



Michael Hammond
with Jerry Wellington

Education Research

the basics

EDUCATION RESEARCH

Concise, engaging and accessible, *Education Research: The Basics* discusses key ideas about the nature and purpose of education research: what it can and cannot achieve, how it has been used in the past and where and how it has an impact.

Providing crucial insight into the work of education researchers, this book:

- Offers seven chapters, each representing a way of understanding the goals and methods of research conducted in the field
- Considers key thinkers in the field, such as Plato, Hirsch, Dewey, Montessori and Freire
- Explores case studies from a range of perspectives
- Provides key terms and further reading throughout

The perfect pocket resource to dip into, *Education Research: The Basics* provides accessible support for those studying education as a subject, for practitioners concerned with developing their practice and for anyone who wants to know more about education and how it is researched.

Michael Hammond leads an MA in social science research and is Reader in Education at the University of Warwick, UK.

Jerry Wellington was a Professor and Head of Research Degrees in the School of Education at the University of Sheffield, UK, and is now an educational consultant.

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EDUCATION RESEARCH

THE BASICS

MICHAEL HAMMOND WITH
JERRY WELLINGTON

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ACRONYMS AND INITIALISMS

AfL	Assessment for learning
CoP	Community of practice
ER	Educational research
ICT	Information and communication technology
IRF/E	Initiation, response, feedback, evaluation
IWB	Interactive whiteboard
MBA	Master of Business Administration
MOOC	Massive Online Open Courses
NGO	Non-governmental organisation
NPD	National Pupil Database
OECD	Organisation for Economic Co-operation and Development
PISA	The Programme for International Student Assessment
RCT	randomised control trial
SES	Socioeconomic status
VLE	virtual learning environment



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INTRODUCTION

The aim of this book is to give the reader insight into the work of education researchers. It looks at how education research is carried out; the purposes it serves; how the research literature can be read; and what kind of themes researchers cover. It is suitable for anyone studying education as a subject, for practitioners concerned with developing their practice and for the general reader who simply wants to know more about education and how it is researched.

The book is organised around a series of chapters that cover: *addressing* problems of practice; *generalising* about education; *describing and categorising* actions and strategies; *explaining and theorising* in education; *advocating* educational change. A seventh chapter looks at the contribution of education research and sets out some present day challenges. The book reads best in sequence with the final chapter providing a reflection on what has gone on before.

We now describe each chapter in more detail. This introduction gives an overview of the book. The book proper begins with Chapter 2 in which we look at research carried out by practitioners in order to address practical problems of teaching and learning. This research often falls under the banner of action research and we look at the strengths and limitations of action research as well as other approaches such as classroom study and reflective practice.

We introduce three case studies to illustrate the action research tradition and look at other approaches to practice research including lesson study and action learning. In this chapter we look too at research methods including observation, interviewing and focus groups.

In Chapter 3 we move to a very different research tradition, one offering generalisations about education very often based on the precise measurement of learning outcomes. We begin by looking at randomised control trials (RCTs), which show differences between groups who have access to an intervention and those that do not. We introduce further research methods including meta-analyses and systematic reviews, we outline how comparisons are made by measuring strength of correlation and effect sizes. We take in international comparisons in student outcomes in the work carried out by The Programme for International Student Assessment (PISA). Finally, we look at recent developments in Big Data research. Attempts to generalise about education give us a big picture but a limitation is that we can lose sight of the detail of classroom life.

In Chapter 4 we look at smaller scale studies that aim to provide this detail. We illustrate the importance of categorising what we see (e.g. observations), what we hear (e.g. classroom talk) and what we are told (e.g. interviews). Through categorising it is possible to compare and contrast different classrooms and to see the consequences of actions for teachers and students. We introduce studies on teacher questioning, classroom talk and school leadership and conclude with a note on the varied nature of teacher knowledge.

In Chapter 5 we look back at the previous chapters by discussing the different kinds of explanations put forward in education research. We recognise the contributions from different types of research tradition including: small-scale case study; practice research; large-scale meta-analysis and systematic review. Each approach comes with distinctive strengths and limitations and we argue that using a variety of approaches will give us a fuller picture. We also introduce the idea of theorising about education as a way of organising ideas around more abstract concepts. Here we discuss the different meanings given to theory and we see the benefit of theorising as offering greater transferability. Finally, we look at

interdisciplinary research. We conclude that while researchers can learn from other disciplines, education research has a distinctive concern for addressing practical problems.

