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Reconciling educational research traditions

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Reconciling educational research traditions

Abstract

The field of educational research encompasses a vast array of paradigmatic and methodological perspectives. Arguably, this range has both expanded and limited work done in the name of educational research. In Australia, the ascendancy of certain perspectives has profoundly shaped the field and its likely future. We (are expected to) identify ourselves in relation to particular theorists, theories, and methodologies, reconciling who we are as education academics with what we do as educational researchers.

In this paper, I explore what it might mean to reconcile seemingly incommensurate traditions. The analysis is anchored in my experience having traversed the terrain from poststructuralism to randomised controlled trials and is demonstrated through work, with colleagues, on student aspirations and teacher development. I argue that reconciling differences within educational research is critical to ensuring the strength of the field and supporting the next generation of researchers for more profound impact on schooling and society.

Keywords

Educational research; traditions; methodologies; randomised controlled trials

Introduction

Picture me, if you will, on the day of my PhD thesis defence at the University of Wisconsin-Madison in December 1990. A mess of emotions, sitting in a room with Ken Zeichner, Tom Popkewitz, Elizabeth Ellsworth, and Michael Apple (all highly esteemed academics in their respective fields), feeling privileged, nervous, and excited. A barrage of questions ensued – mostly expected and supportive, friendly even – and I felt a quietly growing sense of confidence that I would indeed make it back home for Christmas.

And then, the completely unanticipated question that caused me to draw in breath with a mixture of terror and disbelief: “How do you reconcile writing a poststructural critique of critical and feminist pedagogy with the fact that people are starving in the streets?” To reconcile in this moment, meant to justify. To account for my intellectual choices, my ambitions, my contribution, not just to the academy but to society.

In a different way, my father (a Highways Department surveyor) asked the same kind of question when he read my thesis, summarised my three-years-in-the-making Foucauldian analysis in a sentence (which was shockingly accurate), and asked why I didn’t “do something useful – like in Special Education”. It sounds harsher than I remember and, with an intellectually disabled sister, I wanted to believe he spoke from a caring place.

Not much later, upon returning to Australia, I was invited to give a seminar on my PhD at a Queensland university – my first-ever speaking engagement, apart from a couple of conference presentations. The usual seminar structure unfolded; a 45-minute presentation in which I articulated my argument (post-PhD) with a growing sense of authority over the ideas, followed by the obligatory question-and-answer session. I recall none of the questions posed. But in the post-presentation mingling, a question asked has stuck with me ever since. It was 1991, and she said, “How do you reconcile wearing lipstick with your work on feminist pedagogy?” This time, the request to reconcile meant aligning my ideas with a certain physical presentation of my self. An intellectual response came readily, drawing on Foucault’s (1988) notion of technologies of the self, and critiques of the unified rational subject (Henriques et al. 1984). But at an emotional and corporeal level, the question cut deeper such that I continue to think, while perhaps caring less, about how to style myself appropriately for different contexts – how to dress as the Radford lecturer, how to reconcile my aging body with the hip person inside!?

Over the 25 or so years since, I’ve been asked similar kinds of questions demanding that I reconcile different parts of my own work. When I was investigating the micro-practices of power relations in four different ‘pedagogical’ sites, as part of my first ARC study for example (Gore 1995, 1997, 1998), I was asked, “How is this analysis of micro-level power relations in classrooms ‘critical’?” Most recently, I have been asked,

“How do you reconcile your work on poststructural theory with your latest study involving a randomised controlled trial?”

These are all important questions to ask. They raise issues of intellectual integrity and the commensurability of theories and methodologies. They challenge us. They challenged me to clarify my thinking, to read more about the epistemological foundations of ideas that appealed, to justify my academic *raison d’être*, and to carefully consider my potential contribution. Questions like these are provocations to refine what we do and why, and to clarify who we are and want to be. But they can also function in unhelpful ways to label individuals, limit our engagement with each other’s work, fragment our field, and hamper the growth and the standing of education research. In this paper, I explore what it means to reconcile as educational researchers, a theme I address both in the following analysis of the field and in the examples I provide, drawing on my own experience.

A view of the field

As is widely acknowledged, education research encompasses a vast array of paradigmatic, theoretical, and methodological perspectives. Arguably, this range has both expanded, on the one hand, and limited, on the other, work done in the name of education research. When I first attended AERA in 1988 (New Orleans), for example, there were 11 Divisions and 85 Special Interest Groups (SIGs). For the 2018 Annual Meeting, AERA lists 12 Divisions (the addition being Division L: Educational Policy and Politics) and more than 150 SIGs.

