THE NEW LIVES OF TEACHERS: RESEARCH WHICH INFLUENCES

CHRISTOPHER DAY

The University of Nottingham

Abstract: The paper focuses upon external and internal challenges for the research and teaching communities – the perils as well as excitements of border crossings in research conducted on and in the policy and practice contexts which are associated with the new lives of teachers. The paper is organised in four parts. Part 1 deals with the scholar-practitioner dilemmas faced by university teachers and researchers. Part 2 raises issues about knowledge production in which the researcher is also a change agent. Part 3 focuses, briefly, upon what research tells us about key areas of importance which affect the work and lives of teachers in schools and the nature of professionalism which those who conduct research with teachers need to understand if they seek to influence them, directly or indirectly. Part 4 ends the address by focusing upon research in education, why we do what we do in the ways that we do it.

Key words: scholar-practitioner dilemmas of university researchers, researcher as change agent – knowledge production of a different kind, research knowledge about teachers' work and lives of teachers, educational research obligations

Introduction

Despite a good deal of rhetoric, there remain discontinuities between research and teaching and researchers in institutions of higher education and teachers in schools. Finley's (2005) metaphor of 'border crossings', together with Tony Becher's (1989) metaphor of 'tribes and territories' provide vivid illustrations of the current separation cultures both between university researchers and between researchers and teachers. In addition, the environments in which teachers teach and in which research in higher education is conducted have become more problematic as so called neo liberal, 'performativity', results driven agendas have invaded and changed the worlds of work, threatening hard won and treasured practices and professional identities. In academia, this can be seen especially through the creeping erosion of time to conduct research, as bureaucratic procedures continue

to increase; through the rise of research funding which is tied to short term government agendas in some countries; and, in others, the imposition of national Research Assessment Exercises through which the relative quality of research and the research environments of university departments are judged in the UK and funding distributed accordingly, social citation indexes and judgements of research worthiness based upon evidence of impact on the user communities.

This paper will, then, focus upon external and internal challenges for the research and teaching communities – the perils as well as excitements of border crossings in research conducted on and in the policy and practice contexts which are associated with what I call the new lives of teachers.

Different Worlds: Reflections on a Career Journey

I want to begin by describing, briefly, my own career journey as a means of illustrating the different worlds in which teachers, teacher educators and researchers inhabit and which separate, as a point of departure for considering the challenges which those who wish to influence others face. When I began working as a school teacher my primary concern was to educate my pupils. In order to do so, I was reflective about my teaching and drew upon documents relevant to children's learning, teaching approaches and curriculum. I had not heard about research, nor did I feel the need to read about it, beyond what was reported in the professional and educational journals to which I subscribed. My world, then, was the world of the child in the classroom. It was in this world that I sought and found my professional fulfilment. Teaching was something which I had always wanted to do.

When I became a teacher educator in a College of Education the boundaries of my world were extended and my roles became more complex. I now had responsibilities for preparing students for their work as teachers and, so, began to drawn upon the work of those who wrote and conducted research about this as well as continuing to teach and liaise with schools and teachers in which students conducted their practicum. I also began to conduct my own small scale research and to write and publish this. I had entered a different world. Finding professional fulfilment became more challenging, more uncertain in the multiple identities which I now constructed. I was a member of a different tribe, occupying a different, more contested, territory, positioned uneasily between the territory occupied by teachers and the territories occupied by researchers.

When I moved from being a teacher educator to becoming a Local Authority (School District) Schools Inspector, I found myself moving in yet another territory, this time of policy development and implementation. This world, too, had its own particular set of values, norms and expectations. There was a more limited time for considering the ontological and epistemological ambiguities or uncertainties which had characterised my time as a teacher educator. Indeed, these words were not a part of the language of this tribe. I became more accountable for my decisions to a greater range of stakeholders. What I did, the way I spent my time, was also subject to more scrutiny. My pattern of working changed so that I had "office hours"

which were dictated by the service needs of schools during the day and teachers' development in the evenings and, often, weekends. I had less choice in how I spent my time. I was able to remain reflective and encourage others to learn in different ways but the pace of policy development and implementation and the intensity of demands from different stakeholders meant that the time and opportunity for reading and conducting research was squeezed.

When, finally, I began to work in a university, a different world again, I found it amazing that colleagues did not come into work every day, that they did not keep regular office hours and that there was not one but several tribes, each of which had its own traditions, language, ways of being, and perspectives on teachers' worlds; and each of which occupied and fiercely guarded its own territory. There were only a limited number of, usually well patrolled, 'border crossings' which allowed for the trading of ideas, methods of inquiry and the occasional collaborations between the academic members of each tribe and even fewer for the kinds of regular dialogue and knowledge exchange with policy makers and practitioners which might lead to influence them.

The paper is organised in four parts. Part 1 focuses upon the scholar-practitioner dilemmas faced by university teachers and researchers. Part 2 raises issues about knowledge production in which the researcher is also a change agent. Part 3 focuses, briefly, upon what research tells us about key areas of importance which affect the work and lives of teachers in schools and the nature of professionalism which those who conduct research with teachers need to understand if they seek to influence them, directly or indirectly. Part 4 ends the address by focusing upon research in education, why we do what we do in the ways that we do it.

PART 1: THE WORLDS OF UNIVERSITY RESEARCHERS: SCHOLAR-PRACTITIONER DILEMMAS

Researchers in higher education live in uncertain times. Their work has become more intensified and diverse, with more demands from government and the media for better 'value for money', accompanied by calls for research to be 'useful' to and used by practitioners. As a term, evidence based as against research informed knowledge is now the new currency among policy makers as an acceptable means of creating new, useful understandings of schools, children, teachers and teaching. The ambiguities, provisionality and inaccessibility by others of much research conducted in universities may result in the very people and organisations whom it seeks to influence regarding it as increasingly irrelevant to their needs.

