# RESEARCH-PRACTICE PARTNERSHIPS FOR SCHOOL IMPROVEMENT

THE LEARNING SCHOOLS MODEL



MEI KUIN, LAI • STUART MCNAUGHTON REBECCA JESSON • AARON WILSON

# Research-practice Partnerships for School Improvement



# Research-practice Partnerships for School Improvement: The Learning Schools Model

#### BY

#### MEI KUIN LAI

The University of Auckland, New Zealand

#### STUART McNAUGHTON

The University of Auckland, New Zealand

#### **REBECCA JESSON**

The University of Auckland, New Zealand

#### **AARON WILSON**

The University of Auckland, New Zealand



Emerald Publishing Limited Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2020

Copyright © Mei Kuin Lai, Stuart McNaughton, Rebecca Jesson and Aaron Wilson, 2020. Published under an exclusive licence.

#### Reprints and permissions service

Contact: permissions@emeraldinsight.com

No part of this book may be reproduced, stored in a retrieval system, transmitted in any form or by any means electronic, mechanical, photocopying, recording or otherwise without either the prior written permission of the publisher or a licence permitting restricted copying issued in the UK by The Copyright Licensing Agency and in the USA by The Copyright Clearance Center. Any opinions expressed in the chapters are those of the authors. Whilst Emerald makes every effort to ensure the quality and accuracy of its content, Emerald makes no representation implied or otherwise, as to the chapters' suitability and application and disclaims any warranties, express or implied, to their use.

#### **British Library Cataloguing in Publication Data**

A catalogue record for this book is available from the British Library

ISBN: 978-1-78973-572-7 (Print) ISBN: 978-1-78973-571-0 (Online) ISBN: 978-1-78973-573-4 (Epub)



ISOQAR certified Management System, awarded to Emerald for adherence to Environmental standard ISO 14001:2004.

Certificate Number 1985 ISO 14001



## **Contents**

List of Figures and Tables		ix
About the Authors		Xi
Foreword		xiii
Acknowled	dgments	XVI
Chapter 1 and Knowl	Ambitious Aims: Research for Solutions edge	1
	Solving the Big Five – Variability, Scalability,	
	Capability, Acceleration and Sustainability	2
	Variability	2 2 3
	Scalability	3
	Capability	<i>4 5</i>
	Acceleration	5
	Sustainability	6
	A New Approach	6
	Compelling Reasons for Having Research Embedded	
	in Practice	8
	'Real-World' Impact	8
	Increases Utilisation of Research by Practitioners	9
	Develops Research Knowledge That Cannot	
	Be Gained in Controlled Settings	9
	Addresses and Repositions the Big Five	9
	Our Contribution	10
	Evidence from a Variety of Educational and	1.0
	Policy Contexts	10
	Training of Researchers in Research-Practice	11
	Partnerships The Improvement of Valued Student Outcomes	11 11
	The Improvement of Valued Student Outcomes  The Learning Schools Model	12
	The Learning behoof would	12

Chapter 2	The Learning Schools Model (LSM)	17
	Key Concept 1: Contextualisation of Effective	
	Practice to Local Contexts	17
	Understanding Contexts	18
	Knowing the Problem in Context	19
	Why Context Matters to a Partnership	20
	Going Beyond the Local	21
	Key Concept 2: Collaborative Analysis of Data	22
	Understanding Collaborative Analysis of Data	22
	Data and Data Literacy Skills	24
	Two Case Studies	25
	Phase 1: Profiling	26
	Phase 2: Resourcing	28
	Phase 3: Sustainability	30
	Sequence of the Model	31
	The NZ Context and its Affordances	32
Chapter 3	Collaborative Data Analysis	37
	The Analysis Process	38
	1. A Focus on Both Valued Student Outcomes	
	and Practices	38
	2. Co-designed Solutions from the Analysis	40
	3. Agreed Criteria for Evaluating Hypotheses	41
	4. Pedagogical Content Knowledge	42
	Principles for Data Collection	42
	Data Fit for Purpose	42
	High-Quality Data	44
	Principles for Data Analysis and Use: An Extended	
	Example	45
	Typical Analyses: Achievement	46
	Typical Analyses: Teaching and School Data	49
	Typical Analyses: The Relationship between	
	Teaching and School Data and Achievement	
	Data	51
	Artefacts for Collaborative Analysis	54
	Caveat	55
Chapter 4	Partnerships for Design and Sustainability	57
	Partnership Purposes and Roles: Why Collaborate?	58
	Principles of Partnerships	59