Additions to the list of SIGs have brought important new theories, theorists, epistemologies, and methodologies to light, each with a community of scholars large enough to earn the status of special interest group (interestingly, at least ten of the additions are named for their methodological focus). However, the sheer breadth of options also contributes to a diffusion and fragmentation of the field of education. The proliferation makes it difficult to engage with, let alone attempt to see the value in, perspectives not aligned with our own. At conferences, we attend the sessions of our students, peers, and ‘heroes’/‘heroines’, rarely venturing into unfamiliar territory (see also Hayes and Doherty 2017). I do it myself.

In Australia, perhaps more than in other parts of the world and possibly because we are a smaller community of scholars, certain perspectives have risen to ascendancy in ways that have profoundly shaped the field; not only its current form but its future. Deep lines of demarcation drawn long ago, between sociological and psychological perspectives and between qualitative and quantitative research methods, seem to have been sustained here. This is so, despite growing recognition globally that these debates are somewhat old, in the sense of both longstanding and tired/tiresome (Bryman 1984; Lincoln et al. 2011; Moss et al. 2009; Whitty 2016). And yet, many of us are identified and/or identify ourselves in relation to particular theorists, theories, traditions, or methodologies, and we defend what is ‘critical’ or ‘feminist’ or ‘valid’ or ‘trustworthy’ about our work.

I doubt I am alone in sensing expectations to reconcile who we are as education academics with what we do as educational researchers, often in surprisingly unified ways. Bourdieu’s (1988) notions of the ‘empirical’ and the ‘epistemic’ individual are helpful here (pp. 21–35). The epistemic individual is how people become known through social analyses of our field; in my case, as a critical pedagogue or feminist poststructuralist or qualitative researcher, for example, while the empirical individual is the ‘real’ person, Jenny Gore. Expectations of epistemological conformity and methodological purity mean that we, the empirical individuals, end up feeling compelled to perform the epistemic self. In so doing, we restrict ourselves, excluding perspectives outside of our own.

The particular ascendancy of critical perspectives and qualitative methods in Australia means that we have a whole generation of educational researchers who can interrogate policy, deconstruct texts, craft narratives, analyse discourses, conduct interviews, and write (often poignant and beautiful) accounts of lived experience, while glazing over at the very sight of numbers. Among those of us who identify as educational researchers, I suspect less than five percent could run a regression analysis. I cannot do so myself but am grateful that I have colleagues who can. Some might say that employing quantitative forms of research means buying-in to the calculable, measurable, performative, and conservative agenda of neo-liberalism. However, as Allan Luke (2003) argues, powerful presuppositions operate to maintain this divide, including “that quantitative research necessarily travels with neoliberal reform and is antithetical to a project of social justice” and that “qualitative research is necessarily empowering, transformative and progressive, countering existing forms of technocratic hegemony and domination” (p. 93).

More confrontingly, Andrew Calcutt (2016), a UK-based academic in journalism, humanities, and creative industries, recently argued that postmodernism played a role in ‘spawning’ (not creating but spawning) the kind of ‘post-truth’ politics that led to Brexit and to Trump’s election. Calcutt posits that our intellectual arguments about multiple truths have contributed to both the endless spin of truth in politics and the media, and

to a loss of confidence in ‘evidence’ – since everything is partial. From his perspective, such arguments paved the way for the rise of ‘post-truth’, circumstances whereby objective facts are less influential in shaping public opinion than appeals to emotion and personal belief. He concludes provocatively that: “Instead of blaming populism for enacting what we set in motion, it would be better to acknowledge our own shameful part in it.” As others have argued in response (see Calcutt 2016), there’s an important distinction to be made between recognising that ‘truth’ is constructed, partial, and inextricably linked with power and the outright lies told in these political campaigns (Travis 2016). Arron Banks, the multi-millionaire who put £7m of his own money into the Brexit campaign engaged a Washington campaign strategy firm to advise Leave.EU. After the referendum, he reported: “What they said early on was, ‘Facts don’t work,’ and that’s it. The Remain campaign featured fact, fact, fact, fact, fact. It just doesn’t work. You have got to connect with people emotionally. It’s the Trump success.” And this was at a time when Trump was still only a candidate (Fletcher 2016).