In a stringent critique of educational research traditions and practices in the UK, which itself has been the subject of critique by some academic colleagues, David Hargreaves, then professor of education at the University of Cambridge, claimed that:

The £ 50 - 60 million we spend annually on educational research is poor value for money in terms of improving the quality of education in school. In fundamental

respects the teaching profession has, I believe, been inadequately served. It need not be so. If the defects in the way educational research were remedied, research would play a more effective role in advancing the professional quality and standing of teachers. Left to ourselves, we educational researchers will not choose the necessary radical reforms. It needs others, including practising teachers, to give the firm push to get researchers on the move. (Hargreaves, 1996)

In his lecture to the national teacher training agency, now almost 15 years ago, he asserted that there was no agreed knowledge base or shared technical language for teachers, that much educational research is non-cumulative (because few researchers seek to create a body of knowledge), that educational researchers are "often engaged in bitter disputes amongst themselves about the philosophy and methodology of social sciences", that only a small proportion of educational research is applied and that even less is undertaken by practising teachers (here he compared educational research unfavourably with medical research where "there is little difference between researchers and users" p. 3), that educational researchers set their own research agendas and that they write, mainly for one another, "in their countless academic journals which are not to be found in a school staff room" (p. 3).

These gaps between researchers and practitioners betray what David Hargreaves claims, is the fatal flaw in educational research (p. 3).

Researchers continue their work on their own self-validating terms; they are accountable to themselves; so there is absolutely no reason why they should change... In education the key fault is the lack of engagement of users, that is, practitioners and policy makers... it is their exclusion which prevents the redirection of educational research towards the improvement of practice. (op. cit p. 6).

Much of what David Hargreaves said in 1996 is still true in 2010. In many countries there is a suspicion by practitioners and policy makers of the work of educational researchers and the benefits that it brings to understanding and improving education in schools. What is interesting is that this criticism came from a much respected academic. What is also interesting is that this academic spent a considerable part of his career as chief inspector / superintendent for schools in inner London. Implicit in his lecture is not so much the instrumentalism which some might supposed is represented in his critique, but a strong, underlying sense of moral purpose. He clearly believes that educational research should be primarily for the benefit of practitioners and that practitioners should be involved, in different ways, but certainly not only as recipients as research agendas of those who are far removed from the everyday world of classroom and schools.

The implications of drawing lines of separation between policy makers, professional researchers (from the academy) and 'other' researchers (in schools) without considering their complementarity and respective development need to be carefully considered, lest continuing separation does a disservice to all. The evidence still points to a lack of use by teachers of much research where

they themselves have not been involved in the research process. By sustaining the notion of a "profession of academic educational research" removed from practitioner communities we run the risk of perpetuating this. Huberman's (1995) study of dissemination efforts in large-scale national projects of applied research lends empirical support to the importance of researchers' involvement in the organizational contexts of reform. Huberman concluded that, "research is more likely to have a strong conceptual influence on practitioners when researchers are active in the contexts where innovations are in process" (in Zeuli, 1996, p. 177). Earlier Lawrence Stenhouse (1978, p. 735) had written of his purposes: "My trade is that of educational researcher and my principal obsession the relations of theory to practice and of researchers to teachers", and of research:

I want to make it quite clear that in reporting research I am hoping to persuade you to review your experience critically and then test the research against your critical assessment of that experience. I am not seeking to claim that research should override your judgment; it should supplement it and enrich it. All too often educational research is presented as if its results could only be criticized technically and by other researchers. But I am arguing that it should be subject to critical appraisal by those who have educational rather than research experience. (Stenhouse, 1978, p. 738)

Why is it, then, that forms of research which are, in business terms, 'close to the customer', have not been adopted as core development strategies by more than a few university departments in the universities? It is partly because the collaboration which they demand is not easy. It demands the establishment and maintenance of long-term relationships which are at the very least co-equal, in which teacher educators, student teachers, teachers, schools, teacher's associations, parents, governors, government and other agencies – all legitimate investors in education – are "active agents in the production of a new pedagogic discourse, rather than merely the consumers of the professional knowledge produced by academics and educational researchers" (Edwards & Brunton, 1993, p. 156). Even then, there are problems of this form of practitioner research being 'colonised' by higher education academics (Elliott, 1991).

The fact is that the validity of much of the work of educational researchers continues to be questioned from without and within as being either irrelevant or lacking in rigour. Educational research has been publicly vilified by government and powerfully attacked as being "a private, esoteric activity, seen as irrelevant by most practitioners" (Hargreaves, 1996). It is, Hargreaves suggests, often researchers, not practitioners, who determined the agenda of educational research. Others have made similar criticisms in the past, though in a different context (Elliott, 1991; Day, 1991; Zeichner, 1995; Goodson, 1995); and it is true that much research by academics does not reach, does not influence, and is not valued by teachers in schools or by policy-makers.

The separation between the school teaching, policy-making and academic communities which exists partly because of history, partly because of function

and partly because of collusion need not continue. Worlds which emphasise the systematic gathering of knowledge, the questioning and challenge of ideology, formal examination of experience, professional criticism and seemingly endless discussion of possibilities rather than solutions, need not necessarily conflict with those dominated by unexamined ideology, action, concrete knowledge and busyness. Although it is interesting to observe that as researchers from universities and other agencies seek to work more closely with teachers and schools, policy formulation becomes more distant, there are examples of growing understandings of the possibilities for their complementarity. There has been in recent years an increased interest by those outside the academy in conducting systematic inquiry into educational issues. Whilst there is evidence of suppression, distortion, selective inattention and decontextualisation of the results by some for whom the love of politics excludes the application of integrity, this is unusual. Research needs to be more open, more amenable to those interest groups which seek to influence policy. Part of higher education's responsibility is to use our 'room to manoeuvre', to critique policy where it flies in the face of research, to be rigorous in our own research, whether separate from or in collaboration with teachers; and to communicate with rather than colonise the voices of practitioners. In order to do this we need to maintain and develop critical engagement with policy-makers, interest groups and practitioners.

In many countries, now, also, there is a growing market of providers of research from outside academia and it is possible to discern the beginnings of a trend away from reliance upon knowledge produced by the traditional research communities in universities. There are four important 'self-inflicted separations' which do not help our cause in the eyes of those who live outside the academy. These separations are represented by different academic identities, membership of certain tribes and occupation of certain territories.