	Contents	vii
	Professional Learning Communities (PLCs)	61
	PLC Setup	61
	Structure and Focus	62
	Within-Schools Sites	63
	Across-School Sites	63
	Research into the PLCs	64
	Knowledge and Skills for Collaboration	67
	Skill Set 1: Teaching Expertise and PCK	67
	Skill Set 2: Research Knowledge	68
	Skill Set 3: Leadership	69
	Skill Set 4: Analysis and Use of Data	69
	Skill Set 5: Deliberate Dialogue and Facilitation Skill Set 6: Cultural Expertise	70 71
Chapter 5	Resourcing and Professional Learning	
and Develo	opment (PLD)	73
	Why Focus on PLD to Improve Teaching Practices?	74
	PLD as Resourcing: Key Principles	75
	Key Principle One: Profiling Before Resourcing	75
	Key Principle Two: Engaging Teachers in PLD Key Principle Three: Collaborative Analysis of	76
	Data Cycles, Not Silver Bullets	78
	Key Principle Four: The Social Construction of	70
	New Forms of Expertise	79
	Resourcing as Bespoke	80
	Tensions	80
	PLD Model: Cascading Structure	81
	Mitigating the Risks	81
	The Role of School Leaders	83
	Issues with the Cascade	84
	Other Forms of Resourcing	85
Chapter 6	Sustainability of the LSM	87
	Why Is Sustainability so Important for the LSM?	88
	Designing for Sustainability: How Sustainability	
	Is Developed Through the LSM	89
	Sustainability in Phase 3	89
	What We Have Learnt from Sustainability Studies	92
	Key Outcomes	92
	School Practices	93

#### viii Contents

	School Leaders' Beliefs and Supporting	
	Structures	94
	Conditions for Sustainability	95
	Issues	96
Chapter 7	Learning to Learn	99
	Contributing to Methodology	99
	Learning about 'What Works, for Whom, under	
	What Conditions and at Scale'	100
	Our Solution: A Flexible but Robust Design	102
	Contributing to Theoretical Knowledge	106
	Example 1: Instructional Risk in the Teaching	
	of Comprehension Strategies	106
	Example 2: Explaining Digital Pedagogies	107
	By What Mechanisms Do We Learn to	
	Become Better?	109
	Thinking and Testing Ideas	110
	Feedback Loops and Associated Disposition	113
	What Do We Still Need to Learn?	114
References		117
Index		127

## List of Figures and Tables

Figures		
Fig. 1.	The Learning Schools Model Design	14
Fig. 2.	Typical Data Analysis Process	39
Fig. 3.	Reporting Template for Inquiry Projects	91
Fig. 4.	Cross-Sectional Data at Time 1 Which Shows the	
	Achievement Predicted for Each Year Level at the Start	
	and End of the Year	104
Fig. 5.	Stanine Means of Time 1–6 Cohorts against Projected	
	Baseline	105
<b>Tables</b>		
Table 1.	Digital Schools Partnership PLC Structures	65



#### **About the Authors**

Mei Kuin Lai (PhD) is an Associate Professor at the Faculty of Education and Social Work, and an Associate Director at the Woolf Fisher Research Centre, The University of Auckland. Her research focusses on research-practice partnerships to improve valued student outcomes, in particular, how collaborative analysis of data in professional learning communities and networks contribute to these improvements. She was the joint-recipient of the University of Auckland's Research Excellence Award (2015), awarded for research of demonstrable quality and impact, for her work in co-designing and co-testing the Learning Schools Model. She has published in journals like *Teaching and Teacher Education* and *Reading Research Quarterly*, where her first authored article was selected for inclusion in the International Literacy Association's edited book, *Theoretical models and processes of reading (6th Edition)*. She consults nationally and internationally, and has led or co-led large-scale and regional projects in New Zealand.

