

International Research in Teacher Education: Current Perspectives





© 2010 Individual chapters with individual authors

All rights reserved. Apart from any fair dealings for the purposes of private study, research, criticism or review, as permitted under the *Copyright Act 1968*, no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by an means: electronic, mechanical, photocopy, recording, or any other – except for brief quotations in printed reviews – without the prior permission of the publisher.

National Library of Australia ISBN: [978-0-908244-80-5] Published in Australia by Kardoorair Press PO Box 478, Armidale, NSW 2350, Australia www.kardoorair.com.au

Cover design and artwork © Fiona Xeros

Final layout, printing and binding The Printery, University of New England Armidale, NSW 2351, Australia

Acknowledgements

We would like to acknowledge the artistic talents of Fiona Zeros who designed the cover page for this book. Fiona, an art teacher, very cleverly took our thoughts on international education and a representation of the globe and wove these into our cover design.

We also wish to acknowledge the sterling work of Rowena Smith, the copy editor who worked tirelessly on ensuring that the finished product in this book is both uniform and professional. She has used her undoubted expertise and turned our initial editing into something about which the authors and we, as editors, can be justifiably proud.

Finally, the assistance of Sharon Gallen and Kath Jaques from the UNE Conference Centre in handling finances for the book is most gratefully acknowledged.

> Warren Halloway and John Maurer Editors December, 2009

scholars with a rigorous requirement that they read all the papers prior to discussion in small groups throughout the Seminar. This book is a record of that academic rigour and will be invaluable to inform the profession and policy makers who will glean from these pages many concepts to adopt and put to practical effect.

In my role as Chancellor, I know the importance of disseminating research internationally. I commend this book and congratulate those whose work made it possible.

The Hon Dr Richard Torbay, MP Speaker of the Legislative Assembly of NSW Member for Northern Tablelands Chancellor, University of New England

Foreword

Throughout my political career and even before that I have learned that people working together on projects generally produces more powerful outcomes than individuals working on their own. This book is an excellent example of collaboration in the great collegial tradition—a group of scholars coming together to share their knowledge and research for the greater good.

John Maurer and Warren Halloway, the book's editors, have between them more than 60 years of involvement in teacher education. This experience has extended internationally to developing countries, particularly Papua New Guinea, where the appetite and need for education resources is great. Both John and Warren are Fellows of the Australian College of Educators where they have been recognised for their respective contributions to teacher education. They also both taught in small rural schools prior to moving on to academic careers initially at the Armidale College of Advanced Education and then for the past two decades at the University of New England.

This book had its genesis at the 28th Annual Seminar of the International Society for Teacher Education (ISTE) at the University of New England in 2008. The papers are a selection from research-based work that was presented at the Seminar and they represent many aspects of a discipline that is constantly under intense scrutiny. How to improve teacher education, how to prepare and educate the educators and how to achieve better results in the classroom are issues that come across my desk as a politician and are a matter of unending political debate at both state and federal level.

This debate needs to be well informed and it is through academic research, through sharing and documenting practical experience and from educators sitting together to discuss ideas that much of the progress is made. There has never been a time before in history when this kind of networking has been so accessible across continents and between people through information technology. That will continue and develop as the technology itself inevitably advances.

However, I still like the idea of people sitting together in a room to share their ideas and create friendships and professional collaborations. That is the strength of this book and of ISTE which organises these annual gatherings of international

Introduction

The International Society for Teacher Education (ISTE) had its genesis in the early 1980s when two academics involved in teacher training were returning from a traditional 'conference.' They discussed the limitations of conference presentations (including relatively short duration, limited opportunity for quality feedback to presenters, limited presentation time, and inequality of interaction among participants) and pondered the desirability of an alternative that was innovative, collegial, rigorous and supportive. A group of interested educators met at Danbury Park, England in 1981 in a meeting that had longer duration, where almost all participants brought a written paper that could be read prior to presentation and then discussed by colleagues in groups of manageable size. From then the Society has grown to the point where it has met annually on all settled continents and can claim to be truly international in membership, focus and venues.

The 28th Annual Seminar of ISTE was held at the University of New England, Armidale, Australia in April, 2008. Some 120 teacher educators participated in delivery and discussion of their research as well as discussions on relevant issues such as pedagogy and assessment. The participants presented papers on the Seminar theme "Continuing Development in Teacher Education." Following the ISTE philosophy, participants exchanged papers within small groups and read them prior to discussing each paper for about an hour. Many papers were 'publication ready' while others were 'works-in-progress.' The ISTE approach is to encourage thinking and research in an international setting aimed at improving teacher education in diverse contexts.

