

# How teaching influences learning: Implications for educational researchers, teachers, teacher educators and policy makers

Adrienne Alton-Lee\*

*Iterative Best Evidence Synthesis Programme, Ministry of Education, P.O. Box 1666, Wellington, New Zealand*

---

## Abstract

This article is a tribute to Graham Nuthall's contribution to classroom research from his early experimental studies through to his recent work on theory integration. It also explains the potential of the methodology, findings and theory building in our collaborative work to make a substantial positive difference for diverse students. The article explains the significance of, and need for, research linking learning to teaching processes (a scientific realist approach to putting 'process', socio-cultural context and theory building into a new process-product paradigm). Findings of student outcomes contrary to educational goals (for example, teaching designed to enhance appreciation of cultural differences triggering racist abuse) signal the importance of research that explains the impact of teaching on learner outcomes. The article also foreshadows the implications of the work that Graham and I did for teaching, teacher education, research and educational policy. The article concludes with Graham's view that the most important contribution his work would make, would be to initial teacher education.

© 2006 Elsevier Ltd. All rights reserved.

*Keywords:* Classroom research; Learning outcomes; Teacher education; Teaching and learning; Research policy links; Process-product research

---

“As we take up the challenges of recent research we will discover that we have much more profound effects on students' abilities, ways of thinking and remembering, than we have so far imagined.”

(Nuthall & Alton-Lee, 1997, p.11)

## 1. Introduction

This tribute to Graham Nuthall is focussed on his legacy. Graham treasured the prospect of his

retirement from teaching because it promised a long-awaited and utopian time to write; time to do justice to the research in which he had been engaged for many decades. In the face of a cruel illness and time cut short, he endeavoured to communicate what the body of his thinking and his work with colleagues and teachers meant for doing much better for children in education.

I begin with a personal view of the importance and contemporary significance of Graham's early work. The focus of the article is on the implications for educational research and practice of a series of studies that we collaborated on in the three phases of the *Understanding Learning and Teaching Project*. I have been asked by a reviewer to make explicit for

---

\*Tel.: +64 4 463 8327; fax: +64 4 463 8216.

E-mail address: [adrienne.altonlee@minedu.govt.nz](mailto:adrienne.altonlee@minedu.govt.nz).

this special issue, how this collaboration proceeded and changed over time. Accordingly, I have made a personal statement in an endnote<sup>1</sup>. A further

<sup>1</sup>This endnote has been provided in response to a request from a reviewer. Graham was my lecturer in educational psychology in 1970 and 1971 when I did an undergraduate degree in education before going teaching. He asked me years later whether anything I learned had been helpful in my teaching. I responded that his lectures on human memory had been the most valuable preparation for teaching I received.

After 3 years teaching including an opportunity to do research on open plan education as a research affiliate, I began a postgraduate degree in education with a view to use the opportunity to inform my teaching.

I did a postgraduate course with Graham on research on teaching but developed the idea for the new methodology for studying learning in classrooms through the influence of philosopher of science, Brian Haig. I piloted the methodology with Ivan Snook, and then approached Graham with a request for him to be my supervisor. At first Graham was concerned that the plan to study the learning of three children only would not be sufficiently substantial for a master's thesis but he agreed.

When the data collection was completed and the analyses well underway, the potential of the work became apparent and Graham had the thesis converted to a doctoral thesis. He was particularly excited by the initial interview data and while in the US on sabbatical worked on, and corresponded about, a separate analysis of the interview data I had gathered: Nuthall, G.A., & Alton-Lee, A. (1982, August). *Measuring and understanding the way children learn in classrooms*. Teaching Research Project, Technical Report. University of Canterbury. My own work was focussed on the links between what the children experienced and what they learned. Graham required that I use a prediction strategy and made an inestimable contribution to the depth of my thinking and analysis through dedicated supervision and constant challenges.

In 1985 Professor Mick Dunkin, previous editor of *Teaching and Teacher Education* took the role of external assessor of my doctoral thesis. Mick understood my vision that the doctoral studies would be one of a series of such studies using the new methodology. He wrote in his examiner's report:

This is easily the most original Ph.D. thesis I have read. It is also one of the best. Because the study broke so much ground in classroom research, both theoretically and procedurally, and because it was so competently described, argued, implemented and interpreted, I expect that it will be influential well beyond normal expectations for a Ph.D. thesis...I expect to see a succession of studies built upon this one to form a research programme that will have a major impact on classroom research in general.

I had been working half-time at the local College of Education (in initial teacher education) during the final 2 years of doctoral completion and was appointed to the University of Canterbury in 1985 after the doctorate was accepted. The doctoral study became Phase 1 of the Understanding Learning and Teaching Project. Graham and I then set up a series of three replications of the doctorate between 1986 and 1989 funded by the then New

Zealand Social Sciences Research Fund Committee, the University of Canterbury and a series of government employment schemes that enabled us to afford research assistance (Phase 2 of ULTP). Two further replications were funded by the New Zealand Ministry of Education and reported in 1998 (Phase 3 of ULTP). Graham and I co-directed, and collaborated intensively on, these studies from 1985 until December 1993. In 1993 I took up the position of Professor of Teacher Education at Victoria University in Wellington and Graham and I collaborated by distance to complete the final reports to the Ministry of Education for Phase 3 of the ULTP through to late 1998. Graham then established the Project on Learning, a further series of studies.

account of the nature of our collaboration has been described by Greta Morine-Dershimer (2001) in the fourth edition of the *Handbook of Research on Teaching* after she interviewed both Graham and me. In this article, I highlight both the importance of the scientific realist methodology underpinning my doctoral study (Phase 1 of the Understanding Learning and Teaching Project) and the landmark significance of Graham's later writing.

In the latter part of the article I note how my subsequent work collaborating with teachers and other researchers in Educational Research Underpinning Development in Teacher Education (ERU-DITE) on two further replications attempted to strengthen the interplay between the research findings and teacher education. Throughout the article I wrestle with the profound implications of this research for educational research, policy and practice, if its transformative promise for strengthening teaching for diverse learners is to be realised.

(footnote continued)

I have interpolated an account of the links between Graham and I over the 1998–2003 period into the article between pages 25–27 in the context of a consideration of the implications of our work for teaching and teacher education.

In 2000 I took a position at the New Zealand Ministry of Education and developed a role strengthening the evidence-base underpinning policy and practice. In 2003 when Graham took a role as a quality assurer for work I was doing for the Ministry of Education, the initial hurdles of communicating across a policy-research divide became easier.

Graham continued to correspond until he died. I was indebted to Graham's wife, Jill, for her request for assistance with Graham's obituary.

In this tribute to Graham I attempt to demonstrate the cross-paradigmatic breadth, depth, brilliance and significance of his scholarship. Shortly before he died Graham sent me a letter in which he paid tribute to the significance of my contribution: 'I hope that you can understand that it is my way of following through on your original idea... With profound thanks for the stimulus of your ideas, your energy and your dedication to classroom research.'

Download English Version:

<https://daneshyari.com/en/article/374898>

Download Persian Version:

<https://daneshyari.com/article/374898>

[Daneshyari.com](https://daneshyari.com)