



The Australian Journal of **INDIGENOUS EDUCATION**

This article was originally published in printed form. The journal began in 1973 and was titled *The Aboriginal Child at School*. In 1996 the journal was transformed to an internationally peer-reviewed publication and renamed *The Australian Journal of Indigenous Education*.

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is that I found the images at times a distraction as the paintings could be interpreted by some as a novelty. It was not until my second read that I fully understood the importance of many of the images. The images are contemporary interpretations utilising painting methods that have been commercialised from other Indigenous Australian societies using standardised imagery such as hands and animal outlines. Do Nhunggabarra traditional images exist? Perhaps a blend of historical appreciation of tree carvings and other cultural remnants could have been used, more effectively, to portray the traditional knowledge. This book is about place and knowledge yet it is only the mysticism on page 160 that is provided in an image. The reader will feel as though they want to experience, to see, to touch, to feel place. From an arm chair or a classroom a simple black and white photograph can allow the reader to experience the land that Skuthorpe walks. This is an intimate journey, yet the reader is denied the experience to witness the construct of place within an image. We need to sight to "see" it, to understand the lake, the river, the fields or Baayami's track.

In conclusion, would I recommend this book, would I buy it – Yes! Despite my criticism this book will be a wonderful teaching aide from K-12 and even university for Skuthorpe's story needs to be told for all Aboriginal Australians. Non-Indigenous Australia needs to be educated; from the Indigenist position we know this and this text will help. The Indigenous Australian should also read this wonderful book. This work is suitable as a reference for many disciplines, and should be on the shelves of all Australian school libraries.

INFORMATION TECHNOLOGY AND INDIGENOUS PEOPLE

Laurel Evelyn Dyson, Max Hendriks & Stephen Grant (Eds.)

Information Science Publishing, Hershey, PA, 2007, x+346pp, ISBN 1-59904-299-1

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Indigenous people in Australia and throughout the world have been actively participating in networked information technologies and their precursors for several decades. However, very little literature has been generated on the topic to date and for many populations IT has simply become part of the background to contemporary life, often without much consideration of its potential to transmit the dominant cultures from which it originates. In this context Dyson,

Hendriks and Grant's volume *Information technology and Indigenous people* is a significant contribution to this otherwise sparsely documented field, particularly in relation to this country.

The editors are three academics from the University of Technology Sydney who have a wealth of experience between them, particularly in encouraging the uptake of IT as an area of study by Indigenous students. They are also, unsurprisingly, largely positive and optimistic in their appraisal of IT and its potential for Indigenous peoples as are many of the authors. By comparison, some contributors are not so enthusiastic in their approach and their cautionary tales provide welcome balance in the book.

Contributions to the volume are of two types: chapters and case studies. There is substantial variation in the styles of each, from quite formal, theoretical and sometimes heavily technical articles to dialogues and more anecdotal reports that document the lived experiences of community members dealing with technological innovation. Consider, for example, the disparate potential implied by titles such as "Indigenous language use in a bilingual interface: Transaction log analysis of the Niupepa web site" and "My life with computers on a remote island". While this could be a little unsettling at first to those expecting a rigidly academic publication, it ultimately provides an effective system of counterpoint and, following a strongly Indigenous ethos, allows each author to contribute according to their own potential. The result is an evident grounding of the book that keeps Indigenous communities and their concerns at the forefront, and ensures it remains accessible and of interest to the widest possible audience.

Contributors hail from and report on a broad range of locations, including Canada, New Zealand, Malaysia, mainland Australia and the Torres Strait, Fiji, Africa, the United States of America, Spain, United Kingdom, Hong Kong, Japan and Thailand. However, most articles and reports are by or about Australians which is both a refreshing change and makes the book of special relevance locally.

The volume is divided into five sections addressing general issues: education, culture, change and communication. As might be expected, some articles could easily be allocated to a number of these rather broad categories and, at times, their distribution does seem a little arbitrary, possibly motivated by the need to physically balance the sections. But, if this and the annoying refusal to capitalise "indigenous" and "aboriginal" in specifically Australian contexts are its greatest flaws, there is little that seriously detracts from the book or limits its worth and relevance.