In relation to educational research, we have certainly seen the rise of opinion and appeals to emotion shaping education policy, rather than rigorous evidence. One only has to consider the extent of policy-making derived from public submissions and think tank input. To what extent has the rejection of positivism and the concomitant recognition of the multiplicity and partiality of ‘truths’ contributed to the relatively low status of education research and the lack of respect for education as a field of study conveyed in policy and political circles and even within many of our own universities (Slavin, 2002)? As just one example, the endless review and regulation of teacher education (Louden 2008) arguably emanates from just such a lack of respect and trust (Murray et al. 2008).

To be clear, as someone who continues to make use of Foucault’s poststructural insights in my own work (Drew and Gore 2016; Gore and Bowe 2015; Gore and Parkes 2008), I am not reneging on the importance or value of ‘post’ traditions within education. We must continue to address how discourses function and effects of the power/knowledge nexus. But Calcutt’s provocation does give pause for thought, including thought about how we in education research can avoid being subjected to post-truth policy-making.

Embracing numbers

In this paper, I want to argue as many before me have done (Luke 2003; Moss et al. 2009; Oakley 1998, 2000) that numbers are not our enemy in education research. Moreover, I aim to demonstrate that it is possible to reconcile (“restore friendly relations between”) the kinds of emancipatory commitments many of us bring to our research with quantitative approaches to conducting that research; to reconcile emancipatory projects with post-positivist methodologies. Indeed, numbers are often the very essence of the critical projects many of us advocate in and beyond education (such as overcoming the pay gap for women, reducing Aboriginal deaths in custody, removing refugee children from detention). And they are paramount to having influence – with politicians, policy-makers, vice-chancellors, as well as with the media, the public, and practitioners (Lingard and Gale 2010; Slavin 2002; Whitty 2016).

The desire for numerical evidence cannot simply be dismissed as the evil effects of the neo-liberal regime. Rather, as Ann Oakley (2000) argued in the context of feminism, without ‘quantitative’ methods, that social movement would not have got very far. She explains that:

Knowing about the oppression of women depends on an opportunity to examine their relative positions vis-à-vis men in the labour market, the health and welfare systems, political organizations and government, and the private world of the home and domestic relations. The form such knowledge has taken [has consistently pointed] beyond how individual women feel to the ways in which women as a group are slotted into, and treated by, prevailing social and economic structures. Similar arguments can, of course, be put about other emancipatory movements and impulses, including those involving ethnic minorities, children, older people and the inequalities of the class system. Setting injustice right first requires a factual map of what has gone wrong. (p. 306)

Arguing against a retreat into ‘qualitative’ methods as providing a more democratic way of knowing, Oakley (2000) points out that many people rail against ‘quantitative’ and experimental methods on ideological grounds without understanding their role and relevance in socially critical research.

In education in Australia, quantitative research and experimental methods are often poorly understood. Indeed, I was not aware, until I became involved in one, that good quality randomised controlled trials (RCTs), the so-called pinnacle of experimental methodologies, often include qualitative methods. This is because it is insufficient, especially in a field as complex as education, to gather evidence that something ‘works’, without exploring how, why, for whom, and under what conditions. Before simply dismissing this approach as

misguided, I recommend viewing Paul Connolly's keynote address at the British Educational Research Association conference in 2015, in which he provides a succinct and persuasive overview of what RCTs are good for and, in his words, "what they're rubbish at"! Qualitative data are not simply added as a gesture toward methodological diversity. Instead, such RCTs are deliberately designed to gain meaningful qualitative insights that can be applied to the messy realities of policy and practice. Moreover such RCTs rely, in part, on the explanatory power of good qualitative evidence. Without it, there is a grave risk of what Tony Bryk (2015) refers to as the classic mistake of so many educational reform attempts, namely "implementing fast and learning slow"; that is, using weak evidence from one context and quickly applying it across whole school systems without adequate understanding of the particular conditions under which it was found to 'work'. He gives the example of small high schools in the US being associated with lower dropout rates and keeping kids more engaged at school. Certain districts then created a raft of smaller high schools, as if the building and number of students in it was the only factor! Needless to say, the results were not impressive.

The current global push for 'evidence' and 'evidence-informed practice' provides an easy target for critique, particularly in this post-truth era. But as education researchers we cannot afford to simply dismiss this discourse. We need to respond with nuanced and sophisticated evidence, informed by multiple perspectives. Otherwise policymakers and practitioners will continue to make it up for themselves. Fads will continue their reign in schools (Slavin 2002). And real change will continue to elude us.