1. Academic identities: separation by discipline

Many educational researchers hold fast to the original discipline in which they trained. Education is, it is claimed, after all, a field of study, not a discipline in its own right. Thus, it is populated with a range of professionals from what might be called different tribes, each with their own rules and traditions (Becher, 1989). Educational psychologists are psychologists who apply their discipline to educational problems. The same applies to sociologists, social psychologists, critical theorists and philosophers. Many, though not all, talk and write in the language of that tribe primarily for its other members. It is their tribe which provides the primary source of their identity, even within the broad field of educational research – and, other than at plenary sessions of annual conferences, the different tribes do not often talk to one another or read each other's messages.

2. The paradigm problem

Within and across these tribes the territories of educational researchers may be further divided by their preference or disposition towards the use of particular quantitative, qualitative, experimental or mixed methods paradigms which determine how they will research and analyse the worlds which they seek to understand and influence. There are endless debates among and between so called empiricists, interpretivists and constructivists for example, about ontology, epistemology, objectivity, subjectivity, narrative, phenomenology, case study, ethnography, life histories etc., generalisability, reliability, validity, authenticity, and so on, the fitness for purpose of particular ways of conducting research and the trustworthiness of results. Whilst much of this debate, once characterised as 'the paradigm wars' (Gage, 1989) has now been dissipated, tensions remain.

3. Disparate and disconnected agendas: the artisan researcher

Externally funded large scale research projects have always been difficult to obtain for most education researchers. It is not surprising, then, that a 'cottage industry' has developed with a disparate and disconnected range of largely individually constructed (artisan) small scale qualitative, experimental or survey research, resulting in papers in peer reviewed journals in which, it has been noted, "different vocabularies...are being used to tell different stories to ourselves and to others about research and about who we are as educational researchers" (Smith, 1997, p. 10). Perhaps there are better ways to work towards providing a coherent and persuasive research informed corpus of knowledge about schools, teachers and teaching? All research should not, of course, be tied to policy or practice dictated agendas. However, as public intellectuals researchers do have a collective moral responsibility to the educational community at large. For example, there need to be more regular meta analyses and communication to all stakeholders in this and in the broader educational community of what we have learned from the range of cottage industry research which we continue to conduct.

4. The problem of language

Many writers, including, most recently, Ruben Vanderlinde and Johan van Broak (2010), have referred to the difficulties of accessing new knowledge because the vocabulary used restricts entry to those closest to the research paradigm and certainly does not attract those outside the academy who, for the most part, do not read the journals in which such papers are published. Some would argue that the 'publish or perish' culture of higher education in many countries acts as a preventative to the re-working of the language of research. This takes time.

Publication in professional, less scholarly journals has, at least until recently, held few career rewards and may be subject to the charge of oversimplification by their peers.

PART 2: KNOWLEDGE PRODUCTION OF A DIFFERENT KIND: THE RESEARCHER AS CHANGE AGENT

Researchers across the world continue to acknowledge the divide that often characterises the worlds of teacher research and research in the academy and the limits of its influence. In his presidential address to the American Educational Research Association's Annual Conference in Chicago, 1991, Larry Cuban spoke of the usefulness of research as perceived by those outside the academic community and of his own dilemmas as one who had 'practised' in the schools system, and 'researched' as a scholar in higher education (Cuban, 1992). He called for more networking between educational communities of all kinds, and for the establishment of caring communities which would move beyond what is still for many outside academe the rhetoric of collaboration still resonates today. In highlighting the scholar-practitioner dilemma, like other others before and since then, he identified an alienation or at best the worldwide scepticism expressed by many teachers about research and researchers which is so unproductive. Ken Zeichner (1995) developed this theme:

Despite the so-called revolution in teacher research around the world today where there is lot of talk about teachers as producers of knowledge...a view of educational research is still dominant among classroom teachers that sees research as an activity conducted by those outside the classroom for the benefit of those outside the classroom...and educational theory as what others with more status and prestige in the academy hierarchy have to say about them and their work... (Zeichner, 1995, p. 154).

The same might be said about the divide between policy – in many countries based upon political ideology – and research. Whilst there is not always agreement about priorities and practices, there is a need to assert the unique complementarity of purposes of policy makers, schools and departments of education in the education of teachers and in seeking the betterment of pupils. There is, however, a tension between the core 'service' purposes of departments of education to teachers and schools and their location within the academy. In a historical analysis, Ivor Goodson (1995) claimed that schools and departments of education "may have entered a 'devil's bargain'" (p. 141) when they became part of universities, with the result that, "their mission changed from being primarily concerned with matters central to the practice of schooling towards issues of status passage through the more conventional university scholarship" (p. 141). One consequence of this is the continuing separation of research and teaching functions both within universities

and between universities and sites of practice and the danger that the relationship between faculties of education and school practitioners will continue to constitute, "a model of how to talk past each other" (p. 141). This has led to powerful and persuasive critiques of educational researchers and research:

We now have a virtual catalogue of reasons... for the apparent failure of research to influence teaching... (a) The research itself is not sufficiently persuasive or authoritative; the quality of educational studies has not been high enough to provide compelling, unambiguous or authoritative results to practitioners. (b) The research has not been relevant to practice. It has not been sufficiently practical, it has not addressed teachers' questions, nor has it acknowledged their constraints. (c) Ideas from research have not been accessible to teachers. Findings have not been expressed in ways that are comprehensible to teachers. (d) The education system itself is intractable and unable to change, or it is conversely inherently unstable, overly susceptible to fads, and consequently unable to engage in systematic change. (Kennedy, 1997, p. 4)

In the 1990s, Michael Eraut presented a compelling case for reconceptualising the relationship between higher education and the profession:

The barriers to practice-centred knowledge creation and development...are most likely to be overcome if higher education is prepared to extend its role from that of creator and transmitter of generalisable knowledge to that of enhancing the knowledge creation capacities of individuals and professional communities. This would involve recognising that much knowledge creation takes place outside the higher education system, but is nevertheless limited by the absence of appropriate support structures and the prevailing action-orientation of practical contexts... (Eraut, 1994, p. 57)

He went on to suggest the need for closer relations and joint responsibilities for knowledge, creation, development and dissemination, suggesting collaborative research projects, problem-oriented seminars for groups of researchers and mid-career professionals and jointly planned programmes. At about the same time, in the USA, Wagner (1997) identified three forms of direct cooperation: i) data extraction in which the external researcher is the agent of inquiry; ii) clinical partnerships where the external research designer works with the teachers as active participants; and iii) co learning agreements in which both the researcher and participants are active agents and objects of jointly defined inquiries. These forms of cooperation might be regarded as representing different paradigms of knowledge production for change; and it is to a discussion of these to which I now turn.