Stuart McNaughton (ONZM, PhD) is a Professor of Education at the Faculty of Education and Social Work and the former Director of the Woolf Fisher Research Centre, The University of Auckland. He is also New Zealand's Chief Education Scientific Advisor. He has published extensively on children's literacy and language development, the design of effective educational programmes for culturally and linguistically diverse populations and cultural processes in development. He is a recipient of research prizes, consults on curricula and educational interventions nationally and internationally and has a position as Distinguished Overseas Professor at East China Normal University (Shanghai). He is a member of the International Reading Hall of Fame for sustained contributions to literacy research, literacy leadership and the preparation of leaders in the literacy field through teaching. He was the joint-recipient of the University of Auckland's Research Excellence Award (2015) for his work in co-designing and co-testing the Learning Schools Model. His publications have featured in journals such as *Reading Research Quarterly*.

**Rebecca Jesson** (PhD) is an Associate Professor at the Faculty of Education and Social Work, and an Associate Director at the Woolf Fisher Research Centre, The University of Auckland. Rebecca's research interests centre on literacy learning, and on developing effective instruction for all students that leads to advanced literacy skills. Most recently this focus has extended to investigating teaching and learning processes in Pacific Nations and within digital interventions in

#### xii About the Authors

New Zealand. Rebecca has led or co-led large Learning Schools Model projects reaching over 200 schools across three Pacific nations and in New Zealand. She was the joint-recipient of the University of Auckland's Research Excellence Award (2015) for her work in co-designing and co-testing the Learning Schools Model. She has published in journals like *Teaching and Teacher Education*.

Aaron Wilson (PhD) is the Associate Dean (Research) at the Faculty of Education and Social Work, and an Associate Director of the Woolf Fisher Research Centre, The University of Auckland. He researches and writes mainly about literacy, particularly disciplinary and adolescent literacy, as well as about teacher professional learning and development. He was the joint-recipient of the University of Auckland's Research Excellence Award (2015) for his work in codesigning and co-testing the Learning Schools Model. He presents and consults both locally and internationally, working with practitioners, policy-makers and researchers including the NZ Ministry of Education, and has led or co-led high profile large-scale projects. He was a Department Head for the Literacy Leadership Department of the *Journal of Adolescent and Adult Literacy*. He has published in journals such as *Reading Research Quarterly*.

The authors wish to acknowledge the Māori name for the Woolf Fisher Research Centre, Te Pūtahi Whakatairanga Hapori Ako Angitu (The Centre for the Promotion of Successful Learning Communities).

#### **Foreword**

Research-practice partnerships (RPPs) constitute a novel and valuable model for doing educational research, one that is growing in importance and in vitality. I celebrate that shift and greatly value the information presented in this book about one successful instantiation of the RPP model. We have come a long way beyond the metaphors 'applied research' and 'translation from research to practice' that dominated educational researchers' thinking as recently as 20 years ago.

I have myself worked in those more traditional models, developing tools that proved their worth in experimental trials but then were handed off to teachers who never used them. The difference in uptake when we can provide tools to solve problems that teachers themselves nominate is enormous and deeply gratifying. Thus, I am a strong supporter. The partnership approach of developing tools in response to practitioner needs (and to the extent possible in collaboration with practitioners) is much more effective in leading to high-quality implementation, to measurable impacts and to sustainability.

The intuitive appeal of this common sense approach should not, though, blind us to the risks associated with it. The sudden popularity of the RPP model, and the consequent expansion of funding for research carried out in this tradition, threatens to transform a very good idea into a fashion or a trend. Thus the RPP label is now used for many different approaches to doing educational work in the real world, not all of which are equally authentic exemplars. We should be cautious not to let the heterogeneity of what people are calling RPPs dilute the construct and obscure the importance of the central principles, which are so well incorporated into the work presented in this volume, on the Learning Schools Model (LSM).