Foucault (1985) challenged us to "know how and to what extent it might be possible to think differently, instead of legitimating what is already known" (p. 9). Moreover, as Bourdieu says of sociology (see Bourdieu and Wacquant 1992) and we can apply to education,

[W]e need to question and constantly challenge methodological prescriptions Social research is something much too serious and much too difficult that we can allow ourselves to mistake scientific *rigidity*, which is the nemesis of intelligence and invention, for scientific *rigor*, and thus to deprive ourselves of this or that resource available in the full panoply of traditions of our discipline. (p. 227)

He continues that "[W]e must, whenever possible, mobilize and put to work all of the techniques which are relevant and practically usable given the definition of the problem under investigation" (p. 277). That is the anchor I keep returning to – the problem under investigation. As I have argued elsewhere (Gore 2015), running through all of my research are commitments to improving teaching and increasing equity while supporting teachers; and doing so in ways that seek greater clarity about what we might do in education, while at the same time recognising that nothing is simple and that we must continue to problematize, everything. From my earliest work on reflection (Gore 1987) and teacher socialisation (Zeichner and Gore 1990) to the two projects I outline below, these commitments are the threads that make it possible for me to reconcile the different directions taken in my own scholarship.

In the remainder of this paper, I explore what it might mean to reconcile heavily quantitative and experimental traditions with emancipatory research endeavours oriented at equity / social justice / empowerment, and what might be gained for education research as a field from such an enterprise.

Putting multiple techniques to work

Drawing on two current programs of research in which I am working with colleagues – one on student aspirations and the other on teacher development – I want to demonstrate how different research approaches, borne of different traditions and methodologies, combine to enrich the analysis and the potential value and impact of the work. In particular, I highlight insights gained from the quantitative aspects of this work.

In so doing, I do not want to negate epistemological differences or engage in a form of naïve eclecticism. Rather, I have sought to remain open to the insights that might come from different approaches, keeping the questions/interests in the forefront, instead of prematurely narrowing the scope of the work or boundaries around the work by subscribing wholly to a tradition or a methodology as the primary driver.

Demonstrating this argument through my own recent research is not intended to deny similar kinds of work being undertaken by many other education researchers. I simply aim to demonstrate how apparently incommensurate approaches have been brought together meaningfully to (i) enrich the studies, (ii) build capacity among research team members, including future researchers, and (iii) contribute to the 'authority' and influence of the work in various social spheres; all of which I trust will enhance its legacy.

Case study 1: The educational and career aspirations of Australian school students

In the area of student aspirations, our foundational project, titled *The Educational and Career Aspirations of Australian School Students*, was designed to better understand the formation of aspirations among students in Years 3–12. The sub-title, *Understanding Complexity for Greater Equity*, signalled the contribution we wanted to make and our recognition of the work as political, with an explicit goal of increasing equity. The study, an ARC Linkage project with the NSW Department of Education, funded from 2012 to 2015, was positioned in the context of government policies to “widen participation” in higher education (Bradley et al. 2008), ensuring access for a greater proportion of the population and especially for people from targeted equity groups. Recognising complexity was intended to bring a ‘critical’ lens to the work, rather than risk uncritical definitions of ‘problems’ or simplistic ‘solutions’.

Framing the project as a large-scale, longitudinal study, informed by diverse notions of capital (Becker 1993; Bourdieu 1986) and other theoretical perspectives on equity – including feminist insights (Archer et al. 2012; Francis 1999, 2001), the work of Appadurai (2004), and social-psychological theories of development (Gottfredson 1996) – and utilising quantitative and qualitative techniques for data collection and analysis, was intended to shed light on the complex factors involved in aspiration formation and how they vary for students from different social groups. From the outset, this framing of the project opened up a whole range of possibilities, including a series of spin-off projects – funded by the Commonwealth Department of Education within its Higher Education Participation and Partnerships Program (Gore et al. 2017c), the National Council for Vocational Education Research (Gore et al. 2017a), and the National Centre for Student Equity in Higher Education (Gore et al. 2015a) – all of which carried explicit concerns for greater equity, especially for students from low SES backgrounds, for Indigenous students, and for students in regional and remote locations.