In order to get closer to educational practitioners most researchers have engaged in a particular model of innovation identified 40 years ago by Ron Havelock as *Research Development and Diffusion* (R D and D). They choose and conduct the research and disseminate their findings, mainly through publication and conferences. Less frequently, they use a *Social Interaction Model* in which

they invite practitioners to try out the researchers' ideas or findings. In England in the 1970s, the work of Lawrence Stenhouse and colleagues from the University of East Anglia, Centre for Applied Research in Education, provide one notable example of the use of this model through the *Humanities Curriculum Project*. In this project, learning and teaching processes were investigated by teachers and researchers working cooperatively. It has been argued that this model of research and development in which the researcher seeks the cooptation of the client to his/her cause bridges the gap between theoretical research and educational practice and, thus, is potentially more influential on policy and practice; and there is some evidence for this (Burkhardt, 2006).

Three models of problem solving research in education

Gibbons and his colleagues (Gibbons et al., 1994) identified what they term Mode 2 production of knowledge in which knowledge is created in the context of use or application. It includes, "a wider, more temporary and heterogeneous set of practitioners, collaborating on a problem defined in a specific and localised context". The knowledge produced in this context is intended to be useful (Day, 1999, p. 73). It is, "always produced under an aspect of continuous negotiation and it will not be produced unless and until the interests of the various actors are included" (Gibbons et al., 1994, p. 4). It is still propositional knowledge, but problems of relevance, transfer and adoption found in mode 1 knowledge in which, "problems are set and solved in a context governed by the interests of a specific community" (Gibbons et al., 1994, p. 3) are minimised. However, even here, problems of wider dissemination outside the participant communities remain, as do potential problems of sustaining the innovation once the university team has left the scene.

Three models of research, in particular, in different ways provide examples of work by researchers who are concerned to influence policy and practice directly through working more closely with practitioners. Each of these models has been developed, either implicitly or explicitly, on the basis of a belief in the efficacy of a particular model of change.

i) Research into the practice setting: the experimental model

There are those who feel that educational research has done little to offer generalised solutions to educational problems (Olson, 2004). Yet I believe, with Slavin (2004) that, "research in education has an obligation to answer the 'what works' questions that educators, parents and policy makers ask" (p. 27). Like Hargreaves, Slavin uses a medical analogy to answer charges that each educational context is simply too unique, too complex to enable comparisons through, for example, experimental studies of replicable treatments:

Yet randomised evaluations of complex medical treatments are routinely done, and they establish with a high degree of confidence the effectiveness of given treatments under given circumstances for given patients. There is no fundamental reason that research in education cannot do the same. (Slavin, 2004, p. 28)

It is reasonable to suggest that Robert Slavin has a special interest in promoting this since he is responsible for the design and leadership of a national intervention programme in the USA for helping children to read (SFA). Yet it is important to remember, as he reminds us, that, "the ultimate beneficiaries of education research must be children, not the researchers themselves" (p. 28). In further recognition of this, over the last decade in particular, there has been an increasing number of interdisciplinary and transdisciplinary research projects.

Two other models of research which 'fit' new modes of knowledge production and use may be particularly relevant in this century. Like the first, they imply the need for shifts in the attitudes and practices of many of us and the development of different skills, roles and qualities required to those used in more traditional research models. They pose challenges to the current identities and current practices of many of us. They are not intended to replace existing models but to provoke thinking about how, on the one hand, research carried out by academics might be prevented from becoming sidelined and, on the other, promote its influence on policy and practice. They are not intended to promote a move to research which is only utilitarian nor to deny the longer term value potential of research which is more speculative. They are not being promoted as models which should replace existing practices. However, they are being commended as models of practice which bring the so called researcher in university closer to the so called practitioner in school. They do, also, represent a change in the power relationships between the researcher and the researched and in the assumption that knowledge produced outside its context of use by those at a distance from it is intrinsically more credible than that produced through coalitions and collaborations between the different tribes within academia and between these and those tribes outside the hallowed walls of scholarship.

ii) Design research and development

So called design research is similar to a number of projects funded by the Schools Council in the UK in the 1960s. One well known example in the UK is *The Humanities Project*, led by Lawrence Stenhouse, founder of the Centre for Applied Research in Education (CARE) at the University of East Anglia. The experimental design adopted necessitated the active involvement of teachers in 32 schools from whom the central team of researchers would be able to learn. The schools were invited to, "test and develop hypotheses about teaching method and to test, and perhaps to add to, the materials offered by the central team" (Stenhouse, 1980, p. 142). Following this, further dissemination of the materials was mediated though, "a network of understanding people...[we would today call them champions]...

who would act as points of reference in their areas of the country" (ibid, p. 145). Jean Rudduck, who organised the dissemination, noted that, "innovation is difficult to accomplish, that there can be no effective curriculum development without teacher development..." (Rudduck, 1973, cited in Stenhouse, 1980, p. 145).

Essentially, then, design research is a model of research and development which is nested in a particular model of change agentry developed in 1969 by Havelock, then Director of the Centre for Research on Utilisation of Scientific Knowledge at the university of Michigan, out of a review of 4,000 studies of change in many fields. Figure 1 is adapted from the change agent model developed as a result of an analysis of an extensive range of change projects in the USA by Havelock and colleagues.

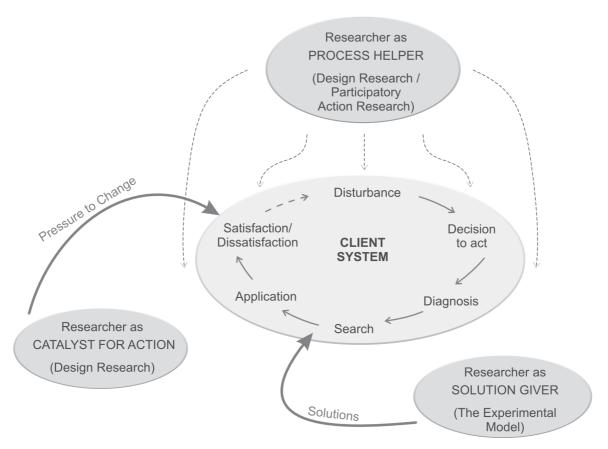


Figure 1. Three roles of researcher as change agent

In the design research tribe, the researcher-as-developer acts as an external change agent in the context of use by being a catalyst and process helper but not a solution giver. In this model the teacher is no longer the 'object' or 'subject', but now is the 'client'.

