Christine Grima-Farrell

What Matters in a Research to Practice Cycle?

Teachers as Researchers



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ISBN 978-981-10-2085-8 ISBN 978-981-10-2087-2 (eBook) DOI 10.1007/978-981-10-2087-2

Library of Congress Control Number: 2016952229

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Printed on acid-free paper

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Inspirational defies the comprehendible in both scientific and human endeavours Stephen Hawking (The theory of everything, Film 2014)

The work of educational practitioners and researchers that strive to enhance student social, emotional and academic outcomes is truly inspirational.

What matters most in the research to practice cycle? Strives to inspire, encourage and link scientific and human endeavours to reframe research to practise knowledge and inclusive education philosophy to promote the sustained use of research to enhance meaningful education for all students.

In these welcome days of implementation science, research has to be real. There has to be a direct and rich connection between what is known and what translates from such data. In this volume, Grima-Farrell delivers exactly that balance: a triumph of deep analysis on a complex and synergistic area, namely, inclusive classrooms and schools. This is a must-read if you want to know what is happening in this challenging and compelling field and where we need to head if research is to inform daily practice.

Professor, School of Education The University of Newcastle Michael Arthur-Kelly, PhD

Much is written about the challenges education faces in bringing its research to professional practice at scale. Little of that work reflects a rigorous empirical investigation of the research to practice process. This book stands alone as a research-based account of the challenge based upon the study of multiple applied research cases each targeted at implementing an evidence-based innovation in an inclusive education setting. The essence of the book is the story of these case studies and the way the findings derived from them are employed to produce a practical model for bringing evidence-based practice to scale in inclusive education. This is truly a unique offering that 'walks the talk' of research to practice and should be read by anyone interested in better professional practice in inclusive and general education.

Associate Professor, School of Teacher Education Charles Sturt University Alan Bain

Foreword

Bridging the Research-to-Practice Gap

How does education theory find its way into practice? What hinders this movement? What might help it? How might academics and teachers, working together, not just put relevant educational theory to practical, everyday use and support ongoing professional learning but also generate new theory in ways that bridge gaps between theory and practice?

In the pages that follow, Christine Grima-Farrell explores these questions – and comes up with some answers – through a careful, detailed and accessible account of her own school-based research studies, focussing in the process, on a specific and all-too-often underused field in social research: that of educational inclusion. As readers will quickly discover, her choice of the words 'bridge' and 'gap' are not insignificant, suggesting both a willingness and a desire – as well as a not overly complicated plan and process (a bridge-building project, we might say, making use of existing skills) – for teachers and academics to come together within what is effectively a newly conceived form of *praxis*. To quote the author herself: *Teaching and research fundamentally depend on the involvement of one another for maximum benefit. The merger of the active ingredients identified through research and practice move us beyond simply imparting knowledge, to inspiring growth and transformation through the enhancement of deep multifaceted understanding.*

In the new working relationship proposed and celebrated in *What matters in a research-to-practice cycle*?, teachers stop being understood or understanding themselves as the sole exponents of practice, while academics stop being understood or understanding themselves as the sole exponents of research and theory. This is a relationship that can best be described and constructed as a *partnership of equals*, in which both the theoretical and the practical elements of teacher education are fused together and in which, importantly, the processes and practices of that fusion are also shared between academics and teachers working together. Physically, academics working within the field of education studies may still be largely based in academia; butthey are likely tofind themselves spending more time inschools–experiencing

the experiences of teachers and students, so to speak. School teachers, meanwhile, will continue to spend most of their working lives in classrooms but may also find themselves occupying working spaces more frequently inhabited by their academic colleagues. It is an approach which recognises, celebrates, develops and draws upon teachers' professionalism – and it does so in ways that go far beyond the demands of current widespread discourses of 'standards' and 'teacher competence' which have become so dominant in so many initial and continuing education programmes around the globe.

Grima-Farrell argues for an approach which invites, listens to and disseminates teachers' experiences, concerns and expertise. These key components are too often and too easily overlooked by politicians and policymakers. The kinds of partnership Grima-Farrell promotes might not happen overnight, as she wisely acknowledges, and may, at least in the first instance, rely on the efforts and determination of committed individuals. However, the potential gains in relation to professional learning, improved practice and increased positive teaching and learning experiences, will be amply and enduringly repaid.