Undoubtedly, part of this subsequent funding success can be attributed to the large datasets we amassed in the original project (10,543 student surveys, 1,397 parent surveys, 1,258 teacher surveys; focus groups involving 577 students, 59 parents and carers, 152 teachers and principals) across a reasonably broad geographic area along the east coast of New South Wales, Australia. Furthermore, the project design enabled us to explore a host of demographic variables related to equity concerns – gender, Aboriginality, SES, location, language backgrounds – as well as factors relating to schooling such as prior achievement, school ICSEA, tutoring, and students’ sense of their own relative academic standing.

The statistical analysis of the quantitative data, primarily using forms of logistic regression, produced a host of significant insights (Gore et al. 2016, 2017b, 2017d, in press; Holmes et al. 2017). For example, we identified that prior achievement, in the presence of other variables, was not a significant predictor of interest in teaching as a career. This finding enabled a potentially important incursion into current policy obsessions with recruiting the ‘best and brightest’ (Gore et al. 2016). We were able to identify that nursing for girls (odds ratio = 25) (Gore et al. in press) and engineering for boys (odds ratio = 10) are the most highly gendered of occupational categories, not only in higher education but among school students as young as eight years old, highlighting the early formation of perceptions of women’s work and men’s work. On the other hand, we found that interest in science careers was not that different for boys and girls, although girls were much less likely to choose (hard) ‘core-STEM’ careers (Holmes et al. 2017). We mapped a significant drop in aspirations, in terms of both occupational prestige and interest in higher education, when students are in Year 7 (their first year in high school), thus contributing to literature on the primary to high school transition and middle years of schooling (Gore et al. 2014).

We have shared data with regional and local municipalities in a number of socio-economically disadvantaged communities where the proportion of adults with degrees is considerably lower than state averages, and yet students’ occupational and educational aspirations were not that different from the aspirations of students across our state-wide sample. This latter finding signals important work to be done in schools and communities, and through university outreach, to maintain and support aspirations rather than assume that children and young people in these communities have already circumscribed or compromised (Gottfredson 1996) on what they see as possible.

We identified that it was only among the highest-achieving students (using NAPLAN quartiles) that the aspirations for university of Indigenous and non-Indigenous students were significantly different (Gore et al. 2017e). This highlighted an aspect of the under-representation of Indigenous students – the gap between the possibility and the desirability of higher education (Gore 2017) – that requires more attention, if efforts to achieve greater parity of access to university are to succeed. These findings are elaborated in other publications, as noted above. I have touched on them briefly here to highlight important insights emerging from our analysis of the quantitative data, insights with relevance to policy, practice, and theory in relation to equity that would not have been possible without the numbers.

There is much more work still to be done with the longitudinal nature of the data as well as deeper analysis and theorising yet to come. Moreover, a vast array of caveats and limitations surround this work, the

acknowledgment of which is essential in a reflexive approach to one's research. For example, none of this work was simple, in conceptual or methodological terms – defining constructs, operationalising constructs, designing survey questions and scales, recruiting participants, preparing data for analysis, and identifying appropriate forms of statistical analysis (see for example, Albright et al. in press). Furthermore, none of the analyses provide straightforward answers for what is to be done in policy or practice; the descriptive insights do not translate neatly into normative positions. But the form of the data together with our underlying interests in equity have enabled us to test and challenge various assumptions and to construct a host of narratives, arguments, and questions, some with implications for policy, some posing theoretical dilemmas, some that simply raise more questions.

While numerical/statistical data are powerful in mapping patterns of inequality, the qualitative data and theoretical perspectives on which we are also drawing, are critical to contributing to our fundamental interest in overcoming differential outcomes for students based on class, gender, race, and so on. Demonstrably, the diverse approaches taken in the design, conduct, and analysis associated with this research agenda has strengthened the work beyond what would have been possible with a singular approach.

Case study 2: Enhancing teaching quality through Quality Teaching Rounds

Turning to the teacher development research, I venture even further into what some would consider the dark-side of empirical research, outlining the randomised controlled trial we recently completed (Gore et al. 2015b, 2017d). The 'experimental' design of RCTs is even less well understood and valued within the education research community than the kind of research outlined above. This is despite the fact that RCTs were conducted in Education *before* they were used in medical research and other fields (Oakley 1998; Torgerson and Torgerson 2001). While hundreds of RCTs have been completed in education in just the past decade (Connolly 2015), there are few examples of RCTs in education in Australia.