Figure 2 illustrates the process by which the researcher as developer coordinates his/her activities with those of the client.

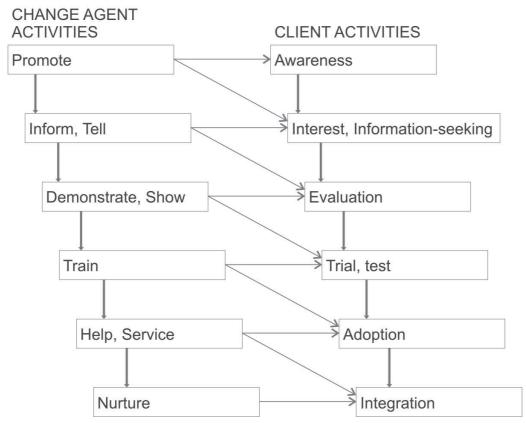


Figure 2. Co-ordinating researcher as change agent activities with the client's adoption activities

However, as Nicholls long ago observed:

In this model an innovation is brought to the attention of a potential receiver. It is the sender who determines both the receiver and the receiver's needs. The receiver reacts to the innovation presented to him and it is the nature of his reaction which determines subsequent stages...It is a model that emphasises the importance of opinion leadership, personal contact and social relationships... (Nicholls, 1983, p. 16)

Thus, the role of researcher as expert, as in the medical model, is safeguarded and the tribe survives.

iii) Participatory action research

An alternative to this is the provenance largely of university researchers who conduct and help others to conduct action research for change and improvement. They are related to the experimental model and design research and development tribes because they also have change and improvement as their central purpose. However, whilst the first two are concerned to test out, if appropriate, adapt their ideas with potential clients, for this problem solving tribe user need is of paramount consideration:

In this model the need of the receiver, whether implied, stated or assumed, is the focal point. The stages in this process of change can be viewed as a cycle, beginning with a felt need which is articulated as a problem. There follows a search for solutions... (Nicholls, 1983, p. 17)

In this model, the researcher from outside the practice setting is the 'underdog', and the subject for the research selected by the 'client(s)' on a voluntary basis. It is the client(s) who conduct research into their practice, with the assistance of the external researcher. The purpose of this research is almost always the examination of practice and the contexts and conditions under which this practice occurs in order that it might be improved. The model requires the researcher to possess and use a greater number of intra and interpersonal, social skill and to have a sustained presence. This 'problem-solving' model of innovation in which external agents are invited into the heart of practice settings (as critical friends, consultants or even intermediaries) in order to help facilitate the identification and resolution of problems identified by the user is an even more difficult undertaking. This is perhaps why, despite undoubted merits, in terms of influence on practice, participatory action researchers are so thin on the ground. It is resource intensive. The academic benefits are few but the intrinsic rewards are many.

A critique

It is easy to extol the virtues of these last two models in terms of the ways they bring research to teachers and invite teachers themselves to engage in systematic critical reflection upon and inquiry into practice. They are 'teacherly' rather than 'researcherly' in their focus. Both models have been promoted by government policy initiatives but for short periods of time. Both continue to be supported through models of school-university partnerships at the pre-service phase, through so-called professional learning communities and learning networks of schools at in-service levels (Veuglers & O'Hair, 2005) and through pre-service programmes which emphasise the important role of reflection in teaching. There are, also, international networks of researchers which promote 'self study' (Loughran, 1999) and action research (Somekh, 2006).

Those researchers who promote and participate in this work remain a relatively small minority. There are four reasons for this: i) they are resource hungry, yield low academic rewards despite their intrinsic worth and required sustained interactivity between the researcher-development and client; ii) to participate requires, for many, a radical reconstruction of professional identity and movement into tribes and territories which they are unfamiliar and with whom, at least initially, they will have little in common, in terms of language, cultural, traditions and beliefs. Such a move would be high risk; and 3. These models of researcher working with teacher as willing participant and co-constructor of knowledge imply the need for researchers to develop new skill sets required, for example, in order to engage in sustained relationships with teachers, to adopt multiple roles (for example, as

underdog, coach, problem poser, critical friend) and to be prepared to devote time and resources to a relatively small group with relatively little return on terms of publications or academic credibility; iv) There is some evidence, also, that the eventual but inevitable withdrawal of the researcher from the practice setting may result in the original research-based design changing or even being abandoned as new policy imperatives drive teachers to engage in new initiatives.

There are also 'messy' ethical issues in working close up with teachers and others outside the research community:

There are those who choose the swampy lowlands. They deliberately involve themselves in messy but crucially important problems. When asked to describe their methods of enquiry, they speak of experience, trial and error, intuition and muddling through. Other professionals opt for the high ground. Hungry for technical rigor, devoted to an image of solid technical competence, or fearful of entering a world in which they feel they do not know what they are doing, they choose to confine themselves to a narrowly technical practice. (Schon, 1983, p. 43)

In 2006, one of the academic tribes began to discuss the ethics of what they call, 'co-generative dialogues' which are rooted in, "a philosophical approach to cosmopolitanism that acknowledges the differences between multiple participant, multiple fields, and varying ways of knowing and being" (Emdin & Lehner, 2006, p. 39). The authors were focussing upon the philosophical and practical measures needed to promote ethical practices when working with school students and teachers. In their discussion the authors:

- 1. highlight the need, as the authors point out, for, "school based researchers (to) have the moral directive to ensure that participants are afforded unconditional fairness and that they....pursue justice and beneficence for their participants by minimising potential harms and taking on any burdens associated with the study" (op. cit.);
- 2. point again to the problem of communication between tribes. This paper illustrates the use of specialised language which makes it virtually inaccessible to all but a few;
- 3. note that, for the teacher, engaging in what these authors term co-generative dialogues implies, as Argyris and Schon (1974) noted thirty years ago, moving away from the comfort zone of unexamined thinking and practice may cause them to experience feelings of loss, anxiety and vulnerability. It is generally assumed that engagement in research will benefit teachers. Yet, "the contributions it makes can only be worthwhile if the conduct of the research itself is irreproachable" (BERA, 2003).