It would be brave editors who produced a simple classification of such papers as each has specific content, methodology and context. The papers in this volume were selected as representing current research in international teacher education. Six of the papers were first published in the *Journal of the International Society for Teacher Education* (Ajiboye and Greenberg in JISTE, Vol. 13, No. 1, 2009, and Croker, Kesianye, Stewart & Adlington, and Freak et al. in JISTE, Vol. 13, No. 2, 2009). They are reproduced here with kind permission of the Editor, Dr. Sybil Wilson and the authors. We have provided a matrix below which may help the reader to identify characteristics in the papers according to aspects of teacher education.

Panizzon's keynote address asks, "How can research inform teacher education programs?" The issues and challenges are canvassed in three research projects which point the way

towards raising standards of teacher education programs and practice. Greenberg's keynote address uses an historical approach to improvements in teacher education drawing on the United States' experience. He cites periods and movements in thinking about how teachers should be educated, referring to outstanding proponents such as Dewey, Counts, Tyler, Goodlad, Berliner and many others. Greenberg concludes, "We need to educate teachers about what others are doing around the world, and we need to integrate into our teacher education programs the kind of study and international experience that will make future educators globally competent and knowledgeable about international perspectives and developments."

It is refreshing to read McQueen's reflective paper on Vygotsky whose thinking has belatedly become better known among western education scholars. Vygotsky's contribution to the theories of learning and teaching is regarded as highly significant. He is acknowledged as a key early figure in developing a social constructivist perspective of cognitive development and advocating an associated pedagogical method and is cited as the inspiration for Bruner's notion of scaffolding. McQueen carefully traces the emergence of these key ideas in the Soviet Union during the early and middle 20th century under the political climate in which a swift transfer to the Gulag was common for dissenters from Communist orthodoxy. McQueen concludes that, "perhaps there was a type of cross-generational inheritance of child-centred and constructivist ideas about pedagogy from Dobroliubov to Ashpiz to Vygotsky."

Ibbotson et al. describe how international partnerships can be utilised to mount a professional doctorate with a base in the University of Derby, England and students in Israel. Their case study approach provides biographical data. Auh and Pegg compare educational policy development in South Korea and Australia aimed at improving standards in teacher education. They conclude that some common factors for attracting and retaining teachers in both countries are teacher salaries, teachers' social status, teacher workload, welfare, and job security.

Action research has been frequently used by teacher educators and teachers in the pursuit of quality teaching in many countries. Ajiboye reports on efforts in Botswana to stimulate interest in action research by school teachers in order to promote improvement in teaching standards. Kesianye, also from Botswana, reports on her action research efforts to change her own teaching style when teaching primary and secondary methodology student teachers. She describes the implications for changing teaching styles of student teachers during practice teaching sessions. Panizzon et al. describe how they explored Chinese and Australian students' scientific understandings in different educational contexts using a cognitive structural model (SOLO). Maxwell

relates a longitudinal project aimed at improving multigrade teaching in remote rural schools in Bhutan. The project evolved over 10 years as cohorts of Bhutanese teachers experienced six-week attachments at the University of New England, Australia and teaching experiences in small Australian rural schools. The Bhutanese teachers conducted action research projects they had prepared in Australia in their own school on their return to Bhutan.

Considerable effort has been made reviewing pre-service teacher education programs in many countries in recent years. Saunders and Crawford highlight the benefits of teamwork in undertaking pedagogical innovations in the initial teacher education program at Weber State University, in the United States. Riches and Benson remind us that "Nothing is New Under the Sun" in describing their six-year longitudinal study of research in pre-service teacher education at McGill University in Canada. They trace modifications in course—school experiences in order to build effectiveness, confidence and career relevance in their program. Campbell gives an encouraging report on an Indigenous teacher education program at the University of Lethbridge, Canada in which Blackfoot elders were respectfully integrated into the teacher education program through course delivery and mentoring of First Nation students. Freak et al. show how they developed customised research instruments for a major investigation at the University of New England, Australia into a generalist primary teacher education program with a physical education specialisation.

The most highly regarded part of pre-service programs according to student teachers is usually school experiences. Research on the practicums during teacher preparation programs is well suited to action research methods. Winsor describes an interesting project at the University of Lethbridge, Canada involving 12 Belizean teachers in a graduate program who found their individual action research projects to be a preferred approach to making a difference rather than relying on traditional ways in the classroom. An unusual report is found in Masters' account of a research project for distance education students at the University of New England, Australia who were required to undertake school experiences. The project was aimed at helping the students via a special online service (Sakai). The project involved assistance with preparation, portfolio records, electronic forums, lectures and peer communication.

