the United Kingdom and Canada. Most of the articles have a research relationship and all the articles cite references to research and related literature.

Most of the writers are uncritical proponents of integration of technology into the classroom. Only Patricia Pokay and Carla Tayeh evaluate the experience of integration with some critical analysis. In their article, "Integrating Technology in a Geometry Classroom." Pokay and Tayeh point out some of the difficulties the students had in their initial introduction to the use of the technology. The difficulties retarded the focus on content in the early stages of the integrative program. John A. Swartz generates a more philosophical approach in his provocative historical piece on media literacy, "Is the RCA Dog Real?"

The majority of the articles describe technology applications in subject disciplines, such as mathematics, geometry, algebra. sciences, visual arts, language learning, writing, social studies (geography), and teacher education. Several articles discuss thematic issues. such as classroom management, behaviour modification (for children with attention deficit disorders), collaborative partnerships across jurisdictions, diversity, special needs (indirectly). student evaluation of instruction, and media literacy.

Most of the studies are descriptions of case studies of projects or programs in the practice of the educational institution. However, there is one model for computer integration by Karen Smith-Grafto and Marcy A. Blackburn in "The Computer as

a Scientific Tool: Integrating Spreadsheets into the Elementary Science Curriculum." The article, "The Dance of Change: Integrating Technology in Classrooms," by Karin M. Wiburg is perhaps the most extensive research paper in the compilation. Wiburg describes a collaborative university/public school collaborative search project with specific research questions addressing the nature of collaboration, use of personal experience by students, effectiveness of opportunities of students to use network-based materials, professional development effectiveness, and dissemination of information to pre-service and in-service teachers. Ms. Wiburg concludes that the investment in people and customized applications are essential to effective integration and will not replace the 'turnkey' approach to integrated learning systems.

Technological tools described in the articles cover a wide range of applications including generic spreadsheets, CD ROM, multimedia authoring systems, databases, the Internet, and specifically the World Wide Web. Specific programs, such as VISPRO: Grafies are included in Xavier Bornas' article from Spain ('Preventing Impulsivity in the Classroom: How Computers Can Help Teachers.') Several specific Web sites, such as the JASON Project, Kid projects, and GlobaLearn on the World Wide Web are mentioned in the Stephen Lafer article, "Audience, Elegance, and Learning via the Internet." Lafer focuses on the development of a 'real audience' for writing improvement.

The articles themselves are generally well selected by the editors to provide a wide range of ideas and specific practical applications for teaching and teacher education. However, the introduction does not provide a cohesive overview of the content. The reader must search the introduction to each article separately to determine its content and usefulness. The introductory article to the collection by D. LaMont Johnson stands alone as an editorial to the topic of technology integration. While many of the articles are generic and applicable to education generally, the Johnson's article shows a very biased American slant, belying the more international relevance of the reports in the compilation. A summary of the articles at the outset would have been useful to tie the pieces together. The book does not attempt to cover the topic comprehensively, but is rather a selective sampling of some of the approaches specific educators have tried. Articles on information skill development and integration of students with disabilities would have provided enhanced coverage. The need for developing related information competencies are absent in all but one article by Louise Hay. She hints at some strategies for developing information skills in her report. "Tailor-Made Instructional Materials Using Computer Multimedia Technology." As with many books on educational technology and specifically, the use of the Web, most of the writers in this compilation seem to take it for granted that students have the information skills necessary to understand the data they are receiving through the Web. Also missing is a treatment of integrating students with disabilities into the classroom through adaptive technology. The Index is very selective and spotty; for example,

it does not pick up the reference to the Alberta (or Canadian) projects discussed by Peter Wright in the only Canadian article in the bunch.

Structurally, the compilation is somewhat misleading. After the introduction, there are two sections named Research and General. Only the Cleborne Maddux article on "The World Wide Web and School Culture" (and primarily an opinion piece based on selected statistics) is located in the Research Section. Wiburg's "The Dance of Change", perhaps the most detailed research article in the collection, is provided in the General Section.

Generally, this is a very good book for practitioners beginning to integrate technology in their classrooms, if they do not have access to other magazines such as *Tech Trends. Computers in the Schools,* etc. The compilation is also useful for researchers looking for prototypes of research projects on integration and wishing to build on previous research. Educators who are looking for applications useful for distributed learning may find the projects useful for adaptation into the online world, although none of the articles specifically address the distributed learnmg environment.

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