PART 3: FOCUSSING ON THE WORK AND LIVES OF TEACHERS

In the next section, five areas of research knowledge about teachers work and lives of teachers are highlighted in order to establish the contemporary policy, psychological and social contexts in which they work and in which their professionalism is defined and contested. These are key areas of focus for researchers who wish to generate knowledge which will contribute to the quality of teaching and influence teachers and policy makers. The research is not intended to be representative but to illustrate the challenges which face them and thus researchers who wish to influence them. The pieces are from England, USA, Belgium and Australia and represent a conceptualisation of professionalism, drawing upon sociological theory (Sachs, 2003) small scale qualitative (Beijaard et al., 2004; Kelchtermans, 2010; Zembylas, 2010); and large scale longitudinal quantitative and mixed methods (Bryk & Schneider, 2002; Day et al., 2007). Each of these tells an important story from which policy makers, teacher educators, teachers and researchers can learn and which they may choose to address.

Story 1: The activist professional identity

"One of the hallmarks of being identified externally as a professional is to continue learning throughout a career, deepening knowledge, skill judgement, staying abreast of important developments in the field and experimenting with innovations that promise improvements in practice" (Sachs, 1997, p. 267).

Using illustrations from the Australian context in support of her ideologically principled position, Judyth Sachs, now Pro Vice Chancellor of McQuarrie University in Sydney, argues that teachers, to be at their most effective, need to be 'activists', rather than driven by policy to be passive recipients of policies which reduce their power to influence. She identifies inquiry as being at the heart of all the activities in developing an activist teacher:

Teaching itself can be seen as a form of inquiry ... professional teachers are viewed as researchers of their own practices, capable of producing worthwhile knowledge about teaching which can contribute to teachers' own and others' professional development. Developing the skills to help teachers inquire into their own and others' practice is fundamental to an activist oriented teacher education program. (Sachs, 2003, p. 73)

If we agree with this notion of what being and behaving as a professional means, then we have a clear indication of the possibilities for both building such values, dispositions and skills into teacher education programmes and, as researchers, to working with qualified teachers who already have a commitment to inquire into their practice in order both to understand it better and to improve it. However,

although some claim that to be a professional is to be an inquirer, we cannot, of course, assume that this will apply to all or even the majority.

Story 2: The vulnerable self: certain and uncertain identities

Over many years now, Geert Kelchtermans and his colleagues in Belgium have conducted small scale, fine grained qualitative studies into the ways in which teachers' selves are constructed. Others, of a similar persuasion, have conducted parallel studies in England (Troman & Woods, 2001) and elsewhere on teacher identity (Beijaard et al., 2004). They have concluded that teachers' selves are fragile and that 'vulnerability' is a feature of teaching. In the context of the new lives of teachers and, in particular, the involvement of teachers in research, we might conclude that an ongoing sense of vulnerability and uncertain identity would not help their confidence in conducting research into their practice; and that they may not be inclined to move towards research conducted by others unless it was able to be directly relevant to their practical needs of survival and growth.

Story 3: Commitment and resilience

According to large scale empirical research in England (Day et al., 2007) the relative stability or instability of teacher identity is associated with the support of school leadership and colleagues as well as teachers' internal (psychological) sense of vocation and strength of purpose. This was found to be especially important for teachers in particular phases of their professional lives and working in schools and with students from challenging socio-economic environments. Here, the exercise of individual, relational and organisational resilience (the capacity to bounce back in adverse circumstances) which sustained commitment was evident among effective teachers. University researchers who may wish to conduct research with as well as on or about teachers, may consider whether the focus of their work and the way they conduct their work needs to take account of the influence of these individual, organisational and social contexts upon teachers' capacities to learn and change in different phases of their professional lives.

Story 4: The trust effect

The fourth story which illustrates the territory which teachers in all countries inhabit and whose borders need to be negotiated by researchers is the school itself as a unit of investigation. Trust is important to the way university researchers form and sustain their relationships with teachers in developing research. Bryk and Schneider (2002) carried out research with 100 elementary schools in Chicago. They found that over a three year consecutive period, student results in English and Maths in those schools in which there was 'relational trust' improved, whereas the reverse was the case for pupils in those schools in which relational trust did not

exist. Whilst this claim may seem to be large, it is fully justified by the robust analysis of the qualitative and quantitative data. The question for researchers wishing to work with teachers, then, is to what extent relational 'trust' and the associated high levels of sustained interactivity on which it is built are necessary features, not only of successful schools but also of successful research relationships.

Story 5: Emotional wellbeing

Finally, there is the issue of teachers' emotional wellbeing. Research has constantly revealed that, although schools and classrooms are emotional, often turbulent places (Nias, 1996; Fineman, 1993), emotions and their role in the quality of teaching and learning are rarely the subject of explicit discussion (Hargreaves, 1998). This applies even more to the world of higher education in which the rhetoric if not the reality of rationality prevails as the dominant form of scholarly discourse. Yet, there is a growing wave of psychological, social and neuro-scientific research which reveals the important part played by emotional intelligence (Goleman, 1996), emotional understanding (Denzin, 1984), emotional literacy (Harris, 2007) and emotions (Damasio, 1994) in decision making. Indeed, we now have a theory of positive emotions (Fredrickson, 2004) which suggests that those who experience these, over time are able to build and sustain resilience. Some even suggest that positive emotions are associated with wellbeing (Layard & Dunn, 2009; Seligman, 2002). Yet, this remains a relatively unexplored field by educational researchers.

Conclusions

Ball and Forzani (2007) argue for a view of educational research which is conducted, "at the heart of educational practice and policy" (p. 529), not in opposition to other kinds of scholarship which examine and inform from a distance, but as complementary to it. They focus upon what they call the 'instructional dynamic'. Like Slavin and Hargreaves before him, they draw an analogy between this kind of research and the close connection between medical research and treatment:

When patients do not understand the new practices or are sceptical of their effectiveness, effective health care workers try to find ways to help their patients learn more and appreciate the validity of the treatment. Educational reformers who seek to implement a new curriculum in a school face the similar task of making sure that the teachers who will use the same materials understand the program's goals and know how to make choices about when and how to use the materials provided. (p. 530)

In taking this stance, Ball and Forzani are arguing for educational research as a discipline rather than a field of study, so that, "phenomena outside educational settings can be studied with a special educational perspective complementary to the theoretical perspectives offered by other disciplines" (p. 530).