This model displays particularly robustly one of the basic RPP principles – that the work be done locally, with a rich understanding of the context. In the work of the Strategic Education Research Partnership (SERP; www.serp.org), with which I have been involved, we have found that approaches to an urgent problem of practice developed for a specific school district always end up being useful to and adopted by other districts, sometimes but not always with minor tweaks. In other words, as discussed extensively in Chapter Seven of this book, working locally does not mean jettisoning the potential for broader impact, or for contributing to research knowledge. But anticipating those more global contributions prematurely can undermine the local commitment.

In the SERP work we have experienced many of the tensions and challenges associated with adopting the RPP approach, some of which are brilliantly illustrated for the New Zealand context in this volume:

- SERP is committed to starting with the practitioners' definition of the problem, but sometimes find that characterisation is not helpful. For example, in our early work in the Boston Public Schools we were asked by the superintendent to 'solve' the problem of middle-grades reading comprehension. The teachers, on the other hand, characterised the challenge as academic vocabulary a much more tractable issue. We found, after many years of work, that tools to improve academic vocabulary did indeed improve reading comprehension (Jones et al., 2019), but had we started focussing on interventions for reading comprehension itself we might never have gotten there.
- The collaborative data analysis that is a core practice in the LSM is costly in time and can limit the sophistication of the analyses. An alternative model, adopted within the longstanding partnership between the Department of Early Childhood at the Boston Public Schools (DECBPS) and a team at the University of Michigan headed by Christina Weiland (Weiland, Sachs, McCormick, Hsueh, & Snow, in press) displays an alternative, in which Weiland's advanced quantitative analytic capacities are deployed to answer urgent DECBPS questions, such as whether investment in summer school for lagging students was justified. Collaboration focussed on refining the question to that BPS got the answer it needed, rather than on engaged in the actual analytic process.
- The LSM centres its activities inside schools, with a focus on professional learning and development as the lever for improvement. SERP also works inside schools, but has focussed its efforts on developing tools that are immediately useful to teachers and that have the potential to change classroom practice; many of the SERP tools are designed to 'carry the training with them,' in part because the organisation does not have the capacity to deliver professional development at large scale. Other robust RPPs have focussed much more outside schools on structural and policy issues. The Chicago Consortium for School Research, for example, and the New York City Research Alliance have access to district data and respond to district requests for specific analyses, but also develop their own questions in discussion with the district. Collaboration in these cases is characterised by regular communication and adherence to a 'no surprises' rule before findings are made public. But the basic model of educational improvement puts more emphasis on district and school policies than the RPPs that do their work mostly with teachers, inside schools. A recurrent challenge, and one that the LSM team has solved brilliantly, is the sustainability of the partnership model. In the US context, where individual districts have considerable autonomy, where the tenure of district leaders rarely lasts more than a few years, and where new leadership is free to bring in new practices and curricula, the work that is needed to keep partnerships alive across transitions is daunting, and not always successful. There are great advantages to systems of education more like New Zealand's, where there are fewer layers

between schools and central government and centralisation of curriculum and policies, which can promote a level of coherence that is rarely reached in US public schooling.

In short, this book can be read in many ways: as a primer in the advantages of RPPs as a new structure for engaging in educational research; as an analysis of the epistemological underpinnings of reliable knowledge about educational practice; as an encouraging story about educational improvement; and as a demonstration that lasting improvement in any complex system requires an unending cycle of learning how to learn.

#### by Catherine Snow, PhD

Patricia Albjerg Graham Professor, Harvard Graduate School of Education President of the American Educational Research Association (1999–2000) Chair, Committee on the Prevention of Reading Difficulties in Young Children, National Research Council, National Academy of Sciences, USA (1995–1998)

## Acknowledgments

Nāu te rourou, nāku te rourou, ka ora ai te iwi (With your basket and my basket, the people will thrive) Māori Proverb

To our school, policy, research, and community partners, and to those who support them

To our families