Despite their negative reputation among philosophers and critical scholars on the one hand (e.g., Biesta 2007; Rowe and Oltmann 2016) and (sometimes simplistic) embrace among policy-makers (and practitioners) on the other, conducting a RCT has been especially helpful in our project of supporting teachers to enhance student learning, including more equitable learning. The RCT enabled us to test and subsequently demonstrate what we (thought we) "knew," from previous studies, in ways that are now more persuasive with others. Quality Teaching Rounds (QT Rounds), as a way of teachers working with each other, using the Quality Teaching pedagogical framework to analyse and refine their individual and collective practice, was conceived by Julie Bowe and me in 2007 (see Bowe and Gore 2017). Despite ten years of activity relating to QT Rounds, with a range of positive impacts documented (Gore 2014; Gore and Bowe 2015), its availability to more teachers within and beyond NSW would remain limited without the kind of evidence made by an RCT.

With a 'waitlist' control group of schools that had access to Quality Teaching Rounds the following year, and hence addressing frequently expressed ethical concerns about one group missing out, what was most exciting in this study was that the quality of teaching for the intervention groups (two variations of QT Rounds) improved measurably, while the control group showed no change. The measures for quality of teaching were derived from classroom observations where our researchers were blinded to group allocation, meaning they were unaware if they were watching a lesson taught by a teacher in the control group or an intervention group. There was no guarantee that we would see any difference between groups. But effect sizes of 0.4 at the end of the intervention period (6 months), during which time some teachers were involved for as little as four half-day Rounds, represents a strong outcome, especially given the enormous complexity of classrooms, the multifaceted measure of teaching quality, and the range of factors that might have impacted on the results (Gore et al. 2017d). Given that our follow-up observations, six months later and in the following school year, showed sustained gains in the quality of teaching is an even more promising sign that Quality Teaching Rounds is a form of teacher development with practical (and measurable) impact. Moreover, when we removed from the analysis those groups that did not implement QT Rounds according to our protocol (a legitimate form of analysis given that one can only report if something made a difference if we know the something was done), the results were even stronger (effect size 0.5).

The rigour of the RCT with randomly assigned groups, blinded observers, baseline measures, and implementation fidelity checks enabled us to develop greater confidence in the Quality Teaching Rounds approach, which itself has strong conceptual and empirical foundations (Bowe and Gore 2017). Within a field where effects of professional development are typically limited to a single subject area (Penuel et al. 2007) or small strategy within a teacher's repertoire (Hill et al. 2013), gains in the overall quality of teaching (in terms of the intellectual quality and significance of lessons as well as the quality of learning environment) demonstrate the potential of the approach for broad capacity building, across subject areas and year levels.

These results not only strengthened claims we might want to make about the efficacy of this approach to teacher development, but the study also generated other insights with important implications. For example, with more than 1073 whole lessons observed over the course of the study, we were able to test assumptions

about the potential moderating effects of such factors as years of teaching experience and relative socio-educational advantage of schools (ICSEA). With a representative sample of teachers¹, we found no significant difference in the quality of teaching among beginning and experienced teachers and, with a diverse sample of schools², differences by school ICSEA that were so small as to be of no practical significance (Gore et al. 2017d). These results have important implications for teacher education and teacher professional learning activities, providing a solid foundation for policy recommendations about the value of investment in school-based PD.

Importantly, given the fundamental commitment to supporting teachers that we brought to this research, positive impacts on teachers and their professional lives were also reported. For example, we used psychological scales looking at effects of QTR on teacher morale and sense of recognition (Hart et al. 2000). Here, we were concerned with seeing if gains in the quality of teaching could be made without adopting the oppressive accountability regimes associated with teacher assessment that increasingly dominate in the US and UK (Cochran-Smith 2013; Day 2017; Ravitch 2016). Positive effects for the intervention groups provide such evidence (Gore et al. 2017d).

To check these kinds of impacts, we interviewed teachers to gain qualitative insights into their experience. From this analysis we determined three key mechanisms that we think were central to why the Quality Teaching Rounds approach was successful: it structures the knowledge base for teaching; it flattens power hierarchies among teachers to enhance collaboration; and, it enhances relationships to build a culture of learning (Gore et al. 2017d). We have also used a Foucauldian lens to consider the discursive, subjectification, and lived effects on beginning teachers (Gore and Bowe 2015) and, as will be reported in a forthcoming paper, on more experienced teachers. We are conducting detailed case studies of the experience in particular schools, drawing on ethnographic traditions, demonstrating among other things the impact on teachers' professionalism and the professional culture in schools (paper forthcoming). These analyses are particularly important for considering the scalability of the approach.