Speeding Up the 'Slow Conversion': Re-imagining Roles

Assuming we agree with Grima-Farrell that research-based theory is of benefit to practising teachers (a view not necessarily shared, alas, by all *policy makers*), how *do* we go about making it happen and about making it happen more quickly and effectively – to use Grima-Farrell's own words, to speed up the 'slow conversion of research into practice'?

Importantly, it is the process as much as the practice of bridging the research-topractice (RTP) gap that Grima-Farrell focuses on, as she seeks not just to identify problems and possibilities but to offer examples of such bridging from her own school-based research. In doing so, she highlights for us a major cultural stumbling block, concerning the ways in which education academics and classroom practitioners themselves may have come to perceive one another and their respective roles in the research-to-practice process. A particular concern, and a major cause of the 'RTP gap', whether we work in the academy or in the school (or for some of us, in both), is a continuing misalignment within education not simply between theory and practice but between those working in universities - often perceived by teachers as the sole undertakers of research and producers of theory - and those working directly with students in school classrooms. As is clear from the pages that follow, many teachers continue to perceive education academics as experiencing life away from the 'real world' of the school and classroom, appearing to present their findings in esoteric language and hard-to-find academic journals - perhaps tending to pursue their own research interests and 'taking among themselves', with little genuine concern for their research's usefulness and implementation, rather than listening to or exploring the concerns of teachers. For their own part, many academics who would dearly love their theory and research findings to find their way into classroom practice, and who may indeed have been motivated to conduct research in the first place with this end in mind, may feel themselves frustrated in their attempts by the perceived response of a professional workforce that (for understandable reasons in these hard-pressed times) demands instant fixes to pedagogic problems, by official central and local government policy that might appear to hold education theory in disdain and by professional development courses whose focus on the practicalities of managing learning serves itself to perpetuate the RTP gap.

A particular problem here relates to the different *work experiences* of academics and teachers. Not only are academics perceived (not unreasonably) as having more time and resources to conduct research; teachers can justifiably complain that they do not have sufficient time and resources to read and engage with research and theory, to – so to speak – convert it themselves into classroom practice, and are not interested in receiving theory and research in its initial form, but rather converted already into advice for classroom practice. Drawing on her own extensive experience as a classroom teacher, Grima-Farrell rather neatly sums this up as follows:

In the schools I taught at, my colleagues and I were always rather cautious around the programs we implemented. After all, our curriculum was over-crowded and we were time poor. We struggled to be confident that we would get the right program that would benefit all the students in our class. We all struggled with this complexity.

Such pressures and uncertainties, she continues, not only made it difficult for herself and her colleagues, to convert research findings into practice, but had the added effect of rendering teachers unconfident about doing the job for themselves – one consequence of which was a lack of critical engagement with research, so that all research had the potential to be taken at the same face value:

Naively I, like many of my colleagues, didn't fully investigate the soundness of the research (although we thought we had) and we didn't fully comprehend how to critique research or why we needed to. We weren't researchers but the women and men who had 30 students in our classes all day and every day. We assumed the researchers were better armed to critically analyse research and then we would engage with the strong empirical programs that would be available to us as school based educators.

Importantly, Grima-Farrell concludes: *That myth was soon dispelled once my comprehension of research methodology began to strengthen.*

Understanding Research Methodology

The importance of knowing about research methodology - i.e. knowledge of the foundation and practices upon which research findings and understandings are developed and publicised - is one key idea in Grima-Farrell's book. This is not a matter of academics preaching to practitioners or telling them what to think and do, but rather of academics and school-based educators working together using a common language - **on an equal footing**. The process begins and ends with teachers and their classrooms and students, in what Grima-Farrell aptly refers to as an 'RTP

cycle' – one that encourages discussion not just within individual schools and school departments, but, crucially, across and between schools, so that findings are pooled and simultaneously peer assessed as part of an ever-evolving research-to-practice process. Such a relationship is exemplified in Grima-Farrell's own work, through a forensic, step-by-step account of a specific research methodology adopted while acting as an advisory academic on six school-based teacher-led projects. Her clear and detailed account of this work acts itself to provide teachers and potential school-university partnerships not only with critical knowledge with which to read and engage with the research of others but with a blueprint of how they might conduct classroom- and practice-based research themselves. This includes not only the sharing of research techniques, but also advice on analysis, dissemination and ethical issues.