Thus they are not arguing for teacher educators as 'intermediaries' between research and practice, but rather that they should have special analytical skills which enable them to bridge the theory practice gap and work across borders with the street and mid level bureaucrats and teachers who mediate the implementation of research which speaks to policy and practice.

The same authors claim that:

At the center of every school of education must be scholars with the expertise and commitment necessary to study educational transactions... [and that] ...if they do not work actively to disseminate that knowledge among policy makers and members of the public, then educational problem solving will be left to researchers and professionals without the requisite expertise...Educational researchers must also arm themselves with the special analytical skills that will allow them to usefully bridge the alleged divide between theory and practice. It is along this divide that educational researchers have special expertise. (ibid, p. 537)

Essentially, Ball and Forzani are identifying 'the elephant in the room', something so obvious that we often overlook its huge importance. In this case, there are two elephants: researcher independence and moral purpose. Whilst all of us would support Ivor Goodson's articulation of the researcher as independent, "a public intellectual, not a servant of the state" (Goodson, 1999), I would argue that alongside independence is moral purpose, a sense of deep responsibility of contributing to the 'betterment' of society. Some time ago, Shulman wrote of the 'six commonplaces of every profession' as:

One, the obligations of service to society, as in a calling. Two, understanding of a scholarly or theoretical kind. Third, a domain of skilled practice or performance. Fourth, the exercise of judgment under conditions of unavoidable uncertainty. Fifth, the need for learning from experience, as theory and practice interact in the presence of chance and unpredictability. And last, a professional community to monitor quality and to aggregate knowledge. (Shulman, 1998, p. 9)

The same might be applied to all of us in the room and beyond who work in education. Discussions of research as a means of understanding, influence and change in education, whether our work is on, with or for teachers take on a particularly important; and for some a new, meaning in this context of moral purposes. Questions of whether research should or should not be relevant to policy and practice are secondary to these discussions. Seligman (2002) identified three categories of teachers – those for which teaching is a job; those for whom teaching is a career; and those for whom teaching is a vocation. The same three categories may be applied to researchers:

1. Research as a Job

Here, researchers are committed to undertaking research only because they must, in order to keep their jobs. They are neither interested nor uninterested in contributing to the greater good of policy or practice.

2. Research as a Career

Here, researchers wish to progress in their tribes to become senior members of their departments or universities, and are willing to work hard to undertake research which will assist them in doing so. They seek opportunities to work with policy makers, colleagues, and practitioners for collaboration, dissemination, coconstruction of research agendas only in so far as it will benefit their careers. They may become less interested in contributing to the greater good of policy and practice once they reach the top of their career path and can progress no further.

3. Research as a Vocation

Here, researchers wish to serve, both through creating new knowledge on, with and for teachers. In whatever paradigm they work, they plan to build bridges with policy makers and practitioners for the purposes of informing and influencing for change. They may not do these simultaneously. They wish for their research to be both 'educative' and 'formative' (Hammersley, 2003). They seek opportunities to work with policy makers, colleagues and practitioners for collaboration, dissemination, co-construction and co-implementation of researcher agendas regardless of career benefits. They see dissemination of research as circular, emphasising, "a two way flow of information between researchers and practitioners and encourage(s) practitioners to adapt and negotiate research findings within the contexts of their use" (Vanderlinde & van Broak, 2010, p. 303).

As researchers, we do need to acknowledge what research tells us about ourselves, our endeavours and our influence (or lack of it). There are sceptics among teachers and policy makers – and even researchers of different ontological and epistemological dispositions – about the intrinsic value of research and about its relevance, language and applicability. However, there are examples of research which does lead to greater educational understandings, which influences policy and practice, which, ultimately, makes a difference to the contexts and quality of teachers' and childrens' experiences in schools and classrooms.

We know that, "the gap between educational research and practice is a more complex and differentiated phenomenon than commonly assumed in the international literature" (Vanderlinde & van Braakk, 2010, pp. 311–2).

No single model of research will necessarily be best fitted to bridge the gap. However, whether research is constructed and conducted primarily for the purpose of furthering understanding or for more direct influence on policy makers and practitioners, whether it is on, about or for education, the obligation of all researchers is to reflect upon their broader moral purposes and measure the worth of their work against their judgement of the extent to which they are able to realise this as they continue to develop their work.

References

- Argyris, C. & Schon, D. (1974). *Theory in practice: Increasing professional effectiveness*. San Francisco: Jossey Bass.
- Ball, L. D. & Forzani, F. M. (2007). What makes educational research educational? *Educational Researcher*, *34*(9), 529–540.
- Becher, A. (1989). *Academic tribes and territories. Society for Research into Higher Education*. Milton Keynes: Open University Press.
- Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education*, *20*(2), 107–128.
- BERA (2003). *Issues and principles in educational research for teachers*, Southwell, Notts, England.
- Bryk, A. S. & Schneider, B. L. (2002). *Trust in schools: A core source for improvement*. New York: Russell Sage Foundation Publications.
- Burkhardt, H. (2006). From design research to large-scale impact: engineering research in education. In J. Van den Akker, K. Gravemeijer, S. McKenney, & N. Nieveen (Eds), *Educational design research*. London: Routledge.
- Cuban, L. (1992). Managing dilemmas while building professional communities. *Educational Researcher, 25*, 137–148.
- Damasio, A. (1994). *Descartes error: Emotion, reason and the human brain*. New York: Grosser/Putnam.
- Day, C. (1991). Only connect: relationships between higher education and school. In H. K. Letiche, J. C. van der Wolf, & F. X. Plooij (Eds), *The Practitioner's power of choice in staff development and in-service training*. Amsterdam: Lisse, Swets and Zeitlinger.
- Day, C. (1999). *Developing teachers: the challenges of lifelong learning*. London: Falmer Press.
- Day, C., Sammons, P., Stobart, G., Kington, A., & Gu, Q. (2007). *Teachers matter: Connecting lives, work and effectiveness*. Maidenhead: Open University Press.
- Denzin, N. (1984). On understanding emotion. San Francisco: Jossey-Bass.
- Edwards, A. & Brunton, D. (1993). Supporting reflection in teachers' learning. In, J. Calderhead & P. Gates (Eds), *Conceptualising reflection in teacher development* (pp. 154–166). London: The Falmer Press.
- Elliott, J. (1991). *Action research for educational change*. Buckingham: Open University Press.
- Emdin, C. & Lehner, E. (2006). Situating cogenerative dialogue in a cosmopolitan ethic. Forum. *Qualitative Social Research*, 7(2), 1–12.
- Eraut, M. E. (1994). *Developing professional knowledge and competence*. London: The Falmer Press.
- Fineman, S. (Ed.). (1993). *Emotions in organisations*. London: Sage.
- Finley, A. (2005). Arts-based Inquiry: Performing revolutionary pedagogy. In N. K. Denzin & Y. S. Lincoln (Eds), *Handbook of qualitative inquiry* (3rd Edition) (pp. 681–694). Thousand Oaks, CA: Sage Publications.