In Chapter 6 we move on to look at those advocating change in how education is organised and how teachers do their work. We look at six kinds of advocacy: neoliberal; conservative; liberal; reformist, progressive and radical. The first two of these are often seen as politically conservative, sceptical of the role of the state in education and in favour of a more directed, deductive form of teaching. However, there are important differences. Neoliberals focus more on the organisation of systems and the importance of free markets, while conservatives are more interested in cultural aspects of education, in particular the protecting of a common culture that can be handed down across generations. Liberal educationalists, meanwhile, see the wider goal of education as a preparation for living a good life while reformers concentrate their arguments on developing a more appropriate curriculum, one that carries greater creativity and relevance. Progressives are concerned to recognise the rights of the child and see education as a natural unfolding while radicals draw attention to inequality in society and want education to play a role in addressing this.

Chapter 7 looks back at the book as a whole. We recognise the varied nature of education research both in terms of what is studied and the methods used to study it, but argue that education researchers have a distinctive interest in how we can help learners to go from one way of understanding culture, society or the physical world to one that is better. We reaffirm the importance of education and the value of education and set out some of the things that education research tells us. Finally, we raise six challenges for those conducting education research today.

Each chapter is organised into sections. We begin with a general introduction and a signpost to what follows. We then include sections on the key themes and add a brief summary. Within each chapter, we cite sources that will help those wanting to go deeper into particular issues but we have avoided over-referencing in order not to disrupt the text. We offer, too, a guide to further reading at the end of the chapter and here we have tried to select one or two of the more accessible texts, often ones that are freely available

online. In each chapter, including in this introduction, there are key words that are listed in an extensive glossary at the back of the book.

We have written this book as we believe education matters. Education provides opportunities for better economic prospects and allows us as individuals to make more informed decisions as to how we want to lead our lives. We hope that by reading this book you will get a better idea about education research, how to read it critically, how to conduct it intelligently and how to contribute to wider discourse. We ask questions as to the nature of educational research, what it can and cannot achieve, how it has been carried out over the years, where and why it has had an impact. We discuss some of the questions that have pre-occupied education researchers for many years such as: *What does good or effective teaching and learning look like? Why do some students achieve higher learning outcomes than others? What is special about educational research? How and why should students be assessed? What is the difference between informal and formal learning and which is more effective? Can practitioners carry out their own research? What relationship should teachers have with literature? Is there any such thing as a learning style? What does successful group work look like? Does progressive education represent a better or worse alternative to what many experience in school?* However, we are exemplifying these debates, we are not offering a comprehensive guide to each and every issue. In similar vein we cannot in a short book like this cover every context in which education takes place. We do present as wide a variety of contexts as we can, for example leadership in schools in Vietnam; classroom talk in England; early years education in Italy; the apprenticeship of tailors in Liberia; future studies in higher education in Germany. And, as far as it is natural to do so, we talk about the work of *practitioners* as well as teachers to indicate that we are interested in many different roles in education – lecturer, instructor, teaching assistant, administrator, mentor, trainer and so on – and we refer to *students* to cover early years and school aged children as well as learners in post-compulsory settings. When we refer to classrooms, these could be teaching spaces in school, seminar rooms in university or nursery settings. But we cannot cover everything. For example, we do not deal with the teaching of particular subjects; we mention, but do not say enough about

students with special needs; there is a lot more we could have said about arts education; and we have not discussed in detail the growing role of home education. We have consciously sought to include references and examples from different countries and raise the concept of decolonising education, but our references are skewed towards the literature and contexts we know best. Finally, the book describes many of the research methods that education researchers use including interviews, observation, surveys and various forms of data analysis including coding and descriptive and inferential statistics. However, it is not a comprehensive 'Research Methods' book – there are many books that offer this and some we cite in our further reading sections. We want to give you the wider picture.

Most people, certainly policy makers, have something to say about education as they have endured, or even enjoyed, considerable exposure to schooling and post-school study. By introducing some of the key debates about education and giving you insight into the tools of the education researcher, we hope this book helps you see your educational experiences, and perhaps engage in your own research project, from a wider perspective.

We would like to thank students and colleagues for their suggestions about this book and Penny Nunn for reading each chapter closely. All mistakes, and errors of omission, are, of course, our own.



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PRACTITIONERS ADDRESSING PROBLEMS OF PRACTICE

INTRODUCTION

We start with the practitioners, the teachers, lecturers, instructors, assistants, mentors and so on who make education work. Where do they fit into the field of education research? One answer is that they can be the instruments of research themselves, they can become the people who carry out research and they can use their research to assist them in their work. Such research carried out by practitioners often falls under the umbrella term of action research and in this chapter we describe action research, we discuss its strengths and the tensions that come with it and raise some of the criticisms made of it. We go on to introduce other approaches to practitioner led research and introduce some well used tools for education research and draw out some talking points along the way.

ACTION RESEARCH

When practitioners carry out their own research this is often described as action research. The term action research is thought to have been first used by Kurt Lewin in his work on improving