Dissemination as Key

Dissemination and ongoioing reflexivity – including built-in opportunities for discussion and sharing across simultaneous case studies – are key aspects of Grima-Farrell's suggested research methodology, which she inscribes within three interrelated but clearly distinct phases: first the *exploration phase*, which focuses on 'identifying the influential school and program factors within the specific experiences of participating teachers as they implement a research-based initiative in their own school'; second the *explanation phase*, which draws on the findings of the first phase in order to 'examine more deeply how the research to practice (RTP) influences impact upon the conduct and status of the individual cases'; and third the *expansion phase* which makes use of focus groups drawn from the individual studies' participants, to (in the example analysed in the book) 'identify themes and relationships derived from the consistencies, differences and the recognition of additional factors that resulted in six different RTP experiences as identified by teachers who implemented research in their diverse school settings'.

The spiralling, evolving nature of this approach, in which research and theory are repeatedly and rigorously tested through dialogue with practice and experiences of implementation, is one that enables and indeed insists upon practical experience not simply being informed by the ongoing research project but itself informing the findings and ongoing development and dissemination of the project itself. Such a methodology takes full account of the nature of *contingency* in public education settings, and of the fact that there may be many different ways in which research and theory may or may not be helpful within the specific school or classroom or pedagogy in which it is tested. As we all know, a major problem for many schools and teachers when it comes to engagement with educational research is that it is very often presented as if it is easily, readily and universally applicable in any situation at any time. As Grima-Farrell says in relation to the specific research project on which she focuses in this book, the central aim of collaborative school-based work of this kind is to enhance our understandings of 'the multiple and complex dimensions of...

education research and practice cultures' – and a key aspect of her approach involves scaling and tailoring research, to take account of individual circumstances so as to produce an appropriate and workable 'fit'.

Developing School-University Research Partnerhips

Although What matters in a research-to-practice cycle? may be of particular interest to practitioners working in the field of inclusive education, it is by no means exclusively aimed at such a constituency, being immediately relevant and helpful to any school teacher wishing to know more about the nature and processes of educational research and to any teacher, school, higher education institution or individual academic interested in developing needs-based collaborative research studies and to the generation and testing out of new theory. Written in clear, down-to-earth English and exhibiting a wealth of accumulated experience, understanding and sympathy that enables her to engage authentically with the needs and interests of workers in both higher and compulsory education. Grima-Farrell has produced a blueprint for future reflexive, school-HEI research partnerships that has far-reaching implications both for the production of meaningful, useable educational research and theory and also in relation to reconfiguring working relationships more broadly between schools and academia. While school teacher attendance at HEI-run Masters programmes offers one site and avenue for pursuing such an agenda, I would suggest that initial teacher education programmes offer another. At a time when many education authorities and HEI providers of initial teacher education in Australia and elsewhere are addressing with some urgency an ongoing difficulty in constructively combining the practical with the more research- and theory-driven elements of such programmes, leading to re-evaluations of the respective roles of schools and HEIs in teacher education and training, Grima-Farrell's book makes itself immediately available as an accessible and invaluable resource in moving such discussions, actions and policies forward.

Institute of Education University of London London, UK Alex Moore

Preface

The focus of this book is on *how* successful and validated teaching approaches can be implemented and *sustained* to support teachers in addressing the diverse needs of individual students in our school systems.

It is embedded in a philosophy that aims to connect students and teachers through evidence-based approaches that effectively address their strengths and needs. It seeks to maximise students' potential to flourish as individuals and classroom members while acknowledging that we all experience life and learning differently. Everyone has a past and has been exposed to different teaching and learning strategies, interests, languages, cultures, strengths and challenges. It advocates for inclusion through the involvement and collaboration of stakeholders including educators, researchers, community leaders, students, parents and policymakers. It endeavours to encourage discussions on how to advance the use of research to enhance inclusive practice *and* how good practice within authentic and changing twenty-first century classrooms can inform research.