The sheer number of contributions (over 40) make it quite difficult to do justice to either the breadth or depth of the volume's content in a review such as this. What follows is an attempt to provide a very brief

synopsis of each section that will hopefully stimulate sufficient interest to warrant further enquiry.

"Issues and perspectives" canvasses some of the overarching concerns in relation to Indigenous people and IT and provides a frame of reference for the remainder of the volume. Authors from Canada, Australia and New Zealand consider the ownership and regulation of technology, its form and rate of adoption, and the implications these matters have for the control of Indigenous knowledge and representation of people and cultures. Questions are raised as to the role of IT as a potential instrument of colonisation, commodification and disempowerment, as well as a vehicle to independently voice Indigenous political ambitions to the world. Kamira's chapter provides a typically Māori perspective on data management based in the terms of the Treaty of Waitangi, while case studies from the Torres Strait sing the praises of the computer's impact on islanders' lives. However, Ying Ooi's review of the Orang Asli experience in Malaysia clearly finds IT innovation to be a lower order need than basic education, health and sanitation; an observation that will resonate with many.

The second section, "Technology and education", has potential to be of most interest to *AJIE* readers. Articles from the Pacific, Africa and the Americas examine the adaptation of IT to suit a range of Indigenous pedagogical traditions as well as the development of strategies to apply IT-based education appropriate to Indigenous cultural diversity across broad geographic regions. Donovan proposes a model for the implementation of IT in education in remote Australian communities while Kinuthia considers Indigenous knowledge as a resource needing to be incorporated in instructional design. The various case studies review responses to specific applications of e-learning including literacy in the Amazon, internet banking in the Torres Strait, and the development of problem-based online learning for tertiary students. The editors also report on their own implementation of prevocational training in IT for Indigenous Australian students.

The potential for IT to provide unprecedented storage, representation and communication of Indigenous cultures is the primary emphasis of the section on "Cultural preservation and revitalisation". Hughes and Dallwitz's paper describes the Ara Irititja project giving Pitjantjatjara and Yankunytjatjara people access to their own expandable cultural database on desert-proof workstations. It provides a clear contrast with Leavy's description of the commercially-oriented Digital Songlines toolkit designed using gaming software to capture Australia's Indigenous cultures for sharing with others. Later chapters and case studies focus specifically on language as the primary vehicle of culture and IT's unique capacity to capture, preserve and transmit it. There are individual reports on

projects in four Australian languages as well as others from Canada and Alaska, each reflecting the particular context and ambitions of the different peoples involved to find solutions to a common set of problems. On a rather different note, Keegan et al. provide a detailed and telling analysis of Māori language use in a bilingual web interface that has strong implications for the design of similar sites.

"Applications transforming communities" highlights the adaptation of computer systems and software for specifically Indigenous interests, although the same could probably be said for most of the volume's content. Eglash examines bead and basketry simulations used in Native American settings that simultaneously teach culture and maths, while Sugito and Kubota describe genealogical software designed on anthropological principles for use in non-Western societies. There are case studies and chapters on such varied topics as computerised brain function tests, Asian e-tourism and an international treaties and settlements database. But, perhaps the most interesting papers are those by Palmer and Turk which differ markedly in their interpretation of Geographical Information Systems – one characterising GIS in North America as a tool of cultural assimilation, the other discussing its potentially beneficial application to mapping traditional Indigenous Australian boundaries.

The final section "Linking communities and providing access" is self-explanatory. There are chapters and case studies describing technological diffusion in remote areas, wireless and UHF networks in rural Africa and Australia, and community internet access in Cape York, Redfern and Arizona. The final paper by Sioui documents how the Wendat people originally from Ontario, but forcibly dispersed as far as Kansas and Oklahoma, are surfing the globalising wave of IT to create an online virtual nation bringing about reunification and cultural revitalisation. As such, it provides a very promising note on which to end for many first nation's people who have more often suffered at the hands of colonial innovation.

Overall *Information technology and Indigenous people* makes a significant and valuable contribution to a currently limited field of scholarly investigation. While it clearly cannot be the final word on this rapidly evolving field, the diversity and quality of its content ensure it will be of great relevance to any whose interests lie in first nations and their responses to the information and communication revolution currently sweeping the world.