Rather than embracing one methodology or another, in this work the different traditions of experimental science, qualitative research and poststructural analysis have been brought together in meaningful ways. Even more diverse perspectives are possible. One colleague has started undertaking a conversation analysis, linked with ethnomethodology, to consider the fine-grained conversational moves within the professional learning communities during Quality Teaching Rounds. We are looking at implementation in small schools and the use of digital technologies for thinking about how we support teachers in contexts where professional development opportunities are often extremely limited. We are also planning to look more systematically at the impact on teachers at different stages of their careers, the sustainability of effects over a longer time period, and to see if impact on student learning outcomes can be demonstrated – the Holy Grail of teacher professional development research. As with the Aspirations work, we have really only scratched at the surface.

Summary

We have gathered extensive quantitative and qualitative data in both programs of research. Although the major funding period has ended, the datasets we have generated on student aspirations and on Quality Teaching Rounds are ripe for further analysis, involving diverse theoretical and methodological approaches. Rather than having 'swapped teams', 'chosen a different side' or 'sold out', I can easily reconcile an embrace of quantitative and experimental approaches in continuing to work toward greater quality and equity, as commitments that have been consistent throughout my career (Gore 2015). The results I have summarised above are indicative of the enriched understanding and contributions to the field connected with this diversification of approaches.

Transforming education research

Understanding and reconciling differences among educational research traditions is critical to ensuring the strength of the field and shaping the next generation of researchers to have, hopefully, a more profound impact on schooling. Accelerating gains in social justice outcomes of the kind we have been pursuing as a nation at least since the launch of the Disadvantaged Schools Program in 1974 (Connell et al. 1992), may well require that we become more open to learning from each other, working across perceived and actual differences. We

¹ Sample of participating teachers: 75% female; 9% from language backgrounds other than English; average age 38 years; 20% with less than four years' teaching experience; 25% with more than 16 years' teaching experience.

² Sample of participating schools: both primary and secondary from urban and rural areas; 2% to 92% students from language backgrounds other than English; 0% to 62% Indigenous students; ICSEA from 766 and 1209, where median is 1000.

can begin by listening to each other, really listening – with humility, reciprocity, and caution (Parker 2006) – in the process of exploring what might be possible with new forms of collaboration.

What social scientists ... must do is work to build and strengthen institutional mechanisms against isolationism, against all forms of scientific intolerance, mechanisms capable of promoting fair communication and a more open confrontation of ideas, theories, and paradigms. ... What matters... is the establishment of relations between social scientists that make possible a greater unification of the field ... and, most importantly, a *unification respectful of diversity*. (Bourdieu, as cited in Wacquant 1989, p. 52)

I want to emphasise that I am *not* advocating a narrow or weak project of technocratic research on what works. Indeed, I am often reminded of something Bourdieu said in a lecture I had the privilege of attending while in Madison studying for my PhD. It went something like “in social science, we should never attempt to be more clear than reality”. My interest *is* in intensifying the value of our collective work as education researchers and enhancing its quality, whether interested in PISA results across nations, the negative consequences of the marketization of education, supporting LGBTIQ students and teachers, improving outcomes for Indigenous students, exploring literacy and numeracy effects of specific interventions, or demonstrating the impact of teacher education. This agenda will require rigorous techniques of data collection and analysis, including strong statistical support, as well as powerful theoretical insight.

When Michael Apple asked how I reconcile my poststructural analysis of pedagogical discourses with the harsh realities of living in poverty, I replied that none of us should be in the academy if we didn’t feel there were important contributions to be made in the intellectual work we do. Twenty-seven years later, I feel more grateful for his question than I did at the time. The demand to reconcile, which I have only begun to explore here, has potential to play a significant role in transforming educational research. I trust I have at least demonstrated the importance of not foreclosing on how questions might be approached; demonstrated how multiple “truths” might play a part in countering rather than promulgating post-truth developments in our field. Being clear about how our work matters within and beyond our own academic circles is, surely, fundamental to not only making a greater contribution but also enjoying and sustaining our scholarship. Our contributions, however defined, are likely to be greater if we can reconcile some of the differences that have divided and weakened our field.

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