Stewart and Adlington describe the changing directions of Australian distance education over the past half-century. They analyse experiences as two action researchers managing a change process in teacher education via an open source learning management system using new technologies. The revisions are sequenced through three years and were aimed at a considerable paradigm shift for both course coordinators and students.

Gregory and Smith explored common and emerging social computing tools used in universities today. They critically examine virtual classrooms involving both distance education and on-campus students.

Fletcher and Donaghy from Waikato University in New Zealand, provide us with a new view of 'training the trainers' in their study of in-service development of teacher educators. They note that in a climate of accountability, outcomes are demanded in terms of the impact of practice for teachers on student outcomes and for in-service teacher educators on teacher professional growth. Their research shows that deep learning is more likely to have an impact that is sustainable than shallow learning and short-term gains.

The trials and tribulations of beginning teachers are gathered and analysed by Harrington and Jenkins. They used an online network to monitor and support a group of beginning teachers, many of whom experienced difficulties such as finding full-time employment, isolation in remote schools and lack of professional support. The researchers conclude that "working collaboratively with beginning teachers, teacher educators and [employers] in the short-term, may address some of the frustrations experienced in their first year of practice and, in the long-term, retain their services as a professional in the field of education." Boyd et al. deal with an over-supply of graduating teachers in Australia and the prevalence of first appointments as casual teachers. Their study also uses an online support initiative with telephone interviews of primary and secondary teachers. Using the qualitative software Leximancer the researchers identified a number of themes. They conclude that, "stakeholders should share information, which will result in better supply and demand relationships within the teaching profession."

Hung et al. investigated the implementation of a learning multiple literacies component of a senior course in Hong Kong high schools. The course involved teams of school staff, industry professionals and teacher educators as guides and advisors to students as they prepared their projects based on the production of video presentations. The course opened opportunities for students with diverse talents to engage in multimodality shifts to new definition of literacies and learning, critical appraisal and reflection. Croker responds to curriculum changes with innovative approaches to teaching the traditional subject English. She critiques teacher education English teaching of literature and literacy and illustrates her ideas using multimedia activities.

Tait uses a case study approach to describe how a boy with autism in a remote rural school in Brunei was helped to modify his behaviour. Her research used a verbal

prompting strategy and functional communication training. Through these strategies the class teacher was able to bring about positive changes in the boy's communication skills. The research offers directions for teachers dealing with students with special needs. Waninga et al. report on a longitudinal UNICEF project Accelerating Girls' Education in three highland provinces of Papua New Guinea. The project sought to encourage female participation, ensure completion of formal primary schooling and deliver quality education programs. The research continues despite difficulties of isolation, conservative gender attitudes and traditional cultural mores. They conclude, "in order to encourage the girls to remain in schools, their specific physical, social, economic, spiritual and educational needs must be facilitated."

These papers have been brought together in what we believe is a comprehensive sample of contemporary international research in teacher education. The matrix below will assist the reader to navigate meaningfully through the research papers presented in this collection.

Warren Halloway and John Maurer, University of New England, Australia

Articles/Authors	Country/ies of Author/s	Country/ies of Study	Action Research	Longitudinal Research	Historical Perspective
Panizzon Keynote	Australia	Australia	1		
Greenberg Keynote	USA	USA			1
McQueen	Australia	Russia			1
Ibbotson et al.	England/Israel	England/Israel			
Auh & Pegg	Australia	South Korea/ Australia			
Ajiboye	Botswana	Botswana	1		
Kesianye	Botswana	Botswana	1		
Panizzon et al.	China/Australia	China/Australia	1		
Maxwell	Australia	Bhutan/Australia	1	1	
Saunders & Crawford	USA	USA			
Riches & Benson	Canada	Canada			
Campbell	Canada	Canada		1	
Freak et al.	Australia	Australia			
Winsor	Canada	Belize/Canada	1		
Masters	Australia	Australia			
Stewart & Adlington	Australia	Australia	1		
Gregory & Smith	Australia	Australia			
Fletcher & Donaghy	New Zealand	New Zealand			
Harrington & Jenkins	Australia	Australia			
Boyd et al.	Australia	Australia			
Hung et al.	Hong Kong	Hong Kong	long Kong		
Croker	Australia	Australia	alia		
Tait	Australia	Brunei			
Waninga et al.	Papua New Guinea	Papua New Guinea		1	

Pre-service Teacher Education	In-service Professional Development	Beginning Teachers	Special Education	First Nation	Educational Technology	Distance Education	Teaching Practicum	Curriculum Specialisation	Policy Development
	1							1	1
	1								1
	1								
			0						1
1									
1							>		
/	1							1	
	1						1	1	
/									
1		1					1		
				1					
✓								1	
						1	1	/	
1					1	1	1		
1						1	1		
1					1	1			
	1								
		1			<i>y</i>				
		1			1				
					1			1	
/					1			1	
			1						
			1	1					✓

