BARRIE BARRELL (Ed.). *Technology, Teaching and Learning: Issues in the Integration of Technology.* Calgary, AB: Detselig Enterprises, (2001). 324 pp. $28.95 (1-55059-217-3)

This book is aimed at teacher educators, school leaders and teachers. It is a good introductory text to the complex issues surrounding Instructional and Communications Technology (ICT) implementation in education, principally because of its open and enquiring stance. John Willinsky alludes to this in the book's Foreword:

> Where do we stand to get a close-up on the new, without letting what has always been critically important to our teaching and learning fall out of focus? How can we possibly get a grip on the significance of a technology that wraps our lives as tightly and completely as yesterday's newspaper once wrapped our fish and chips? Gaining insight into this ubiquitous newness is all about *points of viewing,* in my friend Ricki Goldman's memorable phrase, and this book's very plurality of perspectives may be our best hope of catching sight of both what is happening and what that happening can mean. (Barrell, 2001 p.13)

Generally the contributors have a positive take on ICT, with only Buck and de Castell, Bryson and Jensen gently contradicting the positive stance. On the whole, though, the tone of the book is provisional, thoughtful and often insightful.

In the Introduction, Barrie Barrell, the editor, sets out the questions and issues addressed by the contributors:

- What will it mean and what will it take to be considered literate in the coming decades?

- What are the most effective and interesting ways to integrate technology into teaching and learning in light of society's growing reliance and interdependence on digital technologies?

- What are the instructional philosophies and pedagogies that will guide these initiatives?

- What articulations of curricular engagements through the use of technology are being worked through, encouraged and envisioned by curricula leaders?

- How will technology enhance the radically new curriculum documents in Canada?

- What exemplars of best practice do we have in this country?

- What can we learn from efforts that go wrong and do not meet intended objectives?

The book is divided into three sections:

ISSUES AND PERSPECTIVES: This section explores five diverse dimensions of the theory regarding the use of ICT – especially computers which give access to the Internet – in education and the general approach to teaching (constructivism).

Pat Clifford and Sharon Friesen from the University of Calgary remind us that integrating technology into educational practice causes a rethinking of schooling. They also provide an overview of what schools could do with computers. Rob Cohen, a middle school teacher in an affluent New Jersey community, muses on his teaching practices with young adolescents. He gives us provocative insight into the digitally constructed worlds of teenagers. George Buck examines the historical and cyclic resistance of educators to the use of various technologies. He develops a theoretical model of the conditions necessary for the successful adoption of new technologies. Michele Jacobsen and Ricki Goldman use Margaret Attwood's *The Handmaid's Tale* as a metaphoric device to examine power relations underlying the introduction of technology into learning communities. Next is a thoughtful call by Suzanne de Castell, Mary Bryson, and Jennifer Jenson to examine the assumptions, purposes and values behind the integration of education and technology. They suggest that investigations of the commercialization of education be included in this examination and that technological pedagogy be rethought.

CASE STUDIES AND CLASSROOM USES OF ICT: This section contains four articles reporting on studies of ICT use in elementary, secondary and virtual school settings.

Heather Lotherington, Mary Leigh Morbey, Colette Granger and Lara Doan from York University's Centre for the Study of Computer Education conducted case studies in two inner city schools in Toronto to learn how the schools implemented ICT and met the requirements of provincially defined curricula. They examine professional development activities, and school philosophies and strategies to identify the most meaningful ICT teaching practices. Herb Wideman and Ronald Owston analyze three instances of ICT in teaching. They present questions and suggestions teachers can use when considering integration of ICT into their pedagogical practice. Barrie Barrell and Mary Cameron recount a grade two class's engagement with technology in a well-equipped Alberta foothills school. Bill Hunter and Rosina Smith use data from a series of interviews with teachers, parents, and students to clarify issues surrounding the evolutionary state of virtual schooling.

TECHNOLOGY LEADERSHIP AND TEACHER EDUCATION: This section includes five articles focusing on theory and practice for educational leaders: principals, teachers and teacher educators.

Dianne Yee uses her study of ICT-enriched schools in Canada, the United States and New Zealand to suggest what principals, specialist teachers and classroom teachers can do to foster the use of ICT. Lisa Kortweg playfully presents the success of the Public Knowledge Project at the University of British Columbia. That project involved pre-service teachers, teachers and the general public in the creation of knowledge of ICT use in education. Jim Greenlaw presents a sampling of on-line discussion with his graduate students that concerned issues related to the introduction of computers into elementary and secondary school Humanities and arts courses. He also provides some model lessons produced by the students. Elizabeth Murphy and Thérèse Laferrière introduce us to classroom management theory in the context of ICT through the presentation of a set of situations and reflections.

Those who are required to integrate technology into their classroom practices will find *Technology, Teaching and Learning* a useful collection. Teacher educators could use this as a text for introductory courses in ICT. The variety of issues raised, its Canadian perspective and diversity of presentation style make it ideal for the novice ICT practitioner in Canada. However, those who are already strong believers in, and users of, ICT will not be challenged.

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