

Jones, B.L., & Maloy, R.W. (1996). *Schools for an information age: Reconstructing foundations for learning and teaching*. Westport, Connecticut: Praeger. 388 pp. (Softcover).

I began *Schools for an Information Age* with high expectations. The title suggested that the book might be an ideal text for a new course I was about to teach entitled "Learning in the Information Age." In this course, we consider schools of the future and the role that new information technologies might have in reshaping learning and teaching processes. My interest is in the educative process and the need to base school reform around contemporary learning theory. This review, therefore, is in part predicated upon this perspective.

The author's thesis is that schools must be fundamentally reformed around cooperative and democratic values to meet student needs in an information age. It is important to acknowledge that the authors state in the preface that the book's structure and overall mix is somewhat unusual. I will return to this point at the end of the review; as for me the key question is do they pull it off?

The first chapter begins with a lively and thought provoking discussion on future schools. It provides some interesting historical and political anecdotes, although these are predominantly based on North American examples. A rather utopian perspective is then outlined, supported by data from the voice of 16 front line educators. The technique of using interview extracts helps to amplify many of the author's points. However, I was a little concerned that data were being given too much significance in the overall context of the book. Moreover, the selected extracts were assumed a trustworthy source of data for comparison and potential generalization. There seemed to be a contradiction in the tone of the book and the way that this material was being used.

A key section of the first chapter is devoted to developing a particular blend of constructivist theory. However, constructivism has come in for much criticism in recent years, and the links to subjective realities and post-modern theory did very little to defend the author's views against recent attacks. In fact, there was no acknowledgment of the current debate surrounding constructivism, and it is fair to say that the remainder of the book is unnecessarily limited by the rather narrow interpretation of this theory. It is unfortunate to see that constructivism, as a learning theory, is being inappropriately grafted onto what appears an extreme form of relativism.

The second chapter guides the reader through some of the problems confronting both schools and society in the 21st century. A lot is made of the unequal prospects of children in capitalist America and the role of schools in creating an economically and socially just society. I do not consider myself particularly competent to judge the post-industrial and sociological literature, but this would seem to be up-to-date. However, there were some rather obvious formatting mistakes, for example, the omission of points one to four on page 65. Furthermore, I am surprised that the work of people like Apple and Goodson does not get a mention. I am not a sociologist, but I believe the book would benefit from the inclusion of such material as it would help to present a broader and more critical perspective.

The third chapter discusses learning and teaching in schools. I expected to read a contemporary analysis of learning and teaching theory, and a provocative vision for schools in an information age. I was disappointed. The authors begin somewhat predicably by contrasting a young enthusiastic five year old beginning kindergarten, with a bored teenage student who is totally sick of school. In asking what leads to this situation, the book embarks on a rather dated and selective account of cognitive theory. For example, in discussing cognitive apprenticeship and issues related to learning in and out of school, there is no reference to the work of Resnick. Also, in using Sternberg's "triarchic theory" of mind the authors fail to make the connection to recent literature on metacognition. A great deal of literature is now devoted to metacognition and, in particular, the strategic knowledge that helps students learn how to learn. One would think that the promotion of teaching independent thinkers and life-long learners would be a key goal of future schools.

Arguably, the most significant oversight of the chapter is the lack of attention given to recent socio-cultural cognitive theory. There is a vast amount of literature based around the work of Vygotsky and much of this could have been used to support the call for more cooperative and democratic learning opportunities. This is where a too narrow focus on constructivism deprives the reader of a much richer understanding of the learning process. The work of Vygotsky is inexplicably linked with an understanding of culture, and this cognitive perspective would have been an excellent and pivotal link to material in later parts of the book.

The remaining chapters address other institutional structures that impact on school in an information age, for example, vocational, organizational, and political barriers to change. Also considered are multicultural settings and the role of science and technology in future society. I was surprised that

throughout the book relatively little space was given to new information technologies. The term information technology (IT) was used to describe recent electronic artifacts and rarely discussed in relation to wider processes and technological environments. There is a need to expand the discussion of IT to fit a more inclusive definition. Nevertheless, some pertinent questions are asked such as: Do computers facilitate creativity or merely accelerate the transmittal of old ideas? These questions are, however, addressed quite late in the book and then never fully developed.

As the transformation of schools and workplaces is a major theme of the book, one might have expected a greater discussion on the potential of Internet. It is hard to imagine a book of this title not substantially addressing the educational potential of computer-mediated-communication. On the other hand, the authors to their credit do not engage incomprehensible technobabble. There is clear acknowledgment of the nonneutrality of information technology. Although it is suggested that computers offer tremendous possibilities for the future, there are just as many reasons given to think that people will become, metaphorically speaking, glued to video display terminals. In this regard, the book contains a healthy degree of scepticism on the future impact of new information technologies on learning and teaching in schools.

In conclusion, the authors are to be commended for their attempt to synthesize a wide range of philosophical, sociological, and psychological literature. However, in so doing it is almost evitable that there will be some major omissions. Perhaps in this sense Jones and Maloy's task was a little too ambiguous. The mix of constructivism, post-modernism, post-industrialism, with more than a pinch of anecdotal data simply did not work. Hence, I did not select the book as a course text. That is not to say, however, that other educators are unlikely to find the book a stimulating and thought provoking read.

Mark Brown
Department of Educational Psychology
College of Education
Massey University
New Zealand