Contents

Forewordix RICHARD TORBAY
Introductionxi WARREN HALLOWAY AND JOHN MAURER
Using Research to Inform Teacher Education Programs: What Are the Emerging Issues and Challenges?
Teacher Education: So, What Should We Do Now? Learning from the Past; Looking to the Future 19 JAMES D. GREENBERG
An Historical and Political Re-Assessment of Lev Vygotsky's Legacy for Teacher Education
Exploring the International Professional Doctorate of Educational Practice: Researching Its Impact on Practitioner, Profession, Community & Workplace 45 JULIA IBBOTSON, DAVID DAVIES, SANDRA MORGAN AND MICHAEL KREINDLER
How Teacher Policy Shaped Teacher Education in Korea: A Comparison with Australia for Selected Issues
Teachers and Action Research: The Need to Stimulate Research Interest in School Teachers in Africa
Sustaining Change of Practice Acquired through Action Research: The Case of a Teacher Educator95 SESUTHO KOKETSO KESIANYE
Exploring Students' Scientific Understandings in Different Educational Contexts Using a Cognitive Structural Model107 DEBRA PANIZZON, CHUNXIA WANG AND JOHN PEGG

Ten Years of Capacity Building of Bhutanese Multigrade Teachers: An Initial Analysis of Classroom Action Research Reports and Related Data
Maintaining Cultural Responsiveness through Pedagogical Innovations
Nothing New Under the Sun: Mitigating the Lament of Betrayal in Teacher Education
Making Teacher Education Meaningful for Indigenous Students
Continuing Development in Teacher Education through Research Using Researcher-Developed Instruments
Thinking and Doing Differently: Graduate Students' Practicums as Informative Action Research
Hands across the Ether: Preparing External Students for Professional Experience
Changing Direction with Teacher Educators in Distance Education Provision
How Virtual Classrooms Are Changing the Face of Education: Using Virtual Classrooms in Today's University Environment
In-Service Teacher Educator Pedagogy: What Are We 'Puzzling' Over?
The Reality of Beginning Teaching: Trials and Tribulations

Investigating the Experiences of Beginning Teachers Employed
Casually So as to Match Supply to Demand
JILLIAN BOYD, INGRID HARRINGTON, MARGUERITE JONES,
CHARLES KIVUNJA AND PAUL REITANO
Learning Multiple Literacies from Multimode Knowledge Representation 307
VINCENT HUNG, WINNIE SO AND ALLAN YUEN
Responding to Change in the Teaching of School English: Creating
a Design for the Future
"I Want Sausages for My Lunch!" Using Functional Communication
Training to Enhance Choice Making Behaviour
KATHLEEN TAIT
Accelerating Girls' Education in Papua New Guinea
TENG WANINGA, JAMES YOKO, BRIAN TIEBA AND WATA APINGI

Using Research to Inform Teacher Education Programs: What Are the Emerging Issues and Challenges?

Debra Panizzon Adelaide, Australia

Teacher education programs aim to provide future teachers with discipline knowledge and pedagogical content knowledge, along with pedagogical skills to ensure that all students have the opportunity to achieve their academic potential. While primary teachers develop these competencies broadly across a range of subject areas, secondary teachers are required to demonstrate solid discipline knowledge within a specialised field. Maintaining these standards of teacher education is difficult particularly when faced with shortages in specific discipline areas as is being experienced globally in mathematics and science. The dilemma is, how do we provide suitably qualified and highly competent teachers without dropping educational standards that could compromise future generations of students? In this paper the findings from a number of research projects are used to identify some key issues and challenges facing teacher educators as we attempt to provide our pre-service teachers with the best possible foundation upon which to build once they enter the workplace.

Ensuring Quality in Teacher Education

The quality of education our children receive will in part link to the knowledge, intelligence and professional skills of teachers. In turn, teacher quality depends on the processes used to select the next generation of teachers, their pre-service educational experience, the support they receive in their first few years of teaching, and their continued professional development (Wideen & Tisher, 1990). However, in the current global context of teacher shortages it is possible that each of these important criteria may be undermined by a political agenda and the necessity to have 'someone in front of the class.'

In their review of initiatives to address teacher shortages, Lonsdale and Ingvarson (2003) present a number of pertinent findings that highlight the extent of the problem globally.

 New Zealand: Primary and secondary schools have been experiencing difficulty in filling teacher vacancies since 2003. In