Sustaining the complex balance between research and practice in ways that integrate the knowledge and strengths of multiple perspectives can advance student engagement and achievement and their sense of belonging within diverse learning communities. Advances in research on implementing evidence-based practices for educating students with and without disabilities have generated a strong knowledge base that can underpin efforts to make classrooms and schools more inclusive. Yet despite these significant advances, there remains a significant gap between what has been proven to work in classrooms and the extent to which it has been applied and sustained to address the diverse needs of students.

This complex research-to-practice (RTP) gap is a common concern across a range of disciplines and has been discussed at length by educational researchers and classroom teachers alike. National and global education directives continue to advocate for the sustained use of research-based practices to enhance student outcomes. But still our inability to close the RTP gap has an adverse effect on the progress of inclusion in schools and our ability to effectively and efficiently respond to the needs of all students.

The book is divided into three sections which specifically focus on the sustained use of research to enhance inclusive education. The first section builds and *states the case* by identifying the concerns and complexities associated with the research-to-practice gap in inclusive education. The second section presents a detailed perspective of both research and practice paradigms. It *makes the case* by investigating the practices of six experienced educators and their efforts to empower student growth through the use and sustainment of educational practices that are embedded in research. Essential consideration of case study design is also presented in Section 2. The third and final section considers key findings from the two previous sections to propose a way forward in *building a solution* to reducing the research-to-practice model that highlights the importance of integrating the key components beneficial to reducing the RTP gap is presented in Part 3.

The primary aim of this cyclic research-to-practice model is to enhance the sustained use of validated research in school-based applications to respond to the diverse needs of all students. This research-to-practice model is also proposed as a planning tool for education systems, policy developers, school leadership and tertiary teacher educators to raise awareness of the essential connections between key RTP factors and the people implementing the initiatives, the projects themselves and the preparation required if valuable and validated research initiatives are to be successfully sustained in practice.

As national and international policies mandate that all educators be responsive to the inclusion of all students through the use of research-based practices, this book may be of particular interest to those who strive to address the needs of a diverse student population. This includes applied academics and researchers committed to research to practice, researchers moving towards practice-based studies, teachers, school and system leadership staff, policy developers and evaluators, educational psychologists and professional support agency staff.

In brief the topics covered include the need for a consistent and comprehensive approach to inclusive education that is informed by multiple perspectives. The goal is to ensure that teachers and students can successfully access validated instructional approaches that address their educational needs. This book's comprehensive approach enables readers to develop a deep understanding of the issues, successes, failures and concerns associated with the benefits and challenges of sustaining research innovations in practice. An emphasis is placed on giving traction to research endeavours and empowering educational professionals with a practical pathway to use validated research practices to enhance effective and timely instruction within the global context of inclusion. Methodological decisions and procedures are presented in detail to provide an example for future teacher researchers interested in school-based case study research.

I would like to thank the readers for their interest in this book and the dedicated teachers and researchers who became involved in this work to make a difference. Responding to this well-articulated research-to-practice gap represents the felt obligation of many. It has led to a moral and ethical response to working towards a strengths-based approach that proposes a possible pathway that links research and

Preface

practice to enhance student engagement and success. I wish you success in the progression of your research, research-based teaching and learning endeavours and in the sustained development of inclusive school communities.

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Dr Christine Grima-Farrell

Australian Catholic University Strathfield, Australia 2016

Acknowledgements

I would like to dedicate this book to my supportive and loving family – David, Andrew, Kate, Rennie, Frances, Roseanne Jody, Bernadette and the rest of my family who encouraged me to keep writing even when it took me away from them.

I would also like to acknowledge and celebrate the efforts of all families, dedicated professionals (especially Alan Bain and Sarah McDonagh), mentors and teacher participants who strive to instil a sense of belonging, courage and mastery in their children and students.

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Abbreviations

| CBA | Curriculum-based assessment |
|--------|---|
| CBAM | Curriculum-based adoption model |
| CBM | Curriculum-based measurement |
| CSR | Curriculum school reform |
| DIBELS | Dynamic Indicators of Basic Early Literacy Skills |
| DORF | DIBELS Oral Reading Fluency |
| ISF | Initial Sound Fluency |
| LNF | Letter Naming Fluency |
| NAPLAN | National Assessment Program – Literacy and Numeracy |
| PALS | Peer-assisted learning strategies |
| PD | Personal development |
| PSF | Phoneme segmentation fluency |
| RBP | Research-based programs |
| RTP | Research to practice |
| TE | Teacher education |