Frederickson, B. L. (2004). The broaden-and-build theory of positive emotions. *The Royal Society, 359*(1449), 1367–1377.

- Gage, N. L. (1989). The paradigm wars and their aftermath: A 'historical' sketch of research on teaching since 1989. *Educational Researcher, 18*(7), 4–10.
- Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P., & Trow, M. (1994). *The new production of knowledge: The dynamics of science and research in contemporary societies*. London: Sage Publications.
- Goleman, D. (1996). *Emotional intelligence*. London: Bloomsbury Publishing.
- Goodson, I. (1995). Education as a practical matter: some issues and concerns. *Cambridge Journal of Education*, *25*, 137–148.
- Goodson, I. (1999). The educational researcher as a public intellectual. *British Educational Research Journal*, 25(3), 277–297.
- Hammersley, M. (2003). Can and should educational research be educative? *Oxford Review of Education*, *29*, 3–25.
- Hargreaves, A. (1998). The emotional practice of teaching. *Teaching and Teacher Education*, 14(8), 835–854.
- Hargreaves, D. (1996). *Teaching as a research-based profession: Possibilities and prospects*. Teacher Training Agency Annual Lecture.
- Harris, B. (2007). Supporting the emotional work of school leaders. London: Sage Publications.
- Havelock, R. G. (1969). *A Guide to Innovation in Education*, Centre for Research on Utilization of Scientific Knowledge, Ann Arbor, The University of Michigan.
- Huberman, M. (1995). Networks that alter teaching. *Teachers and Teaching: Theory and Practice*, 1(2), 193–221.
- Kelchtermans, G. (2010). Vulnerability in teaching: the moral and political roots of a structural condition. In C. Day & J. C. Lee (Eds), *New understandings of teacher effectiveness: Emotions and educational change*. Springer, (in press).
- Kennedy, M. (1997). The connection between research and practice. *Educational Researcher*, 26(7), 4–12.
- Layard, R. & Dunn, J. (2009). *A good childhood: Searching for values in a competitive age*. London: Penguin Books.
- Loughran, J. (Ed). (1999). *Researching teaching: Methodologies and practices for understanding pedagogy*. London: Falmer Press.
- Nias, J. (1996). Thinking about feeling: the emotions in teaching. *Cambridge Journal of Education*, *26*(3), 293–306.
- Nicholls, A. (1983). *Managing educational innovations*. London: George Allen and Unwin (Publishers) Ltd.
- Olson, D. (2004). The triumphs of hope over experience in the search for 'what works': A response to Slavin, *Educational Researcher*, 33(1), 22–24.
- Sachs, J. (1997). Reclaiming the agenda of teacher professionalism: an Australian experience. *Journal of Education for Teaching*, 25(3), 263–275.
- Sachs, J. (2003). *The activist teaching profession*. Milton Keynes: Open University Press.
- Schon, D. A. (1983). *The reflective practitioner*. London: Jossey-Bass.

- Seligman, M. (2002). Authentic happiness. New York: Free Press.
- Shulman, L. S. (1998). *Teaching and teacher education among the professions*, 38th Charles W. Hunt Memorial Lecture, AACTE 50th Annual Meeting, New Orleans, Louisiana, February 25th, 1998.
- Slavin, R. E. (2004). Educational research can and must address 'what works' questions, *Educational Researcher*, *33*(1), 27–28.
- Smith, J. K. (1997). The stories educational researchers tell about themselves. *Educational Researcher*, 26(5), 4–11.
- Somekh, B. (2006). *Action research: A methodology for change and improvement*. Maidenhead: Open University Press.
- Stenhouse, L. A. (1978). Cultures, attitudes and education. *Royal Society of Arts Journal*, CXXVI, 735–745.
- Stenhouse, L. A. (Ed.). (1980). *Curriculum research and development in action*. London: Heinemann Educational Books.
- Troman, G. & Woods, P. (2001). *Primary teachers' stress*. London: Routledge.
- Vanderlinde, R. & van Broak, J. (2010). The gap between educational research and practice: views of teachers, school leaders, intermediaries and researchers. *British Educational Research Journal*, *36*(2), 299–316.
- Veuglers, W. & O'Hair, M. J. (2005). *Network learning for educational change*. Maidenhead: Open University Press.
- Wagner, J. (1997). The unavoidable intervention of educational researcher: A framework of reconsidering researcher-practitioner cooperation, *Educational Researcher*, *26*(7), 13–22.
- Zeichner, K. M. (1995). Beyond the divide of teacher research and academic research. *Teachers and Teaching: Theory and Practice*, 1, 153–172.
- Zembylas, M. (2010). Teaching and teacher emotions: a post-structural perspective. In C. Day & J. C. Lee (Eds), *New understandings of teacher effectiveness: Emotions and educational change*. Springer, (in press).
- Zeuli, J. S. (1996). Using research as a substitute for practical judgment: response to John Eisenberg's, 'The limits of educational research', *Curriculum Inquiry*, *26*, 175–179.

Contact information
Christopher Day
School of Education
Faculty of Social Sciences
Jubilee Campus
Nottingham
NG8 1BB
United Kingdom
christopher.day@nottingham.ac.uk